

A sunset over a beach with a dark dune in the background. The sky is filled with soft, golden light, and the water reflects the colors of the setting sun. The dune is silhouetted against the bright sky.

A Planetary Tragedy

**Why Humanity Fails the
Environmental Challenge**

Ton Bührs

A PLANETARY TRAGEDY

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WHY HUMANITY FAILS THE ENVIRONMENTAL
CHALLENGE

TON BÜHRS



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*To Greta Thunberg
and her generation*

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Preface

Initially, this book was meant to be a sequel to *Environmental Integration – Our Common Challenge*, which was published in 2009 by SUNY Press, New York. The original manuscript for that book was considered too large for one volume, and the SUNY Press editor at the time suggested that I took some of the chapters out to publish them as a separate volume. I accepted this advice and intended to put the remaining chapters into a new book with the provisional title of *Environmental Integration in a Comparative and International Perspective*.

For several reasons, from 2010 (the year of the first Canterbury earthquake), my work on this project came to a virtual standstill, and I was only able to pick it up again in 2015. By then, much of what I had written for the 2009 publication needed to be updated and revised. Moreover, I began to rethink the rationale for the book, as it seemed to me that explaining the shortcomings and limitations of environmental integration around the world warranted more in-depth analysis than I had provided, based foremost on the comparative and international environmental policy and politics literature. It seemed that much of that literature only scraped the surface when analysing the sources or causes of the environmental (mal-) performance of governments. It had become obvious that, individually and collectively, governments had been failing to meet the environmental challenge for years and that the environment was rapidly deteriorating almost everywhere.

As a result of these reconsiderations, I revised the focus of this book, shifting it to what can be regarded as the systemic causes and sources of this failure. Much of the book explores the underlying causes of unsustainability located in the prevailing, interconnected political, economic, and socio-cultural systems. It has become clear that, without a fundamental change of these systems based on environmental imperatives, there is simply no chance of averting worldwide collapse and disaster. If this makes me another prophet of “doom and gloom”, then so be it. But having studied and taught environmental politics and policy for more than 35 years, always with the idea that the environmental challenge could be addressed (more) effectively if the political will were there, I now think that this is an illusion. Although, in theory, addressing the environmental challenge effectively is possible, politically it seems most unlikely that the systemic changes required can and will be adopted in most countries as well as globally. What lies at the heart of the problem? Power.

Acknowledgements

Writing this book has been a long and rather lonely affair, taking up much of my time since my official retirement and move to Tauranga in 2015. Nonetheless, I would not have been able to do this without the ongoing support, in many ways, of my wife Nicole, who has continued to accept the rather a-social behaviour that is involved in research and writing on an extensive topic like this.

Although perhaps a bit unusual, I also wish to thank all the authors whose work(s) have been included in the bibliography of the book. In one way or another, your work(s) have influenced my thinking, ideas, and writing. It may seem obvious, but it deserves to be emphasised that writing a book like this is only possible because of the research, ideas, and writings of numerous other people who have gone before, whether or not one agrees with what they have written. On a broad topic like this, I would not have been able to come up with my own ideas or arguments without leaning on the work produced by numerous others, sometimes a long time ago.

In line with that thinking, this book will be made available online without charge. It is just a small way to acknowledge the collective nature of the efforts to make sense of this world, a challenge that is not new to my generation but that will become critical during Greta Thunberg's and her generation's lifetime.

Finally, I thank Christine Dann, Ron Lopert, Nicole Bührs, and Sheldon Kamieniecki for the comments that they have provided on the pre-publication draft. Of course, any remaining errors and oddities remain my responsibility.

Ton Bührs
November 2022

Introduction

A planetary tragedy is unfolding. After billions of years, the evolution of life on Earth has arrived at a stage where a single species, *Homo sapiens*, is destroying the foundations which allowed life to flourish. As humans developed the capacity to manipulate nature to serve their own ends, their impacts on the environment have reached a level and scale that threaten their survival, together with that of numerous other species. What makes this a tragedy is not only that one of the most beautiful and miraculous products of cosmic evolution, a web of life that is extremely rare if not unique in the universe, is about to be destroyed, but that the responsibility for this lies with a species that is often regarded as standing at the pinnacle of this process of evolution. Commonly considered to be the most intelligent of all life forms on Earth, it is also the most, perhaps even only, destructive species to have evolved. Humans have become the greatest threat to life on Earth, including themselves. Arguably, this is the greatest paradox and mystery or, one might argue, "mistake" of evolution. Why is it that evolution has produced such a self-destructive species?

Trying to find answers to this question, however fascinating, is a philosophical and speculative enterprise that I will not undertake in this book. Nonetheless, the book addresses two main questions that are hardly less challenging: Why are humans doing this? And are they able to stop doing this?

Efforts to find answers to these questions may also provoke philosophical and highly speculative trains of thought, for instance, about human nature and its fundamental and innate flaws that make this process of (self-) destruction unavoidable, and therefore a real tragedy in the sense that it is commonly understood: a drama in which the innate flaws and compulsions of the main character(s) lead inevitably to disaster. In this drama, humans and evolution could be seen as the two main ill-fated actors in this planetary tragedy.

Although it is not my intention to speculate and dwell upon the innate flaws of human nature, it is, for the purpose of this book, relevant to point out what could be considered two main limitations or shortcomings of *Homo sapiens* that impinge on its interactions with the environment. The first of these, which may be called their ecological flaw, is the fact that humans do not have a built-in (genetic) code, like all other species have, that guides their interactions with the biophysical environment. Guided by their brains (intelligence), humans manipulate and use the environment for their own purposes and are the only species that takes more from the environment than what they need to meet their basic needs, often causing (knowingly or unintentionally) environmental harm. A second (social) flaw is that, although they are a social species, humans also do not have an inner code that instructs them how to interact with each other. They are socially unspecialised in that their behaviour and actions may be influenced but not determined by their genetic code. Human thinking, actions and behaviour are also (some might say mostly) influenced by societies, conditions, feelings, thinking, and choices. Thus, they (have to) learn how to live together in groups and societies. Yet, despite a lengthy period of socialisation, people make just as many mistakes interacting with each other as they do in their interaction with the biophysical environment, causing harm to each other (knowingly or

unintentionally), sometimes tearing apart the groups and societies on which they depend.

While the depiction of these two flaws of human nature is speculative and contestable, it is relevant to the two questions raised above. It suggests that people need to learn how to interact with their environment to avoid causing unnecessary harm that also impacts themselves. It also indicates that, whether or how this learning occurs, depends on a social context that contains its own challenges. Most people may agree that these two statements, even though derived from claims about human nature, are hardly controversial and may be considered facts rather than speculations. To use an analogy linked to another shortcoming of human nature, people are not naturally endowed with the ability to swim, but a society that wishes to help prevent drowning can set up a programme for swimming to be taught. The fact that people cannot swim by nature does not imply that drownings are inevitable: societies can address this “flaw” in human nature. This example suggests that societies are not necessarily doomed because of the ecological and social flaws of the human species. But finding the solutions to address these flaws may not be that simple.

However, there is another way to approach these questions, one that I will be taking in this book. That approach involves not so much dwelling upon human nature but looking at how humans and societies have interacted with their environment and trying to explain these interactions, and their outcomes, based on the social and environmental contexts and developments that influence or even shape these interactions. Here, the notion of social context is interpreted broadly and comprises everything that societies have constructed to guide and regulate human actions and interactions. It includes, among others, the fields that provide a focus for social studies or sociology, political studies, and economics. I define the environmental context as the biophysical reality, which includes the environment as modified by humans. Both contexts are interrelated and influence each other, ultimately constituting one undivided reality, as nature and the humanly modified environment are influenced or even shaped by the social reality created by humans (societies), while the biophysical environment, events, and developments influence social contexts.

This approach to the main questions raised above shifts the focus from human nature to what humans do (or don't do) collectively. Rather than attributing the destruction of nature to human nature, it looks for answers in the ways humans, through groups and societies, collectively shape or determine their interactions with the environment. People do not destroy nature because it is in their nature to do so, but because they collectively fail to adequately consider the (potential) impacts of their decisions and actions on the environment. This approach turns the “inevitable” planetary tragedy into what I refer to as the environmental challenge. Humans may, collectively, stop the unfolding planetary tragedy notwithstanding the flaws or shortcomings that are inherent to their nature. Recognising the biophysical reality, societies may develop and adopt measures to control these flaws to reduce and minimise their impacts on the environment.

However, even though this may sound optimistic, there is hardly any ground for optimism. Looking back at the records of societies in dealing with the environmental challenge, it is hard to avoid the conclusion that, overall, they have failed, and

abysmally so. This is not because humanity has not been warned. Concerns about environmental degradation and issues such as pollution, deforestation, soil erosion, and declining wildlife, had been causes of concern for people and governments earlier in history, and especially so from the second half of the 19th century.¹ In 1962, Rachel Carson published *Silent Spring*,² a book that is often considered to mark the beginning of the modern environmental era. Carson rang the alarm bell about the harmful effects of pesticides on the environment and human health. Her analysis drew attention to the unforeseen impacts of technology on the environment as an intricate and interdependent whole. At the end of her book, she referred to the arrogance of the idea of controlling nature,³ a view that is still highly relevant today. The book sold millions of copies and was translated into 30 languages.⁴ It sparked much public concern and contributed, along with many subsequent publications and rising pollution problems, to a rapidly growing environmental movement that culminated in the organisation of the first Earth Day on 22 April 1970 in the United States.⁵ The increased publicity and concern gave rise to the discourse of an environmental crisis, and even "eco suicide", among scientists and environmental thinkers.⁶ Other early warnings were contained in the report *Limits to Growth*, published in 1972, which provided a science-based projection of the serious problems that the world could expect if environmental limits were transgressed, under different scenarios.⁷ Although the report provoked criticism for its (allegedly simplistic) modelling and gloomy messaging, in 2008, a study comparing the report's projections and actual

¹ Markham, Adam (1994), *A Brief History of Pollution*. London: Earthscan Publications; Ponting, Clive (1991), *A Green History of the World*. London: Penguin Books; Worster, Donald (1988), *The Ends of the Earth: Perspectives on Modern Environmental History*. Cambridge, England: Cambridge University Press; Carter, Vernon Gill and Tom Dale (1955, 1974 ed.), *Topsoil and Civilization*. Norman, Oklahoma: University of Oklahoma Press; Marsh, George Perkins (1864, 1965 ed.), *Man and Nature: Or, Physical Geography as Modified by Human Action*. Cambridge, MA: The Belknap Press.

² Carson, Rachel (1962), *Silent Spring*. Harmondsworth: Penguin.

³ *Ibid.*, 257.

⁴ Boslaugh, Sarah E. (2020), *Silent Spring - Work by Carson*, Britannica, <https://www.britannica.com/topic/Silent-Spring> (Accessed: 13 July 2020). It is noteworthy that, just predating *Silent Spring*, Murray Bookchin (under the pseudonym Lewis Herber), published *Our Synthetic Environment* which raised concerns about the adverse effects of the widespread use of chemicals notably on human health.

⁵ Which is said to have mobilised some 20 million Americans. Earth Day Network (2015), *The History of Earth Day*, <https://www.earthday.org/history/> (Accessed: 29 September 2015).

⁶ White, Lynn (1967), "The Historical Roots of Our Ecological Crisis", *Science*, Vol.155, No.3767, 1203-1207; Sprout, Harold (1971), "The Environmental Crisis in the Context of American Politics", in L. L. Roos Jr. (ed.) *The Politics of Ecosuicide*, 41-50; Commoner, Barry (1973), "The Origins of the Environmental Crisis", *New Zealand Environment*, Vol.3, No.1 (Part 1), No.2 (Part 2), 8-10, 11-15; D'Amato, Anthony (1971), "The Politics of Ecosuicide", in L. L. Roos Jr. (ed.) *The Politics of Ecosuicide*, 10-28.

⁷ This report has been followed by several updates (in 1992 and 2004) Meadows, Donella H., et al. (1992), *Beyond the Limits. Confronting Global Collapse, Envisioning a Sustainable Future*. Post Mills, Vt.: Chelsea Green Pub. Co; Meadows, Donella H., et al. (2004), *Limits to Growth: The 30-Year Update*. White River Junction, Vermont: Chelsea Green Publishing Company.

developments concluded that “analysis shows that 30 years of historical data compare favorably with key features of a business-as-usual scenario called the “standard run” scenario, which results in collapse of the global system midway through the 21st century.”⁸ In 2012, Jorgen Randers, one of the contributors to the original report, argued that the collective response to the challenge of adapting humanity to the limitations of the planet was too slow and that it was “difficult to maintain a happy outlook when you know deep in your heart that the world is on a path to disaster.”⁹

There is no need here to elaborate much on the continuous stream of reports on the rapidly degrading environment around the world. Notwithstanding the views of a small number of academics who deny or downplay the seriousness of environmental problems,¹⁰ there is strong evidence of serious environmental decline and rapid global warming.¹¹ Also, it is now recognised that the rate of environmental deterioration has increased significantly after WWII with a rapid rise in socio-economic indicators accompanied by sharp increases in “Earth System indicators” beyond the levels that were characteristic of the Holocene, the geological period that began some 11,700 years ago after the last ice-age, and that created the conditions for the human species to proliferate and develop. It has been suggested that this “Great Acceleration” can be regarded as an appropriate starting point for the Anthropocene, the label for a proposed new geological era characterised by changes in the structure and

⁸ Turner, Graham M. (2008), “A Comparison of the Limits to Growth with 30 Years of Reality”, *Global Environmental Change*, Vol.18, No.3, 397-411. See also Turner’s updated assessment of 2014 which concludes that “the early stages of collapse could occur within a decade, or might even be underway.” Turner, Graham M. (2014), *Is Collapse Imminent? An Update Comparison of the Limits to Growth with Historical Data MSSl Research Papers*. Melbourne: Melbourne Sustainable Society Institute, 16.

⁹ Randers, Jorgen (2012, e-book ed.), *2052: A Global Forecast for the Next Forty Years*. White River Junction, Vermont: Chelsea House Publishing, Loc 7118-7119.

¹⁰ Lomborg, Bjørn (2001), *The Skeptical Environmentalist: Measuring the Real State of the World*. Cambridge; New York: Cambridge University Press; Simon, Julian Lincoln and Herman Kahn (1984), *The Resourceful Earth: A Response to Global 2000*. Oxford: B. Blackwell. Such reports tend to emphasise improvements of the living conditions for many people in the ‘developing’ world, but disregard ecosystem and resource degradation. For the role of industries behind such efforts, see Oreskes, Naomi and Erik M. Conway (2011, e-book ed.), *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. London: Bloomsbury Publishing; Goldenberg, Suzanne (2013), “Secret Funding Helped Build Vast Network of Climate Denial Thinktanks”, *The Guardian*, 14 February.

¹¹ For just a few recent scientific assessments, see Ripple, William J., *et al.* (2017), “World Scientists’ Warning to Humanity: A Second Notice”, *BioScience*, Vol.67, No.12, 1026-1028; IPCC, Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (2021), *Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: International Panel on Climate Change; Secretariat of the Convention on Biological Diversity (2020), *Global Biodiversity Outlook 5* Montreal: Secretariat for the Convention on Biological Diversity; United Nations Environment Programme (2019), *Global Environmental Outlook GEO-6. Healthy Planet, Healthy People*. Cambridge, U.K: Cambridge University Press.

functioning of the Earth System as a whole that can be attributed to human activities.¹² Although, as yet, it remains unclear and debatable whether these changes mark a permanent departure from the Holocene, or whether a significant reduction of socio-economic pressures may make it possible to return (close) to the conditions that have been so favourable for the flourishing of the human species, it is certain that a continuation of the pressures at these levels (or even higher) creates a high-risk “brave new world” that humanity may not survive.¹³

Yet, despite the ever-louder calls for more effective action, it seems that governments, societies, and humanity as a whole, are unable (or perhaps unwilling) to deal effectively with the environmental challenge. The planetary tragedy continues to unfold and attributing this failure to societies rather than human nature does not offer much if any, ground for optimism. Arguably, the source of the problem is not just innate to human nature, but also societies. Collectively, humans do not and perhaps cannot learn how to interact with the environment sustainably and change our social interactions to that end.

The main argument of this book is that the sources of this inexorable process of environmental destruction lie in three clusters of factors that constitute fundamental and interconnected obstacles to addressing the environmental challenge more effectively. The first cluster relates to the diversity of views and interpretations of the environment, environmental problems and their sources or causes. The second comprises obstacles in the prevailing political, economic, and socio-cultural systems that shape most of the practices and institutions of societies, and that are overwhelmingly incompatible with long-term environmental protection. The third cluster relates to two main factors: power and agency. These factors strongly influence both other clusters but are also influenced by them. It is the interconnectedness between these three clusters of factors that make it so difficult for environmental advocates to bring about significant change and a meaningful and enduring reduction of environmental pressures. The key to doing so, I argue, lies in the redistribution of power and, specifically and strategically, in the creation of national-level Sovereign People’s Authorities (SPAs).

By far most analyses of the “environmental crisis” are followed by calls upon governments and “us” to take more effective or radical action. It is often proclaimed that “we” can resolve this crisis if “we” adopt the behaviour changes, practices, technologies, and measures that are considered to be needed. All members of society (and all people in the world) must do so, and/or governments must adopt the political will to introduce such measures and encourage, motivate, or even force their citizens to accept these. Yet, as I will argue in this book, using the term we in this context is

¹² Steffen, Will, *et al.* (2007), “The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?”, *Ambio*, Vol.36, No.8, 614-21; Steffen, Will, *et al.* (2015), “The Trajectory of the Anthropocene: The Great Acceleration”, *The Anthropocene Review*, Vol.2, No.1, 81-98.

¹³ Wikipedia (2021), Guy McPherson, https://en.wikipedia.org/wiki/Guy_McPherson (Accessed: 27 October 2021); Rees, Martin J. (2003), *Our Final Hour: A Scientist’s Warning: How Terror, Error, and Environmental Disaster Threaten Humankind’s Future in This Century- on Earth and Beyond*. New York: Basic Books. For a discussion of such views, see Wallace-Wells, David (2019, ebook ed.), *The Uninhabitable Earth: Life after Warming*. London: Penguin Books.

misplaced. While it is easy and understandable to use the terms we and us when talking about matters of collective interest, such as the environmental challenge (I do it myself), it must be recognised that the responsibility for actions and practices that destroy the environment, and for societal action and inaction, is not equally shared. "We" (humans) are facing an existential catastrophe, but our fate, in the world as it is, lies in the hands of a relatively small group of people who make decisions on which, by far, most of us have no influence.

The distribution and exercise of power lie at the heart of the environmental challenge. Societies are being led to environmental collapse. Halting, let alone reversing this process, requires systemic changes that are unlikely to be made by the dominant elites or classes. The "flaws and inner compulsions" that lead humanity and the planet to disaster may have roots in human nature but are mediated, mitigated or fuelled, by societies. How "we" deal with the environmental challenge depends foremost on the choices and decisions made by the most powerful, who also create, shape, or amend the systems through which those choices and decisions are made and legitimated. Fundamentally, the failure of humanity to adequately meet the environmental challenge can be attributed to the deliberately created incapacity of the prevailing systems to adequately recognise the existential importance of protecting environmental processes, systems, and boundaries. Only the creation of systems that assign primacy to our collective interests may stave off the presently inexorable process of destruction. Therefore, a big shift in power from the dominant elites to the people offers the last and only chance of moving societies from the highly unsustainable path that they are on.

This radical idea implies rethinking all existing political systems, whether democratic or authoritarian. It comes down to the question of who has (or should have) the right to exercise the assumedly sovereign power of the citizens of a country. With the rise of the liberal democracies, this right has been granted (one could argue usurped) by Parliaments on behalf of the people. In authoritarian systems, this right is appropriated by those who effectively hold the strings of power and claim to represent and advocate for the people. But in all political systems, the notion of popular sovereignty has been and is still being used to legitimise highly unrepresentative governments that primarily serve the interests of the dominant political-economic sections (classes or elites) of a society (or even beyond). If the principle of popular sovereignty is to mean anything, it is that the people, that is all the citizens of a country, collectively, already are the legitimate source and holders of supreme power. Logically, at least, the people cannot be given what they already own: the supreme (highest) power. If that power is de facto exercised by some people or institutions, that does not mean that the people have ceased to be sovereign. If the existing holders of formal political (institutional) power fail to exercise that power to protect or advance the collective interests of the people as a whole, citizens have the right to reclaim that power and to exercise it differently. It is perhaps poverty of imagination, cultivated by the dominant interests and rulers, that leads people to think that there is no other way to exercise their sovereignty. The idea of creating Sovereign People's Authorities is an alternative way for the citizens of a country to exercise the sovereign power that they already have in principle. The creation of such bodies constitutes, in my view, a

superior way to give practical consequence to that principle and to give more meaningful substance to the idea of democracy compared to existing liberal-democratic systems, let alone authoritarian systems.

Certainly, an important question that arises from this proposal is whether the creation of SPAs would make a difference in the way(s) the environmental crisis would be tackled. On that point, I will be frank and admit that there is no guarantee that such bodies will address the environmental challenge effectively and prevent a catastrophic breakdown of societies and the world as a whole. I elaborate on these questions in the last two chapters of this book. Here, I will just make four points; first, the chances that the systemic obstacles to meaningful environmental protection and restoration will be overcome or eliminated by SPAs will be infinitely higher than they are in all existing political systems; frankly, I think that the chance that countries, and the world as a whole, will undertake the kind of fundamental transformations that are needed to move towards more sustainable (or at first, less unsustainable) societies, are presently close to zero; second, I do not see any other way than creating SPAs to get societies to adopt truly transformational change, at least before it is too late; third, if these fundamental changes are not made, humanity may indeed be doomed; nature will continue in some way or other, and most likely will rebound over time, but the destruction of the life-support systems on which humans depend, will make the survival of the human species very difficult; thus, the idea of creating SPAs amounts to allowing societies the chance to give us our best and perhaps last shot at survival – it is our last line of defence; fourth, if SPAs fail to undertake the necessary changes, it can at least be said that societies will get the future that they deserve, not the future that has been created for them by unrepresentative leaders.

In the remainder of this introduction, I will lay out the development of my main argument in the chapters of the book.

Chapter 1 elaborates on the first cluster of issues mentioned above, related to how environmental problems have been predominantly interpreted and approached. Although there are many different takes on environmental problems and how they can or should be addressed, the prevailing interpretation adopted by most governments has been very pragmatic, and the approaches to these problems are ad hoc, reactive, and fragmented. I argue that the environmental challenge requires a comprehensive and integrated approach based on the holistic nature of the environment. This is not a new idea; it has been long recognised by early environmental thinkers, but it has never been taken (very) seriously by governments and, for that matter, many people in modern societies. The chapter presents and discusses the notion of environmental integration (EI) that can provide a basis for analysing the way(s) environmental concerns have been taken on board in cognitive frameworks, policies, and institutions, and for the development of a comprehensive and integrated approach to the environmental challenge by governments.

Chapter 2 uses the framework presented in Chapter 1 to assess the environmental performance of the governments of four countries that, at various stages over the last five decades, were considered to be environmental leaders. The comparative analysis shows that none of these countries adopted and consistently pursued an approach that stands up to the framework, although, at different stages,

they developed greater strengths in some area(s) of environmental integration than others.

In Chapter 3, I discuss potential explanations for the failure of governments to adopt a comprehensive and integrated approach to environmental integration. The chapter begins by taking stock of the efforts undertaken by the comparative environmental policy and politics literature. While this field is useful because it identifies a range of potentially relevant and important factors that can help explain governments' environmental performance, I take issue with the allegedly scientific approach aimed at the development of a general theory that applies to all countries. To explain the approach to the environmental challenge by countries, we need to look at the specific and often unique history, position, context, and developments of countries. Nonetheless, the independent variables that have been identified in the comparative (environmental) policy and politics literature can provide a useful basis for exploring the role of relevant factors. Drawn from the literature, I briefly describe what I think could be the most important factors: socio-cultural factors, political-institutional factors, political-economic factors, and power and agency.

Chapter 4 elaborates on the role and importance of socio-cultural factors and the extent to which these have helped or hindered environmental integration. In particular, the chapter looks at a range of worldviews (religious and secular) and whether and how these consider the environment. It also explores the social support bases of these worldviews and whether there is evidence of growing support for the emergence of a new dominant environmental paradigm in countries. It also discusses the role of power and agency in the battle for the hearts and minds of people, indicating that socio-cultural change is not just a matter of evolution or changing conditions, but also of deliberate efforts to shape the dominant worldview in societies and, increasingly, the world at large.

Chapter 5 focuses on the role and importance of political institutions in environmental integration. After providing my take on this topic, I focus, in particular, on the role of states as the most important and dominant political institutions of the modern world. It postulates that since the emergence of modern states in 17th century Europe, states have fulfilled, or have tried to fulfil, four main core functions: security, economic, demand and conflict management, and social integration. How these functions are interpreted or defined is the subject of a continuous battle within states and societies. Arguably, environmental protection is, or should be, a fifth core function of the state. Pushed by environmental advocates and demands, states have introduced and/or adapted (environmental) institutions ("ecostates") to fulfil this function. However, these reforms have done little in terms of how the traditional core functions of the state are interpreted, which heavily constrain or even negate the effectiveness of environmental institutions. The chapter also discusses, in the context of the demand and conflict management function of states, arguments about the relative (de-) merits of democratic and authoritarian political systems in advancing environmental integration.

Chapter 6 looks more closely at the interaction between political systems and economic systems. It begins with a general discussion of economics and economic systems and how the realm of economics has increasingly become disembedded from

societies with the rise of capitalism and its treatment of nature and humans as mere means to economic ends. But it also discusses the crucial role of states in facilitating and shaping economic systems and that of economic power in shaping and constraining political systems. Although this interaction can lead to many different or even unique political-economic systems, I identify six main types based on a characterisation of political systems as more or less democratic or authoritarian, and of economic systems (capitalist, socialist, and mixed), five of which have had actual counterparts. This classification provides a basis for discussing, in the following three chapters, the extent to which these different systems may be conducive to, or contain inherent obstacles to, environmental integration, given the conflicting claims about their past performance and their potential to be greened. But the chapter also elaborates on what can be considered a common underlying feature of all five political-economic systems that have thus far been in existence: their dependence on industrialisation and industrial production systems. Such systems, it can be argued, have inherent features that make them fundamentally incompatible with environmental imperatives, including their expansionary logic and their roots in the idea of infinite progress. This has led to the emergence of industrial societies in which progress is defined foremost in material and scientific-technological terms, thus creating a socio-cultural support basis for the ongoing process of disembedding development from societies, but also of societies and humans from nature. These developments may lead to the creation of a completely artificial world (superseding nature) ruled by totalitarian technocracy. However, whether this eventuates depends foremost on developments within extant political-economic systems.

Chapter 7 focuses on capitalism and its inherent features or imperatives, including the profit motive; competition; the need for capital accumulation; commodification; and the tendency towards overproduction and crisis. These features also imply the need for continuous economic growth and endless consumerism, profit-driven technological development, and ignoring or downplaying social and environmental harm resulting from development, all of which make capitalism fundamentally incompatible with meaningful and long-term environmental protection. Although individual entrepreneurs may be genuinely committed to the greening of their businesses, they are constrained in how far they can take this by the systemic features referred to above. The same applies to governments who may, under pressure from environmental demands, express their commitment to the greening of the (capitalist) economy, in particular in economies that have been opened up to international competition.

Chapter 8 addresses the question of whether or to what extent socialism provides an alternative to capitalism as a basis for meaningful environmental integration. This question is addressed at two levels: theoretical or ideological, and based on the environmental record of socialist countries. At the ideological level, I discuss what I regard to be some of the key tenets of socialism, noting that in principle these are not incompatible with giving a high priority to environmental concerns: on the contrary. However, based on a discussion of the dismal environmental record of some of the countries which have (had) socialist economic systems, notably the Soviet Union and China (under Mao), it must be concluded that this potential has not been

borne out in practice. The chapter explores the main reasons for this failure, pointing out the importance of the commitment to rapid (industry-based) economic development, the political and historical context, and the lack of democratic institutions. While Cuba has a somewhat more positive environmental record, it too suffers from the same afflictions. As all the countries with socialist economic systems have also (had) authoritarian political systems, the chapter also explores whether democratic socialism could provide a basis for a sustainable political-economic system.

Chapter 9 looks at political-economic systems with what I refer to as hybrid economic systems, which combine elements of capitalism and socialism. To the extent that such systems have been, or are, able to reform or tame capitalism in ways that it is no longer inherently unsustainable, they perhaps offer realistic alternatives for moving towards sustainability. Two sub-types of hybrid systems can be identified: one combined with a more or less (liberal) democratic political system, and one combined with a more or less authoritarian system. The chapter discusses the experience of social democracies as examples of the first, and China in the post-Mao era as an example of the latter. It finds that while social democracies appeared to hold considerable promise for advancing environmental integration, these systems did not address, let alone remove, the obstacles to environmental integration that are inherent to capitalism, notably the growth imperative. While the Chinese hybrid may exercise greater control over capitalism it, too, has not been able to effectively address the fundamental sources of unsustainability, in particular those related to industrialism and the kind of society that it has generated. Moreover, contrary to what some people argue, the Chinese political system is even less capable of effectively addressing the environmental challenge than social democracies were. Rather, it has put the country on the track towards becoming a dystopian totalitarian technocracy.

Chapter 10 takes the discussion to the international and global levels. Given the seemingly insurmountable obstacles to environmental integration at the nation-state level, it explores the question if it has been and can be better pursued at the international level. Also, as the environmental challenge is as much, if not more, a global as a local, regional, and national challenge, it can be argued that this is the level on which environmental advocates should or must focus their efforts. The chapter takes stock of the environmental integration efforts that have been undertaken thus far, based on the environmental integration matrix presented in Chapter 1, discussing initiatives and developments in the cognitive, policy, and institutional realms. It finds that, in relative terms, environmental integration efforts have been most successful in the cognitive realm (based on the notion of sustainable development), but less so in the policy realm, and least in the institutional realm. Overall, the effectiveness of these efforts is, euphemistically stated, not very high, and what may look like progress is often not more than a form of reverse environmental integration by which environmental issues are redefined and made subject to economic logic and interests.

Chapter 11 discusses four schools of thought in the field of International Relations and Globalisation that can contribute different insights into the reasons why environmental integration efforts at the international and global levels have made limited progress. Two of these, Realism and Institutionalism, continue to recognise

states as the building blocks of the international (dis-) order, albeit with different degrees of optimism or pessimism about international cooperation and global governance, including on environmental issues. A third school, International Political Economy, delves into the political-economic factors and developments that have led to globalisation, providing insights into the structural features of international and global capitalism and the way it circumscribes what states (can) do. This also provides little ground for optimism about the chances of global environmental integration and, for that matter, the future of humanity and nature. The fourth school, Cosmopolitanism, offers a more positive (or idealistic) view of the world, and arguably strong moral grounds for global environmental cooperation, but it needs an injection of realism from the other schools of thought. None of these perspectives offers much of a basis for the idea that the environmental challenge can be (most) effectively addressed at the international or global level.

Chapter 12 discusses what I see as the kind of systemic changes that would need to occur to steer countries away from the unsustainable path that they are presently on. Although the specific nature of the changes required will differ from country to country linked to their historical, political, economic, social, and environmental contexts, and will need to be determined by the citizens of each country, it is possible to broadly sketch the kind of changes that need to be made to enable the approach to environmental integration described in Chapter 1. Moreover, it is important to explore what systemic changes would make it possible for societies to create the kind of sustainable societies that they consider desirable. The kind of changes proposed lie in four broad areas: political-institutional (also referred to as greening the state), economic transformation, the transformation of socio-cultural systems, and the transformation of relations at the international and global levels. Contrary to presently prevailing views, the suggestions presented here do not prioritise global transformational change, which is deemed beyond reach for the foreseeable future, but emphasise a bottom-up approach based on existing states. States that have embraced transformation may inspire others to follow their example and could forge cooperative networks and coalitions that advance sustainability at a practical level rather than through hollow rhetoric at the global level.

However, as discussed in the earlier chapters, in all existing political-economic systems, the obstacles to fundamental, systemic change are formidable, and it seems unlikely that the kind of changes put forward in Chapter 12 will be accepted and pursued by any state. Therefore, Chapter 13 revisits the question of whether it is even plausible to think that societies can steer themselves collectively, purposefully, and democratically into a direction of their choosing. As briefly discussed in Chapter 3, this raises the issue of collective action (agency) and power. Historically, there is little evidence that societies have been able to do this. Whatever societal steering has occurred has been done by the most powerful in societies, often with unforeseen and disastrous results. The chapter revisits the importance of states, not only for meeting the essential needs of people and societies but also (strategically) for tilting the imbalance of power towards societies rather than elites. Given their political-institutional power, rooted in the sovereignty of the people, states hold the key to altering the allocation and distribution of power in societies. While historically this has

long been recognised, as reflected in the phenomenon of political revolutions, it has not led to the creation of political systems that assign the power to democratically steer societies to societies themselves.

To that end, Chapter 14 puts forward the idea of creating Sovereign People's Authorities (SPAs). An SPA would be the supreme political institution of a country based on the principle of popular sovereignty. It would be composed of a representative group of citizens, selected by sortition, with rotating membership for a fixed term. Its foremost responsibility would be the adoption of a social contract based on what the members consider to be the most important long-term collective interests of society, including socio-economically and environmentally. It would have constitutive power in that it reconstructs a country's constitution as well as an overarching policy framework laying down the main principles, rules, and goals that must be respected and implemented by the government of the day. The rationales for creating SPAs are twofold: First, assigning the highest power to a supreme body of citizens that can stand in for society is warranted by the principles of popular sovereignty and democracy. Second, the creation of such bodies is most likely to be the only way to bring about the transformative change needed to get societies off the highly unsustainable path that they are presently on, and to steer them collectively and democratically in a direction considered to be desirable by society. The chapter discusses some of the main objections that are likely to be raised against this idea and puts forward suggestions for how the creation of such Authorities could be advanced strategically.

Chapter 1 –The Environmental Integration Challenge

Introduction

Although the environmental challenge has been on public and government agendas for some five decades, there still is not much clarity, let alone agreement, on what this challenge represents. These agendas have been dominated by particular issues, such as pollution of various kinds, waste management, hazardous substances, the depletion of the ozone layer and, more recently, climate change. Consequently, most government efforts have been focused on the development of policies for particular issues, with variable and questionable rates of success. The main argument advanced in this chapter is that, to address the environmental challenge more effectively, we need to conceptualise it in broader terms and take a more comprehensive and integrated collective approach. While this may not be a novel insight, governments have, by and large, failed to adopt such an approach. One of the reasons for this is the dearth of models or frameworks that can provide guidance for tackling the environmental challenge in a more comprehensive and integrated way. In this chapter, I advance the notion of environmental integration as a basis for reconceptualising the environmental challenge and put forward a framework that can be used as a guide for undertaking steps towards a more comprehensive, integrated, and effective approach to addressing this challenge.

Environmental integration

Environmental integration, in broad terms, implies the integration of environmental considerations into all areas of human thinking, behaviour and practices that (potentially) affect the environment.¹ The need for environmental integration derives from the ecologically undetermined and genetically unspecialised nature of human beings. Unlike other species, humans do not interact with their environment based on instincts or genetically determined patterns of behaviour. Rather, they intervene and change their environment rationally² to meet their needs and wants. Often, as historical analyses and present-day experiences show, this has unforeseen and undesirable consequences, even to the point that they erode the environmental basis on which human well-being, societies and civilisations are based.³ Environmental integration, therefore, implies learning about the environment and the environmental effects of human behaviour and actions and determining what behaviour and practices are appropriate, acceptable, desirable, or necessary.

From the outset, it is important to recognise that this is a collective challenge, as much of our thinking, behaviour and actions are influenced or shaped by the communities and societies in which we live, and as the failure to account for (potential)

¹ Bührs, Ton (2009), *Environmental Integration: Our Common Challenge*. Albany: SUNY Press, 1.

² Rationally, in this context, means that they use their capacity to reason, but always within a particular view of the world and/or the environment.

³ Diamond, Jared M. (2005), *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking; Wright, Ronald (2005), *A Short History of Progress*. New York: Carroll & Graf Publishers; Carter, Vernon Gill and Tom Dale, *Topsoil and Civilization*.

environmental effects by individuals or groups can have serious consequences for others, for a society and increasingly even for the world as a whole. It is also a collective challenge in the sense that some degree of agreement must be reached over which aspects of the environment need to be considered, and how, as the efforts on the part of some may not be commensurate or even conflict with and negate the efforts of others.

As this book talks about the environment, it is also important to clarify what I mean by this concept. The term environment only came into common use during the 1960s. Before then, it was used much more sparingly to refer simply to the "surrounds" or conditions in which people found themselves, including their social conditions or milieu, but not to the kind of things that we now commonly associate with it. Early pioneers to raise awareness of people's impact on their surroundings used the term nature.⁴ Herbert Spencer, in his book *Principles of Psychology*, was one of the first to use the term environment in an ecological sense, defining it as "The Correspondence between Life and its Circumstances" and as "The Correspondences in Their Totality".⁵ However, this usage of the environment concept did not take off and it was not used even once in the book where it would have been very much in place, Darwin's *The Origin of Species*.⁶

Here, I define the environment as the biophysical (including bio-chemical) environment. It consists of a complex combination of interacting systems that have also been referred to as the ecosphere. In the ecosphere "everything is connected to everything else", a statement that was formulated as the first law of ecology by Barry Commoner to reflect "the existence of the elaborate network of interconnections in the ecosphere: among different living organisms, and between populations, species, and individual organisms and their physicochemical surroundings".⁷ As a species, humans (individually and as a population) are an inherent part of this network. Directly or indirectly, humans are affected by everything that surrounds them, and everything that they do affects the ecological network. From an ecological point of view, humans cannot be detached from that network. In this broad sense, the term environment started to be more commonly used during the 1960s, especially since the publication of Rachel Carson's *Silent Spring*.⁸

Although the ecosphere is not controlled by humans, over time, human impacts on the biophysical processes have increased significantly. It is now widely recognised that the scale and nature of the human environmental impacts on the environment are such that nature no longer exists as an autonomous force, marking "the end of nature".⁹ It has also been argued that this imprint warrants the identification of a new

⁴ Marsh, George Perkins, *Man and Nature: Or, Physical Geography as Modified by Human Action*; Thoreau, Henry David (1854), *Walden, or, Life in the Woods*. Boston: Ticknor and Fields.

⁵ Spencer, Herbert (1855), *The Principles of Psychology*. London: Longman, Brown, Green, and Longmans.

⁶ Darwin, Charles (1859), *On the Origin of Species by Means of Natural Selection*. London: J. Murray.

⁷ Commoner, Barry (1972), *The Closing Circle*. New York: Alfred Knopf, 16.

⁸ Carson, Rachel, *Silent Spring*.

⁹ McKibben, Bill (1990), *The End of Nature*. London: Penguin Books.

geological era called the Anthropocene.¹⁰ Some see this as a reason for suggesting that humans are now in the driver's seat of the ecosphere, and can and should "play God",¹¹ a view that can be regarded as an ultimate form of hubris. But whatever one thinks of this view, the point to emphasise is that the environment is the environment as modified by humans. Humans have always, to some extent, modified their environment, but increasingly so. The urban environment, where now more than 50% of the human population lives, is a highly modified environment that has both significant ecological impacts as well as on humans themselves. Indeed, many of the environmental issues that affect people most directly originate from the urban/highly modified biophysical environment, including pollution of all sorts (with its health effects), housing conditions (slums, unhealthy houses), a lack of natural/recreational areas, noise (from traffic and many other sources), ugly buildings/neighbourhoods, congestion, and other conditions created by humans. In some countries, like the Netherlands, the environment consists almost exclusively of highly modified landscapes and ecosystems, including for agricultural purposes, urban development, and transport. Yet, even in such a highly modified environment, people cannot ignore the biophysical processes that operate in the ecosphere as failing to do so can make the environment completely uninhabitable. In other words, they still need to integrate environmental considerations into their thinking, behaviour, and actions.

This raises the question of what environmental considerations humans need to integrate into their thinking, behaviour, and actions. As the environment comprises everything that exists and occurs in the ecosphere, environmental integration may seem an impossible task. To make this task manageable, we need to, somehow, simplify it while continuing to do justice to the holistic nature and interconnectedness of the environment.

For a start, we can distinguish three dimensions of the environment that, although interrelated, provide different foci for environmental integration. These I will call the ecological, human, and resource dimensions. The ecological dimension relates to the protection of ecosystems and the ecological processes on which life on earth depends. This includes traditional concerns about biodiversity and nature conservation, ecosystems, and issues like climate change, the nitrogen cycle and other issues that threaten to unhinge the biophysical processes critical to life on earth. The human dimension relates to the protection of humans from threats to their health and well-being arising from the modified (physical) environment and hence is concerned with the quality of that environment (such as air, water, the built environment, and the work environment). The resource dimension relates to concerns about the continued (long-term) availability of renewable and non-renewable resources that are essential to meeting human needs. This includes issues like the protection of agricultural land and food security, water resources, house building materials/resources, and the continued supply of adequate energy resources and essential minerals.

¹⁰ Steffen, Will, *et al.* (2007), "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?".

¹¹ Lynas, Mark (2011), *The God Species: Saving the Planet in the Age of Humans*. Washington, D.C.: National Geographic.

It needs to be emphasised that these categories of environmental concerns are artificial constructs and do not reflect different "areas" within the environment. They are better thought of as dimensions, aspects of the environment seen from different angles or perspectives. In reality, the three dimensions overlap and are strongly intertwined, impacting each other. Nonetheless, these categories are useful as they allow grouping together a large range and number of environmental issues and concerns that need to be considered. But while each category can provide a basis for the development of more comprehensive policies related to the issues within that category, the links between these dimensions and categories also need to be considered. Otherwise, policies adopted for issues within one category may be out of sync or even work against the policies adopted within or for another category of issues. Environmental integration requires the development of a coherent overarching framework that brings and keeps integration efforts in line with each other.

Given the interconnected nature of the biophysical environment (from the local to the global level), and the increasingly interconnected nature of human societies and their political-economic and socio-cultural systems, environmental integration is a challenge that needs to be addressed at all levels of government or governance. While, in the era before globalisation, which can be said to have begun with the process of colonisation from the end of the 15th century, societies or civilisations could collapse and disintegrate without adversely affecting much of the rest of the world, this is no longer the case. Increasingly, the world has become an interdependent political-economic system in which resources are exploited and used no matter where the demand is coming from, with increasingly adverse effects on the global ecosystem and the global resource base. By implication, environmental integration has become as much a global as a national and local challenge. Although there are different views on whether global interdependence is a positive or negative thing, and whether that interdependence can or should be reduced (or increased) the reality is that already all countries and people in the world are affected by the actions of others. As several global ecological boundaries are being crossed or have already been crossed,¹² effectively addressing the drivers and causes of these human-induced disturbances requires action of all major contributors to these problems. However, this has proven to be a formidable and some might say impossible challenge as will be discussed later in this book.

Notwithstanding the global dimension of the environmental challenge, states remain crucial agents for advancing environmental integration. While other actors, including transnational corporations (TNCs) and international non-governmental organisations (INGOs), and state-based international organisations (IOs), have also become important global actors, national governments still hold the key to advancing environmental integration. They are, in the present global political context, the only institutions that formally represent all people within the boundaries of their polities, and hence are, at this stage, also the main avenue for more or less democratic collective decision-making on environmental integration at the national and international level. National-level political systems and governments (must) also play

¹² Rockström, J. et al. (2009), "Planetary Boundaries: Exploring the Safe Operating Space for Humanity", *Ecology and Society*. Vol.14, No.32, www.ecologyandsociety.org/vol14/iss2/art32.

a crucial role in enabling and promoting environmental integration efforts at the local level. Therefore, the focus of this book will be foremost on national-level efforts, issues and obstacles towards environmental integration while recognising the important linkages with developments at the global and local levels.

The environmental integration matrix

As noted in the preceding section, environmental issues can be classified into three categories that can provide a focus for environmental integration efforts, while keeping in mind the links between the dimensions and the need for the development of an overarching approach. I will now elaborate on the latter challenge. This challenge involves more than distinguishing categories of environmental issues and identifying the connections between them, although this is a good start. Meeting this challenge also requires the adoption of a collective, comprehensive, coherent, and sustained response to these issues and maintaining and adapting such a response in the long term.

Such a response, although it needs to be comprehensive, can be conceived of as a set of sub-challenges based on different dimensions. One dimension relates to how humans (in societies) collectively manage their affairs, not just environmental matters, but across the board. Here, the term management is interpreted broadly as the way groups, and societies as a whole, approach and handle the issues and problems facing them. How issues and problems are managed depends on three main things that I will refer to as the domains or realms of management. These are the cognitive domain (the cognitive frameworks on which management is based), a policy domain (the sphere of collective action), and the institutional domain (comprising rules and organisations). These three domains are of course also interrelated.

Cognitive frameworks provide a basis for collective action and for institutions or institutional change. Policies can be aimed at maintaining or changing cognitive frameworks and/or institutions. And institutions can provide a basis for entrenching cognitive frameworks and policies for the long term and may stand in the way of cognitive and policy change. However, there is not necessarily consistency within and between the three management domains: within the cognitive domain, a diversity of views exists, even though some may dominate; in the policy domain, a wide range of policies co-exists that are likely to contain conflicting or even incompatible goals, objectives and courses of action; similarly, within the institutional sphere, rules and organisations do not necessarily add up and may serve different purposes, many of which have been inherited from the past. As a result, prevailing cognitive frameworks, policies, and institutions may not be mutually supportive but contain differences and tensions that are the subject of conflict, political struggle, and potential change. This may result in changes in one domain but not necessarily in the other two domains, possibly creating new tensions and conflicts. For instance, governments may adopt a policy to reduce climate change emissions but, at the same time, not make any changes to the institutions (rules and organisations) that contribute to increases in emissions, such as laid down in the mandates of governments departments that promote economic growth, the building of new motorways, or the expansion of the dairy industry. Moreover, within the policy domain, governments may increase the

inconsistency and conflict between policy areas, for instance, by spending more on motorways.

As these examples indicate, there is considerable scope for conflict within and between these three management domains. But a collective, comprehensive, and enduring response to environmental issues implies a need to integrate at least compatible, but ideally mutually supportive, environmental components in each domain. Doing so requires two things: first, agreement and clarity on what needs to be integrated. This assumes the existence or development of an overarching view of what is needed to protect or enhance the environment. The second relates to making changes in the various domains to accommodate these requirements. I refer to these two requirements as the internal and external dimensions of environmental integration. The internal dimension relates to the need for guidance, based on a comprehensive environmental view of what environmental principles, imperatives, goals, or rules or considerations need to be integrated, whereas the external dimension relates to how these are to be integrated into what are commonly considered non-environmental areas of thinking, behaviour and action, and non-environmental institutions.

Although there are (many) different and often conflicting views on the environment, the internal dimension of environmental integration implies the creation of some degree of collective agreement about what is required to protect the environment. While full agreement on this front may never be reached, environmental integration requires giving (greater) recognition to the interconnectedness of the environment and the links between environmental problems. Otherwise, environmental problems will continue to be addressed (if at all) on a one-by-one basis, and to little effect, as has been the experience thus far. Enduring progress is unlikely to be made if environmental integration efforts are not guided by a broad vision of the environmental challenge and of what is required to address it, even if knowledge on that front is imperfect and there is no full agreement. Without such a vision, there is also no basis for advancing coherence and avoiding counter-productive efforts in the greening of non-environmental cognitive frameworks, policies, and institutions. Without internal integration, external integration efforts are unlikely to add up, at best. Without external integration, internal integration will be of little if any consequence. Both are needed and are essentially two sides of the same coin.

Having identified three management domains and two dimensions of environmental integration, we can distinguish six areas in which environmental integration needs to occur in mutually supportive or at least compatible ways. Together, these six areas or sub-challenges of environmental integration constitute what I will refer to as the environmental integration matrix, presented in Table 1. For each area, particular foci for advancing environmental integration can be identified, as will be discussed below.

Environmental integration in each of these areas raises different questions, issues, and obstacles. However, all six sub-challenges are logically and practically interconnected, implying that none of them can be ignored. Rather, as noted above, they must be addressed together in complementary and mutually supportive, or at least compatible, ways. Yet, in practice, as I will discuss in Chapter 2, the environmental

integration efforts of governments have often been skewed towards one or two of these sub-challenges, thereby limiting the effectiveness of these efforts and creating new frictions and tensions. If governments are to address the environmental challenge more effectively, they must improve or strengthen their capacity and efforts to deal with all six sub-challenges in a concerted way.

Table 1 – The Environmental Integration Matrix

Domain Dimension	Cognitive domain	Policy domain	Institutional domain
Internal dimension	Overarching cognitive framework: cognitive capacity and a collective vision	Green planning (including implementation)	Strong and enduring overarching environmental institutions
External dimension	Greening of non-environmental cognitive frameworks: economic thinking and thinking about the role of science and technology	Greening of non-environmental policies: economic, energy, transport, agriculture, and urban development	Greening of non-environmental institutions: greening of government, economic and sectoral institutions

Within each area, a variety of means or tools have been developed to promote environmental integration, leading to differences in approaches. The aim here is not to elaborate on the different means or tools by which environmental integration has been pursued. I have done so elsewhere.¹³ The effectiveness of all these means and tools has been limited, in part because each tool has its limitations and/or because they have been applied in isolation rather than in a coherent manner, and in part because they have been deliberately designed and implemented to have limited effectiveness, influenced by the political-institutional context in which they have been developed and introduced.

In the following sections, I will elaborate on each of these areas of environmental integration to further clarify their rationales and identify some of the main issues associated with each.

Overarching cognitive environmental framework: knowledge and a collective vision

Approaching the environmental challenge more comprehensively begins with the development of an overarching cognitive framework that consists of two main elements: cognitive capacity and a collective vision.

¹³ Bührs, Ton, *Environmental Integration: Our Common Challenge*.

Cognitive capacity relates to the need to find out how the environment “works” and what the human impacts on the environment are. Given the complex and interconnected nature of the environment, and the multiple and interconnected sources of human impact, determining the overall impact of humans on the environment, and whether or to what extent this impact adversely affects the complex ecological basis on which life (including human) and societies depend, requires the development of comprehensive and reliable knowledge and understanding. This need applies not just to a country’s domestic environment, but also to the interactions with the global environment.¹⁴

Throughout history, (indigenous) societies developed a local knowledge of their environment and impacts through experience and observation. While local knowledge remains invaluable (as environmental impacts often manifest themselves locally), in modern societies and highly modified, especially urban, environments, with far more people and numerous and diverse activities and technologies that impact the environment, often far beyond the local environment, there is a need for developing a much more extensive knowledge basis. In many countries, this has been recognised, as reflected in the adoption of state of the environment reporting and the creation of agencies responsible for the collection of data and the development of environmental knowledge and understanding. Increasingly, this has also become a matter of international and global concern, given the transboundary and global nature of many environmental issues, as demonstrated, among other, by the establishment of the International Panel on Climate Change (IPCC).

Science and scientists play a crucial role in the development of knowledge and understanding of the environment and the human impacts thereon. Without scientific research, humans and societies may remain largely unaware of many of the environmental impacts of their actions, practices, and technologies and/or develop no good understanding of the proximate sources or causes of environmental problems. This has been illustrated from the early days when environmental concerns entered the public and political agendas, for instance, with the publication of Rachel Carson’s *Silent Spring*. But it also applies to the discovery of the hole in the ozone layer, the growing concerns about climate change, the effects of many pollutants on humans and ecosystems, and numerous other environmental issues. Based on scientific analyses and models, we can identify planetary boundaries for a range of crucial biophysical systems and processes that have been or threaten to be crossed because of human interventions.¹⁵ Science and scientists, therefore, often function as crucial

¹⁴ Caldwell, Lynton K. (1990), *Between Two Worlds: Science, the Environmental Movement, and Policy Choice*. Cambridge England; New York: Cambridge University Press.

¹⁵ Folke, Carl (2013), “Respecting Planetary Boundaries and Reconnecting to the Biosphere”, in E. Assadourian and T. Prugh (eds.), *State of the World 2013. Is Sustainability Still Possible?*, 19-27; Rockström, J. et al. (2009), “A Safe Operating Space for Humanity”, *Nature*, Vol.461, No.7263, 472–475; Rockström, J. et al., “Planetary Boundaries: Exploring the Safe Operating Space for Humanity”; Steffen, Will, et al. (2011), “How Defining Planetary Boundaries Can Transform Our Approach to Growth”, *Solutions Journal*. Vol.2, No.3, <http://www.thesolutionsjournal.com/node/935>.

allies in bringing environmental problems to light and in providing environmental advocates with a solid knowledge basis for their concerns and arguments.¹⁶

However, the contributions of science to developing a comprehensive and integrated understanding of environmental problems are limited. Much research on environmental issues, like most science, is focused on particular problems or aspects of the environment, such as climate change or the decline of biodiversity. However important the latter issues are, they can and should be seen as symptoms of the broader environmental challenge with deeper sources and causes that are often ignored by scientists. All too often, scientific analyses of environmental issues stop at the proximate sources or causes, like greenhouse gas emissions, that then provide the basis for identifying solutions to the problem(s). The political, economic, social, philosophical, and ethical aspects or causes of the environmental challenge are often ignored. This is understandable given the scientific worldview, the reductionist nature of the scientific approach and methods, and the way scientists have been trained. But it means that science, on its own, cannot provide an overarching cognitive framework for understanding the environmental challenge.

This issue also relates to the second focus for the development of an overarching cognitive framework to guide environmental integration: the development of a collective vision.¹⁷ On its own, even the most reliable knowledge and understanding of the biophysical environment and the human impacts thereon cannot tell us how much value we must assign to environmental protection, and what we should or must do to protect the environment. Decisions on such questions are inherently value-laden and political. The answers given to these questions depend on socio-cultural and political-ideological perspectives and are influenced by people's interests and positions in society. Even among environmental philosophers and advocates, there is a broad variety of views on how humans should interact with the environment, ranging from deep ecological or ecocentric to more pragmatic and human-centred perspectives.¹⁸ In highly pluralistic societies, characterised by a high diversity of worldviews, many of which hardly give any (explicit) recognition to the environment or recognise its importance, reaching collective agreement on such questions arguably poses an even bigger challenge than creating a high level of scientific agreement on how the environment works and the human impacts thereon. Yet, if we accept that environmental integration is a collective challenge and that the attitudes, behaviour, and practices of even relatively small groups of people can have big consequences for a society (or the world) as a whole, we cannot allow the diversity of views and interests

¹⁶ Caldwell, Lynton K., *Between Two Worlds: Science, the Environmental Movement, and Policy Choice*.

¹⁷ *Ibid.*, Chapter 6.

¹⁸ Devall, Bill (1980), "The Deep Ecology Movement", *Natural Resources Journal*, Vol.20, No.2, 299-322; Eckersley, Robyn (1992), *Environmentalism and Political Theory: Toward an Ecocentric Approach*. Albany: State University of New York Press; O'Riordan, Timothy (1981, 2nd rev. ed.), *Environmentalism*. London: Pion Limited; Capra, Fritjof (1997), *The Web of Life. A New Synthesis of Mind and Matter*. London: Flamingo; Hay, Peter (2002), *Main Currents in Western Environmental Thought*. Sydney: University of New South Wales Press. For a history of ecological thinking and the diversity of ideas, see Worster, Donald (1994), *Nature's Economy: A History of Ecological Ideas*. Cambridge, England: Cambridge University Press.

to be used as an excuse for collective paralysis. Somehow, a collective vision that informs and guides the behaviour and practices of all people and organisations must be created if environmental integration is to be pursued in complementary ways.

That this is not impossible is demonstrated by the fact that, in many countries, governments have adopted the idea of sustainability or sustainable development as an overarching cognitive framework that, at least notionally, assigns an important status to environmental values and that is often used as a basis for integrating such values into non-environmental frameworks, policies and institutions. Sustainability, as a principle, has also been adopted by many businesses and societal organisations, even to the point that it can be said to have become the dominant environmental discourse at the local, national, and global level and possibly already the prototype for a new cognitive paradigm.¹⁹

However, sustainability and sustainable development have been interpreted in many different, often self-serving, ways, which has led to much debate about their usefulness and how these concepts should be interpreted.²⁰ While many of the critiques are valid, it would be unwise, even if this were possible, to discard these concepts. For one, they are by now well and truly entrenched in public discourse, alongside other normative concepts like democracy, liberty and justice that also cannot simply be recalled or suppressed. Second, there is scope for translating these concepts into more specific and even quantifiable terms, especially concerning the biophysical boundaries of what can be considered ecologically sustainable, as exemplified in the case of climate change, where thresholds of emissions have been specified to avoid global warming from reaching dangerous levels. As noted above, it is possible to determine (even if roughly and tentatively) the planetary boundaries for a range of crucial biophysical systems and processes.²¹ Similarly, there is potential for quantifying resources and the extent to which they are exploited and consumed, with implications for their long-term availability, and claims on resources by different groups and countries, based on the notions of environmental space and material flows.²² The concept of the ecological footprint can help to make explicit the extent to

¹⁹ Dryzek, John S. (1997), *The Politics of the Earth: Environmental Discourses*. Oxford; New York: Oxford University Press, 121-136.

²⁰ Lélé, Sharachchandra M. (1991), "Sustainable Development: A Critical Review", *World Development*, Vol.19, No.6, 607-621; Luke, Timothy W. (2005), "Neither Sustainable nor Development: Reconsidering Sustainability in Development", *Sustainable Development*, Vol.13, No.4, 228-238; Redclift, Michael R. (1987), *Sustainable Development: Exploring the Contradictions*. London: Methuen; Robinson, John (2004), "Squaring the Circle? Some Thoughts on the Idea of Sustainable Development", *Ecological Economics*, Vol.48, No.4, 369-384.

²¹ Folke, Carl, "Respecting Planetary Boundaries and Reconnecting to the Biosphere"; Rockström, J. et al. (2009), "A Safe Operating Space for Humanity"; Rockström, J. et al., "Planetary Boundaries: Exploring the Safe Operating Space for Humanity"; Steffen, Will, et al., "How Defining Planetary Boundaries Can Transform Our Approach to Growth".

²² Spangenberg, Joachim H. (2002), "Environmental Space and the Prism of Sustainability: Frameworks for Indicators Measuring Sustainable Development", *Ecological Indicators*, Vol.2, No.3, 295-309; Committee on Material Flows Accounting of Natural Resources, Products, and Residuals, Board on Earth Sciences and Resources, Committee on Earth Resources, Division on

which human activities and resource consumption are exceeding the limits of what can be plausibly considered biophysically or ecologically sustainable, while also revealing the inequality in the claims on resources.²³ Such analyses, although science-based and quantitative, can also provide a basis for raising normative, including equity, issues, about resource consumption, and can be incorporated into broader views about what constitutes a desirable or good society (and world).²⁴ Ultimately, it is the combination of a collective vision that provides normative guidance and the reliability of its empirical knowledge basis that determines the potential effectiveness of an overarching cognitive framework.

In this context, it must be recognised that even a sustainable and safe world is not necessarily a socially, economically, and politically desirable world. Even if ecosystems continue to operate within ecological boundaries, pollution is minimised, urban/modified environments do not cause physical harm to people and are aesthetically pleasing, and resources are being used sustainably, this does not mean that human well-being, justice, equality, and the many other things (including public goods) that make for a "good society" will have been achieved. A sustainable society may co-exist with high inequality, unemployment, discrimination, low job satisfaction, political oppression, and many other social, economic, and political ills. Aldous Huxley's *Brave New World*, inhabited by seemingly happy people, could be environmentally sustainable, but it remains nonetheless a dystopian nightmare. Hence, an overarching view of a sustainable society needs to be incorporated into a vision of what constitutes a good or desirable society as determined by its citizens.

The greening of non-environmental cognitive frameworks

As noted in the preceding section, in modern societies, the development of a collective societal vision that recognises the importance of the environment poses a major challenge given the existence of a diversity of socio-cultural and political-ideological perspectives that incorporate different and often conflicting environmental perspectives.

Here, I will just briefly elaborate on the rationale behind efforts aimed at the greening of non-environmental cognitive frameworks. One might take the view that changing socio-cultural and political-ideological perspectives to integrate environmental concerns or considerations may be a near-impossible task and not one

Earth and Life Studies, National Research Council of the National Academies (2004), *Materials Count. The Case for Material Flows Analysis*. Washington, D.C.: National Academies Press.

²³ Wackernagel, Mathis and William E. Rees (1996), *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island, B.C.: New Society Publishers; Global Footprint Network (2015), National Footprints, http://www.footprintnetwork.org/gfn_sub.php?content=national_footprints (Accessed: 15 September 2015).

²⁴ Carley, Michael and Philippe Spapens (1998), *Sharing the World: Sustainable Living and Global Equity in the 21st Century*. London: Earthscan; Hayward, Tim (2007), "Human Rights Versus Emissions Rights: Climate Justice and the Equitable Distribution of Ecological Space", *Ethics & International Affairs*, Vol.21, No.4, 431-450; Wiedmann, Thomas O., et al. (2015), "The Material Footprint of Nations", *Proceedings of the National Academy of Science of the United States of America*, Vol.112, No.20, 6271-6276; Sachs, Wolfgang, et al. (1998), *Greening the North: A Post-Industrial Blueprint for Ecology and Equity*. London: Zed Books.

for governments to undertake. Rather, some may argue, governments must take the diversity of socio-cultural and political-ideological perspectives in their societies as a given and accommodate these different views, inasmuch as possible, in their decisions and policies. This is, arguably, indeed the stance that most governments have taken. They have done little if anything to change the views, ideologies, and management philosophies or frameworks of the “non-environmental” sectors to integrate environmental concerns, and left this to businesses, groups, and individuals themselves. But this has been another main reason why the collective efforts of governments and societies aimed at environmental protection have failed. If a collective vision of what is deemed to be a sustainable and desirable society (as discussed in the preceding section) is to be taken seriously, it must be incorporated into the views or cognitive frameworks that rule or guide the behaviour, actions and practices of individuals and groups across society.

Arguably, most if not all human behaviour and practices have some environmental impact. Humans cannot avoid using some natural resources to meet their needs, but the nature and scale of these impacts vary depending on a range of factors, including population size, which resources are used and in what amounts, and the type of technology used for exploitation, production, distribution, and consumption.²⁵ But it can be argued that by far most environmental problems and pressures find their sources in what could be referred to as the economic sphere, which comprises production, distribution and consumption activities (including industry, agriculture, energy, transport), and in which scale and the type of technology used make a big difference. Nonetheless, there are also other areas of human activity that have significant environmental impacts, such as urban settlement (development and planning), and defence and security. The relative importance of these non-environmental sectors, also in terms of their environmental impacts, varies from country to country. But to identify the proximate (more immediate) sources of environmental pressure and make a start on greening them by integrating environmental concerns or imperatives, looking at these sectors is useful.

As noted above, many if not most environmental impacts have their source in the economic sphere. This is understandable as it is through this sphere that humans meet (most of) their material needs, which inevitably involves using resources. Traditionally, which and how many resources were used, and how, was circumscribed by the local or regional (biophysical) environment as well as by the cultural frameworks and technology developed by a group, tribe, or society, with relatively little trade with outsiders. These societies did not have or recognise a separate economic sphere and the way they used resources (their economic activity) was embedded into the beliefs, culture, values, and norms of society. By contrast, in modern societies, economic activity has been largely disembedded from societies and has progressively been guided by economic thinking, ideas, ideology, and theories, a sphere or domain that

²⁵ The I=PAT formula, where “I” stands for environmental impact, “P” for population, “A” for affluence, and “T” for technology), was first put forward by Ehrlich and Holdren in the early 1970s and is a useful shorthand for capturing the main *proximate* causes of environmental pressure. But it can (and has been) contested as a model for explaining why or how these causes vary, and the underlying factors.

has become increasingly professionalised and the basis for how governments manage the economy. These ideas influence or shape government economic policy and (economic) institutions.

Which economic ideas, ideologies, and theories guide government economic policymaking and institution formation is largely a matter of politics and political economy. This will be discussed in later chapters. What is important to note here is that the cognitive economic frameworks that have guided governments (and the business sectors) have, by and large, ignored the importance of the environment other than as a pool of (virtually infinite) resources and a sink for the waste generated by economic activity. By implication, dominant economic ideology and theory have been based on the assumption of the possibility (and desirability) of infinite economic growth. These ideas have also underlain and informed government policies for all the sectors of activity mentioned above. Increasingly, they have also influenced government policies on science and technology. Although each of these sectors has its own rationale – reason for existence – the policies and institutions in each sector are largely circumscribed and influenced by the broader cognitive economic framework (or paradigm) that guides governments and businesses.

Hence the importance of greening this economic paradigm and way of thinking. However, most governments have barely begun to recognise this need (sub-challenge), let alone take it seriously. Although many governments talk about greening the economy, green economics, and “green growth”, they continue to accept and operate within the dominant capitalist (neo-liberal) economic paradigm, which, I will argue in Chapter 7, is fundamentally incompatible with meaningful and long-term environmental protection. As most sectors of economic activity also operate within this paradigm, moves towards greening their main underlying rationales have also been quite limited. Although more recently, many governments have indicated to be committed to the greening of the energy sector, transport, industry, agriculture, and urban and spatial development, among other areas, these efforts are largely confined to technological and managerial solutions that, at best, mitigate the environmental impacts of these sectors. But they do not question the underlying rationales of these sectors, nor the ideology, theories and assumptions on which the economic and sectoral institutions and policies (including science and technology) are based.

As governments and mainstream economists have shown little interest in this area, it has fallen mostly to “green” economists to come up with ideas and suggestions on this front. Boulding, Mishan, and Daly were among the first economists to point out the failings of mainstream economic theory to give proper consideration to environmental concerns.²⁶ One of the fundamental shortcomings of the prevailing economic paradigm that Daly pointed out is that it treats the environment as a sub-system of the economic system while, in reality, the economy is only a subset of the

²⁶ Daly, Herman E. (1973), “Introduction”, in H. E. Daly (ed.) *Toward a Steady-State Economy*, 1-29; Mishan, E. J. (1967, Pelican 1969 ed.), *The Costs of Economic Growth*. London: Staples Press; Boulding, Kenneth E. (1966), “The Economics of the Coming Spaceship Earth”, in H. Jarrett (ed.) *Environmental Quality in a Growing Economy and Society*, 3-14.

ecosystem.²⁷ This leads to the environment being seen as an infinite source of natural resources and dumping ground for waste rather than as a biophysical system with interactions and processes that need to be recognised and respected if environmental and resource conditions are to remain conducive to the flourishing of life, including human life and societies. Ecological economics, aimed at integrating the biophysical reality and ecological considerations into the heart of economic thinking and theory, has developed into an important alternative school of economics.²⁸ But although the number of economists advocating a major change in economic thinking (also for environmental reasons) has been growing, as yet they have not been able to bring about a shift in the dominant economic paradigm under which both governments and businesses operate. In part, this may be attributed to the fact that there is considerable diversity and disagreement among alternative economic thinkers.²⁹ But a more important reason for the failure of governments to develop and adopt a cognitive economic framework based on environmental fundamentals lies in the political-economic realm, to be discussed in later chapters.

Thus, the greening of the cognitive frameworks that influence and shape government policies and institutions in the areas of human activity that have the most impact on the environment, the realm of economics, including all its different sectors, as well as science and technology and urban and spatial development, remains a largely unmet challenge.

Overarching environmental policy

Not surprisingly, given the difficulties associated with the construction of an overarching cognitive framework that can function as a basis for environmental policy integration, the adoption of a comprehensive policy that converts that framework into government policy also proves to be a major challenge. The lack of agreement on what constitutes a good society or even a good environment has a corollary in the messy and conflict-ridden world of politics and policy.

Inherent to the notion of policy is the assumption that people, individually and collectively, have certain ideas about what they want to achieve in the future (the intentional component). Such ideas (goals) can be broad and vague or very specific. They are not necessarily mutually complementary but may conflict with each other, even at the individual level (sometimes, we have to choose). Goals usually are assigned different degrees of importance and priority. As public policy theorists have argued,

²⁷ Daly, Herman E. (1996), *Beyond Growth: The Economics of Sustainable Development*. Boston: Beacon Press, 49.

²⁸ Daly, Herman E. and Joshua C. Farley (2004), *Ecological Economics: Principles and Applications*. Washington: Island Press; Costanza, Robert and Lisa Wainger (1991), *Ecological Economics: The Science and Management of Sustainability*. New York: Columbia University Press.

²⁹ For different views and contributions on this front, see Martinez Alier, Joan and Roldan Muradian (2015), "Taking Stock: The Keystones of Ecological Economics", in J. Martinez Alier and R. Muradian (eds.), *Handbook of Ecological Economics*, 1-25; Spash, Clive L. (2017), "Social Ecological Economics", in *Routledge Handbook of Ecological Economics: Nature and Society*, 3-16; Raworth, K. (2017), *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Random House; Jackson, Tim (2009), *Prosperity without Growth: Economics for a Finite Planet*. London: Earthscan.

government policy development seldom results from a rational (comprehensive) approach. Given the diversity of interests, values and goals associated with most if not all issues, it is not surprising that policies are usually developed in a fragmented, incremental, and often incoherent and inconsistent manner, depending on the particular constellation of political forces operative in different issues, policy areas, and contexts. Apart from the political obstacles to comprehensive policy development, it also faces informational and theoretical-analytical requirements that are difficult to meet. Such policies are very demanding in terms of the amount of data and information needed, and they assume knowledge about connections and interactions between variables that may not exist and that involve advanced, but not necessarily realistic modelling. Moreover, there is the concern that, given the diversity of values and interests in the political arena, comprehensive policy almost inevitably leads to the disregard or even suppression of that diversity, and hence is likely to be undemocratic. Given these objections and obstacles, the rational model of policy development has been dismissed as unrealistic and even undesirable by various public policy theorists, largely because of the same objections as those raised above about the development and adoption of an overarching cognitive framework.³⁰

Yet, there are good grounds for arguing that the idea that environmental policy integration can be guided by an overarching, comprehensive policy that assigns a crucial place to environmental considerations, and that it should not be dismissed a priori as unrealistic or even impossible, for three main reasons. First, there are different views on what a rational (comprehensive) approach to policy development entails. Second, the extent to which comprehensive policy development is possible or difficult may vary depending on the type of political system and institutions. Third, comprehensive policy development that assigns an important place to environmental considerations has, at least to some extent, already been a practice in many countries, albeit with variable degrees of success and continuity.

First, it can be argued that the rational-comprehensive model of policy development as portrayed by some policy analysts, such as Herbert Simon,³¹ is like a straw man or ideal that is easy to knock down. In practice, policies can and are being developed with varying degrees of comprehensiveness, depending on the nature of the issue(s) being addressed (broad or specific), the extent to which issues or policy areas are being linked (for instance, straddling economic policy and other policy areas), and the importance assigned to certain goals or principles (such as user-pays or the devolution of responsibilities to lower levels of government or the market). In many cases, there are no a priori theoretical reasons why policies cannot be developed in a less fragmented and ad hoc manner, for instance, by expanding their information basis and analytical frameworks, by changing decision-rules to require consultation

³⁰ Wildavsky, A. (1979), *The Art and Craft of Policy Analysis*. London: Macmillan Press; Lindblom, Charles E. (1959), "The Science of "Muddling Through"", *Public Administration Review*, Vol.19, No.2, 79-88; Lindblom, Charles E. (1990), *Inquiry and Change: The Troubled Attempt to Understand and Shape Society*. New Haven Yale University Press.

³¹ Simon, Herbert A. (1945), *Administrative Behaviour*. Glencoe, Ill: Free Press.

with or input from a wider range of parties, and/or by broadening the mandate of agencies responsible for policy development.³²

Second, the extent to which (more) comprehensive policy development is possible and practised depends also on the political system, political culture and the traditional policy style or tradition in a polity. Obviously, in political systems where planning was or has been a common or even predominant tool in the development of policies, such as in the previously "really existing" socialist countries, and in many Western European countries until the 1980s, comprehensive policy development was commonly practised. Even though assessments of the effectiveness of such policies may differ, what is possible and realistic depends to a large degree on the existing political institutions and the prevailing views on the role of government.³³

Third, related to the notion of sustainability discussed above, many countries have already some experience with the development of comprehensive policies that assign an important or even central place to environmental considerations. These policies came under a variety of labels, like Sustainable Development Strategies and National Environmental Policy Plans which have been collectively referred to as green planning. Following the publication of the Brundtland Report,³⁴ many governments adopted such a policy, plan, or strategy. It even became a norm or expectation following the United Nations Conference on Environment and Development (UNCED) in 1991, which, among the recommendations in *Agenda 21*, called upon governments to adopt such plans. These green planning efforts varied considerably in scope, specificity and the extent to which they received practical follow-up, especially concerning the greening of non-environmental policies and practices.³⁵ Some countries, notably the Netherlands, were considered leaders in this field.³⁶ But it must be admitted that most of these efforts have been one-off exercises of a symbolic nature and that the more serious commitments in this area have floundered in the 1990s under the growing influence of neo-liberal ideology on governments.³⁷

³² Bartlett, Robert V. (1990), "Comprehensive Environmental Decision Making: Can It Work?", in N. J. Vig and M. E. Kraft (eds.), *Environmental Policy in the 1990s: Toward a New Agenda*, 235-254.

³³ Leontief, Wassily (1981), "The Case for National Economic Planning", *The Journal of Business Strategy*, Vol.1, No.4, 3-7; Devine, Pat (1988), *Democracy and Economic Planning*. Oxford: Polity Press.

³⁴ World Commission on Environment and Development (1987), *Our Common Future*. Oxford; New York: Oxford University Press.

³⁵ Jänicke, Martin and Helge Jörgens (1998), "National Environmental Policy Planning in OECD Countries: Preliminary Lessons from Cross-National Comparisons", *Environmental Politics*, Vol.7, No.2, 27-54; Dalal-Clayton, D. B. and Stephen Bass (2002), *Sustainable Development Strategies: A Resource Book*. London; Sterling, VA: Earthscan; Organisation for Economic Co-operation and Development; United Nations Development Programme.

³⁶ Johnson, Huey D. (1995, 2008, 3rd ed.), *Green Plans: Blueprint for a Sustainable Earth*. Lincoln: University of Nebraska Press.

³⁷ Bührs, Ton (1996), "Green Plans: A New Generation of Symbolic Environmental Policies?", Paper presented at *ECOPOLITICS X Conference*, Canberra, The Australian National University, 26-29 September; Bührs, Ton (2000), "Green Planning in Australia and Canada: Dead or Alive?", *Environmental Politics*, Vol.9, No.2, 102-125.

That a comprehensive approach to policy is possible is also illustrated by how neoliberal ideology and principles have effectively functioned as a basis for policy integration, influencing and shaping with a remarkable degree of consistency a wide range of policy areas, including health, education, housing, social welfare, urban development, and environmental policies (for instance, leading to the introduction of emissions trading). It is important to point out that even if such policy changes were not presented or contained in a comprehensive plan (as planning is a dirty word in neoliberal ideology), they effectively constituted a rational-comprehensive policy approach. If environmental principles had been substituted for neoliberal principles this would have gone a long way towards environmental integration. Neoliberal ideology and principles have effectively been integrated into and captured all three domains of management: cognitive, policy, and institutional.

The question, then, is not so much whether governments can adopt a more or less comprehensive policy approach, but what kind of overarching policy intentions, principles, and goals governments choose to adopt as their dominant or guiding policy that effectively serves as a basis for policy integration. The experience with green planning demonstrates that it is possible for governments to adopt a comprehensive environmental policy as a basis for environmental integration, even though, in most countries, these efforts have not been pursued and implemented with much if any vigour, were overshadowed by economic goals, and ultimately fizzled out. But this does not mean that, at some stage, the idea and practice of green planning could not make a comeback. Ultimately, whether this happens is a matter of politics.

The greening of non-environmental policies

As discussed above, there is growing recognition that addressing environmental problems effectively requires the greening of what are commonly regarded as non-environmental policy areas or sectors, including the energy, transport, industry, and agricultural sectors. Many environmental pressures and problems find their immediate sources or drivers in these sectors. But as I have pointed out above, what is happening in these sectors is largely circumscribed by broader economic considerations or imperatives and influenced by economic policies. Hence, the greening of economic policy (based on a green economic theory or framework), has also been a subject of debate and some, albeit very limited, government efforts. In this section, I will briefly discuss the rationales for the greening of economic, energy, transport and agricultural policies and the weakness of government efforts in these areas.

That prevailing economic theory largely ignores the biophysical environment realities has already been noted above. The environment is simply treated as a pool of resources and a sink, not as a system on which all life depends. This is reflected in the economic policies of governments and the economic decisions, practices and behaviour of most producers and consumers. Continuous economic growth is the overriding goal of the economic policies of most if not all governments,³⁸ promising

³⁸ One of the few exceptions is the government of Bhutan, which has made the pursuit of "Gross National Happiness" a core goal that is even included in the country's constitution. See Drexler, Madeline (2014, Kindle ed.), *A Splendid Isolation. Lessons on Happiness from the Kingdom of Bhutan*. madelinedrexler.com.

ever higher standards of living and full employment while providing also (tax) revenue that enables government spending on public goods like health, education, infrastructure, and environmental protection. When economic growth stagnates or the economy shrinks, as measured by Gross Domestic Product (GDP), governments are usually held responsible and in trouble politically. Restoring economic growth then becomes an even greater priority, as reflected during the COVID-19 pandemic which, in many countries, led to the biggest economic contraction since the economic crisis of the 1930s.

However, as noted already, economic growth is also regarded as one of the most important drivers of environmental pressures, problems and degradation, while the claim that it leads to ever-rising human and societal well-being has been drawn into doubt.³⁹ Economic growth is being held responsible for the growing scarcity of non-renewable natural resources, unsustainable pressure on renewable resources, rising levels of energy use and GHG emissions, many forms of pollution and ill-health linked to industrialisation, technology, the destruction of ecosystems and the decline of biodiversity, increasing waste streams, fostering unhealthy materialism and the erosion of social capital, and many other ills of modern societies.⁴⁰

It has long been argued that, given the existence of environmental limits, infinite economic growth is a physical impossibility.⁴¹ In the 1970s, the environmental debate was often cast in terms of environmental protection versus economic growth. However, from around the mid-1970s, the idea that economic growth and environmental protection can be (made) compatible started to receive more support.⁴² This became the dominant view after the publication of the Brundtland Report, which put forward an interpretation of sustainable development that implied that environmental limits were flexible and that, with technological innovation and better management, economic growth would be able to continue within these limits.⁴³ Such optimism was upheld by a raft of further studies, pointing out the potential of

³⁹ Mishan, E. J., *The Costs of Economic Growth*; Booth, Douglas E. (1998), *The Environmental Consequences of Growth. Steady-State Economics as an Alternative to Ecological Decline*. London and New York: Routledge; Hickel, Jason (2019), "Degrowth: A Theory of Radical Abundance", in E. Fullbrook and J. Morgan (eds.), *Economics and the Ecosystem*, 88-112; Raworth, K., *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*.

⁴⁰ Many of these multi-faceted effects of economic growth, comprising physical-environmental, social, political, and psychological dimensions, are *indirect* outcomes that may have been produced by interaction with other variables, which makes such claims contestable. But inasmuch as economic growth is defined in terms of increased physical or material "throughput", many of the physical-environmental effects can be attributed *directly* to economic growth.

⁴¹ Meadows, Donella H., *et al.*, *Limits to Growth: The 30-Year Update*; Meadows, Donella H., Dennis L. Meadows, Jörgen Randers, William W. Behrens (1972, 1974 2nd ed.), *The Limits to Growth. A Report for the Club of Rome's Project on the Predicament of Mankind*. New York: New American Library; Daly, Herman E., "Introduction". Boulding, Kenneth E., "The Economics of the Coming Spaceship Earth".

⁴² Some influential publications supporting this view were Kahn, Herman, *et al.* (1976), *The Next 200 Years: A Scenario for America and the World*. New York: Morrow. And Simon, Julian Lincoln and Herman Kahn, *The Resourceful Earth: A Response to Global 2000*.

⁴³ World Commission on Environment and Development, *Our Common Future*, Chapter 2.

higher levels of resource efficiency and developments towards the greening of the systems of production and consumption,⁴⁴ while the contention that the environment was getting worse was also questioned.⁴⁵

Many governments jumped on this bandwagon and adopted the notion of "green growth", continuing their commitment to economic growth whilst claiming that the environmental effects thereof could and would be "decoupled" from increases in GDP. Economic policies did not change fundamentally and continued to be pursued based on the neoliberal ideology and principles that most governments adopted during the 1980s and 1990s. To the extent that environmental problems were considered, they were translated into monetary values, natural capital, quantified and addressed by the introduction of (modest) green taxes and/or markets in environmental commodities (such as carbon, water, and pollution rights). These policies amounted to a form of reverse environmental integration, implying the economisation and monetisation of the environment, which could then be managed within the prevailing economic frameworks, rather than the greening of economic thinking and policies. This shift has been supported by a growing body of environmental and resource economics which, in contrast to ecological economics, does not take biophysical reality as the basis for its theories but relies foremost on assigning monetary values to environmental commodities.⁴⁶

The limitations and shortcomings of the main measure of value produced by economic activity, the Gross Domestic Product (GDP), have long been recognised, and a variety of other ways of measuring that value and changes to human and environmental well-being have been proposed.⁴⁷ However, although some countries have introduced a form of green, resource or well-being accounting, these have had no impact on the actual economic policies that governments pursue, which continue

⁴⁴ Weizsäcker, Ernst von, *et al.* (1997), *Factor Four. Doubling Wealth - Halving Resource Use*. St. Leonards, NSW, Australia: Allen & Unwin; Hawken, Paul, *et al.* (1999), *Natural Capitalism: Creating the Next Industrial Revolution*. Boston: Little, Brown and Company; Jänicke, Martin (2000), *Ecological Modernization: Innovation and Diffusion of Policy and Technology*. Berlin: Forschungsstelle für Umweltpolitik (FFU) Freie Universität Berlin.

⁴⁵ Lomborg, Bjørn, *The Skeptical Environmentalist: Measuring the Real State of the World*.

⁴⁶ For further discussions on this approach see Stavins, R. N. (2000), "Market-Based Environmental Policies", in P. R. Portney and R. N. Stavins (eds.), *Public Policies for Environmental Protection*, 31-76; Tietenberg, Tom (2002), "The Tradable Permits Approach to Protecting the Commons: What Have We Learned?", in E. Ostrom, *et al.* (eds.), *The Drama of the Commons*, 197-232; Arsel, Murat and Bram Büscher (2012), "Nature™ Inc.: Changes and Continuities in Neoliberal Conservation and Market-Based Environmental Policy", *Development and Change*, Vol.43, No.1, 53-78.

⁴⁷ Daly, Herman E., *et al.* (1989), *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press; Victor, Peter A. (2008), *Managing without Growth: Slower by Design, Not Disaster*. Cheltenham, UK: Edward Elgar; Waring, Marilyn (1988), *Counting for Nothing. What Women Value and What Women Are Worth*. Wellington: Allen & Unwin; Atkinson, Giles (1995), "Greening the National Accounts: U.S. Congressional Budget Office", *Environment*, Vol.37, No.5, 25-28; New Economics Foundation (2004), *Chasing Progress: Beyond Measuring Economic Growth*. London: New Economics Foundation.

to be driven by the commitment to economic growth and neoliberal prescriptions.⁴⁸ Hence, although these ideas contribute to a different way of thinking about economics, thus far they have had little if any impact on the actual policies of governments and/or the decisions and practices of businesses.

As mentioned before, the need for policy-external environmental integration also extends to a range of other policy areas related to sectors that harbour many of the immediate sources of environmental pressure and problems, including industry, energy, transport, and agriculture policies. Given the more immediate and often visible or noticeable nature of the problems generated by these sectors, they have become much more a focus of demands for greening than economic policy. The higher profile of greening efforts in some of these sectors (notably energy and transport) can be attributed to the mounting concern about climate change, but also the fact that the mostly technological nature of the greening efforts in these areas are tangible and speak to the imagination of people. They fit in well with the paradigm of technological progress and the creation of better societies. But perhaps the most important reason why these have become the focus of attention for greening the economy is that they are compatible with the dominant economic paradigm and are seen and promoted as new areas for significant “green” economic growth.

However, it is highly questionable that societies can grow their way out of the environmental crisis through the development and large-scale adoption of new technology, including so-called renewable energy technologies, electric cars and hydrogen-fuelled aeroplanes, among others. For a start, the main rationale for adopting these technologies lies in the need to reduce CO₂ emissions, the main contributing factor to climate change. However, climate change is just one (albeit very important) environmental problem, and CO₂ emissions are only one proximate source of the problem. This approach fails to place the problem of energy use and policy in the wider context of the environmental challenge and its connections with many other environmental issues and their common, underlying drivers and causes. Some critics have put question marks behind the green credentials of renewable energy technologies and some of their advocates.⁴⁹ Even if, on balance, the savings in greenhouse gas emissions associated with the whole lifecycle of these assets may be positive, this is no reason for ignoring their many other significant environmental effects.⁵⁰

⁴⁸ Bührs, Ton, *Environmental Integration: Our Common Challenge*, 159-163.

⁴⁹ Jeff Gibbs and Michael Moore, in a film titled *Planet of the Humans*, provided a highly critical assessment that was labelled by some environmental advocates as misleading to the point that they wanted to have the film banned from YouTube. But although the film may contain some inaccurate information, the general argument that is conveyed in the documentary cannot simply be dismissed and deserves to be heard: on their own, renewable energy resources are not going to solve the energy problem, let alone the environmental challenge. Gibbs, Jeff (2020), *Planet of the Humans*, Producer: Michael Moore; Wikipedia (2020), Planet of the Humans, https://en.wikipedia.org/wiki/Planet_of_the_Humans (Accessed: 19 October 2020).

⁵⁰ Gauthier, Philippe (2018), The Limits of Renewable Energy and the Case for Degrowth, <https://www.resilience.org/stories/2018-11-21/the-limits-of-renewable-energy-and-the-case-for-degrowth/> (Accessed: 19 October 2020); Spellman, Frank R. (2014), *Environmental Impacts of Renewable Energy*. New York: CRC Press.

But defining the greening of energy use and policy mainly in terms of a need to shift towards renewable energy forms becomes even more problematic if it is promoted as a means of promoting economic growth, an argument often put forward by the advocates of Green New Deals. The shift has indeed the potential to create many new jobs, which is no doubt a positive argument, especially in times of economic decline or crisis. It also offers new investment and profit-making opportunities for capital. But if this shift simply amounts to an increase in material production and consumption (“throughput”) it will not lead to an overall reduction of environmental pressures, on the contrary. There is a strong possibility that the production of “environmentally friendly” energy produces a rebound effect and will increase energy consumption as this is seen as no longer problematic, despite the ecological and material implications involved. Moreover, what needs to be considered is the amount of energy it takes to produce a unit of usable energy (the energy return on energy invested or EROEI). As fossil fuels are energy dense and pack a lot of energy in a small volume, their EROEI is very high, although it has declined over time as the more easily accessible fields have been exploited first. And although the EROEI of renewable resources varies depending on the resource involved, it is not as high as that of fossil fuels in the past. This means that, if energy demand were to keep rising, ever higher investments in renewables will be required, with concomitant increases in resource exploitation for their production, and the environmental effects thereof.⁵¹

To genuinely green energy use and policy, therefore, requires considering the full spectrum of its environmental effects as well as the recognition of environmental limits or boundaries. Given the severe degree of environmental degradation that is already occurring around the world, there is a need to *reduce* total energy consumption, notably in high-income (high consumption) countries. Also, while there is scope for significantly increasing energy efficiency, the gains will steadily decline after the “low hanging fruit has been picked” and negated if economic growth is allowed to continue. Ultimately, to put a halt to, let alone reverse, energy consumption will almost inevitably require the imposition of some kind of quota system that puts limits on the amount of energy that can be consumed.⁵² Admittedly, such a policy seems unlikely to be adopted in, and most probably is incompatible with, the prevailing political-economic systems.

Similar assessments can be made of the efforts to green the transport sector and other sectors that rely foremost on technological innovation aimed at mitigating or reducing greenhouse gas emissions. Most if not all of these efforts are based on a

⁵¹ On the importance of EROEI and the consequences of a decline in energy return on investment, see Homer-Dixon, Thomas F. (2006), *The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization*. Washington, DC: Island Press/Shearwater Books; Hagens, Nathan John (2015), “Energy, Credit, and the End of Growth”, in L. Mastney (ed.) *State of the World 2015. Confronting Hidden Threats to Sustainability*; Heinberg, Richard (2005, 2nd ed.), *The Party’s Over: Oil, War and the Fate of Industrial Societies*. Gabriola Island, BC: New Society Publishers. Heinberg, Richard and David Fridley (2016), *Our Renewable Future: Laying the Path for 100% Clean Energy*. Washington, DC: Island Press.

⁵² For a discussion of the limitations of renewable energy technologies and the likelihood that a reduction of overall energy consumption is needed, see Heinberg, Richard and David Fridley, *Our Renewable Future: Laying the Path for 100% Clean Energy*.

narrow definition of the problem and do not question the rationales on which sector policies are based. They continue to adhere to the assumption that continuing expansion and growth are both feasible and desirable. For instance, in the transport sector, the dominance of private transport (and car ownership) is taken for granted and continues to be held up as desirable. Fuelled by advertising, car ownership has become associated with social status and the idea of individual freedom.⁵³ It has become an important aspiration and sign of material achievement, driving the rapid expansion of the production of passenger cars worldwide, which rose from less than 10 million per year in the 1950s to more than 70 million in 2014, while the world's light vehicle fleet passed the one billion mark in 2012.⁵⁴ At the same time, largely driven by changes in transport policies, there has been a decline in public transport and a shift in the transportation of goods from rail to road, further contributing to the emissions and other environmental effects of this sector.⁵⁵ One does not have to be a genius to figure out that continuing to produce 70 million or more cars each year, even if they are electric, will further increase the already enormous environmental pressures and destruction even if, on balance, these cars would generate lower CO₂ emissions than their fossil-fuelled equivalents.

The story is arguably even less encouraging in agriculture, which has been described as "the single largest threat to biodiversity and ecosystem functions of any single human activity on the planet".⁵⁶ Agriculture accounts for 40% of total land use,⁵⁷ and is responsible for about 69% of all freshwater withdrawal globally.⁵⁸ Agriculture is also a major source of water, soil and air pollution and one of the main sources of emissions of methane and nitrous oxide emissions.⁵⁹ Agricultural practices have also come under scrutiny and criticism because of their adverse effects on the health and well-being of farm animals. Altogether, agriculture has become a major source of environmental pressures in many countries as well as internationally.

As in the transport sector, policy integration efforts in agricultural policy are not guided by a clear framework or interpretation as to what constitutes greening.

⁵³ Paterson, Matthew (2007), *Automobile Politics: Ecology and Cultural Political Economy*. Cambridge: Cambridge University Press.

⁵⁴ Worldwatch Institute (2015), *Vital Signs 2015. The Trends That Are Shaping Our Future*. Washington: Worldwatch Institute, 40-43.

⁵⁵ O'Meara Sheehan, Molly (2001), "Making Better Transportation Choices", in L. R. Brown, et al. (eds.), *State of the World 2001*, 103-122.

⁵⁶ Clay, Jason W. (2004), *World Agriculture and the Environment: A Commodity-by-Commodity Guide to Impacts and Practices*. Washington, D.C.: Island Press, viii. For a recent discussion of the role of agriculture in the ongoing decline of nature and biodiversity in the EU, see European Environment Agency (2020), *State of Nature in the EU. Results from Reporting under the Nature Directives 2013-2018* Copenhagen. The report notes that "current agricultural practices are by far the most dominant driver affecting habitats and species" (p.72).

⁵⁷ Organisation for Economic Co-operation and Development (2001), *Environmental Indicators for Agriculture. Volume 3. Methods and Results*. Paris: OECD, 18.

⁵⁸ Clay, Jason W., *World Agriculture and the Environment: A Commodity-by-Commodity Guide to Impacts and Practices*, 55.

⁵⁹ Organisation for Economic Co-operation and Development, *Environmental Indicators for Agriculture. Volume 3. Methods and Results*, 278.

Although some governments have adopted sustainable agriculture as a goal, this notion is as open to interpretation as the notion of sustainability itself. Another concept that is sometimes used, 'multifunctional' agriculture, provides possibly even less guidance about how agriculture can or should integrate environmental concerns, other than implying that these should be considered alongside economic and social imperatives. Although countries and cultures differ in the prevailing views on the (desirable) role, values, and functions of agriculture, and the extent to which natural values and the protection of landscapes, rural settlements and communities are seen as important,⁶⁰ most governments continue to support the industrial model of agriculture that has been responsible for large-scale environmental destruction around the world.

To conclude, while it is imperative to green all policy sectors and areas that have a major environmental impact, government efforts on this front have been largely weak and ineffective, while broader economic policies have remained virtually unchanged and continue to ignore or deny the reality of environmental limits. Hence, policy-external environmental integration remains a daunting sub-challenge. To increase the effectiveness of these efforts, they need to be based on a clear overarching policy framework (a 'green plan') that translates environmental (sustainability) imperatives into a coherent set of specific policy goals for all major policy sectors and areas. Moreover, they must be adequately supported in the institutional realm.

Overarching environmental institutions

As discussed in the preceding section, environmental integration requires the greening of policies in non-environmental areas that contain the drivers behind many environmental pressures and problems. But the effectiveness of environmental policy integration, within and across sectors, depends in large part on whether and how such efforts are backed up by rules and organisations (institutions).

Environmental integration requires the creation or amendment of institutions that give formal status and power ("teeth") to the environmental principles and/or imperatives that have been identified in the overarching cognitive framework, and that are, through more or less comprehensive policy (green planning), integrated into and across all policy areas that (potentially) significantly affect the environment. Institutional-internal environmental integration refers to the creation of overarching environmental institutions that support environmental integration in the cognitive and policy spheres, and that guide the greening of non-environmental institutions.

As the experience of green planning in many countries makes clear, what governments *do* to advance environmental integration is often half-hearted, non-committal, and short-lived. If a society (and the world as a whole) wants to ensure that environmental integration is pursued seriously and in a more enduring fashion, it will need to create a supportive institutional framework that makes it a formal and continuous requirement of the highest order. If environmental considerations are to be taken seriously and enduringly in the behaviour and practices of individuals and

⁶⁰ Buller, Henry (2000), "Regulation 2078: Patterns of Implementation", in H. Buller, Geoff A. Wilson and Andreas Höll (ed.) *Agri-Environmental Policy in the European Union*, 219-253.

organisations, they need to be institutionalised, for instance, in the form of laws and regulations, backed up by sanctions. Moreover, as many existing rules and organisations allow, encourage, or prescribe behaviour and practices that (potentially) have significant adverse environmental effects, such institutions need to be changed to address (mitigate or ideally eliminate) such behaviour and practices.

Before the 1970s, in many countries, organisations, rules and regulations were already in existence for the management and protection of a range of resources (notably forests, land, and water), for instance, to protect some species that were threatened with extinction or to promote hygienic conditions and human health by the provision of sanitary services. But it was only in the early 1970s that, in many countries, organisations and rules were created or amended specifically aimed at environmental protection. Over time, governments introduced a wide range of institutional changes aimed at protecting the environment, including environmental legislation, the creation of environmental ministries or departments and/or other agencies with environmental mandates, and advisory bodies such as Sustainable Development Councils. Many governments also introduced environmental rights and/or responsibilities, often laid down in their constitutions.⁶¹ While variable in efficacy, many governments around the world can be said to have considerably strengthened their country's institutional capacity to address environmental issues and/or to advance sustainable development.⁶² These complexes of environmental rules and organisations have become so extensive that they are sometimes referred to as the "ecostate" or "environmental state".⁶³

The broad rationale for building state environmental capacity is that the interconnectedness between environmental problems requires a more comprehensive and integrated approach and that the state is the main or even only institution that can do so collectively and legitimately. However, notwithstanding the changes referred to above, the institutional facilitation of such an approach remains weak and problematic almost everywhere. In many countries, environmental agencies have been saddled up with hands-on responsibility for a range of specific environmental problems rather than having been granted high-level responsibility for the development of comprehensive, integrated, and long-term environmental policy (green planning). Nowhere have they been given responsibility for the coordination of the implementation of such a policy across other agencies, and/or for bringing about

⁶¹ For a discussion of a variety of forms of institutional-internal environmental integration, see Bührs, Ton, *Environmental Integration: Our Common Challenge*, Chapter 7.

⁶² Jänicke, Martin (1997), "The Political System's Capacity for Environmental Policy", in M. Jänicke and H. Weidner (eds.), *National Environmental Policies - a Comparative Study of Capacity Building*, 1-24; Jänicke, Martin (2002), "The Political System's Capacity for Environmental Policy: The Framework for Comparison", in H. Weidner and M. Jänicke (eds.), *Capacity Building in National Environmental Policy. A Comparative Study of 17 Countries*, 1-18; Lafferty, William M. and James Meadowcroft (2000), *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*. Oxford; New York: Oxford University Press.

⁶³ Duit, Andreas, et al. (2016), "Greening Leviathan: The Rise of the Environmental State?", *Environmental Politics*, Vol.25, No.1, 1-23; Meadowcroft, James (2012), "Greening the State?", in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 63-86.

institutional change in non-environmental organisations to ensure the integration of environmental imperatives and priorities into those agencies. Most government environmental agencies are focused on and swamped by day-to-day environmental problems of a particular nature (often pollution-related), especially those that are high on the public and government agendas. They usually have little time and capacity or simply no interest in and/or responsibility for what I have referred to as green planning. As a result, much of what they do is of an ad hoc, reactive, fragmented, and incremental nature, unguided by an overarching environmental policy. Not surprisingly, this situation allows non-environmental government agencies (such as ministries of energy, transport, and agriculture) to continue to pursue their own non-environmental goals and priorities, paying lip service to environmental considerations and concerns at best.

In many countries, rather than assigning overarching responsibility for environmental integration to a core government agency, governments have created advisory bodies, often under the label of a Sustainable Development Council, to provide guidance on environmental and/or sustainability issues. However, while such agencies may be useful for debating issues between representatives from the business sector, environmental organisations, and government officials, their effectiveness in terms of influencing policy development (either in the form of a green plan or the development or amendment of existing policies) is questionable.⁶⁴ Although the significance of such bodies for cognitive-internal integration, by promoting public debate on environmental and sustainability issues aimed at reaching broad agreement, should not be dismissed,⁶⁵ the institutional context within which they operate puts considerable constraints on their effectiveness. Given these constraints, a case can be made for the establishment of far more powerful (citizens) bodies that take responsibility for ensuring that environmental imperatives are integrated across the whole of government. This idea will be discussed in Chapter 14.

To a large extent, whether and how overarching environmental institutions are, or even can be, established, and how effective they can be, is a question that is intertwined with the rationales and relative importance of non-environmental institutions. As noted above, environmental institutions have been created relatively recently. Most non-environmental (political, economic, and social) institutions that guide human behaviour and practices, within governments and societies, have existed for much longer and serve rationales that pre-date environmental concerns. To the extent that the importance and power of those institutions are greater than that assigned to environmental institutions, and their rationales are incompatible with

⁶⁴ Maurer, Crescencia (1999), *Rio+8: An Assessment of National Councils for Sustainable Development*. Washington, D.C.: World Resources Institute; Rosenberg, Jonathan and Linus Spencer Thomas (2005), "Participating or Just Talking? Sustainable Development Councils and the Implementation of Agenda 21", *Global Environmental Politics*, Vol.5, No.2, 61-87; Bührs, Ton, *Environmental Integration: Our Common Challenge*, 195-198.

⁶⁵ Niestroy, I. (2005), *Sustaining Sustainability, a Benchmark Study on National Strategies Towards Sustainable Development and the Impact of Councils in Nine EU Member States. Background Study No. 2, EEAC Series 76 (1958). No. 2*. The Hague: European Environment and Sustainable Development Advisory Councils (EEAC).

environmental needs or imperatives, creating a powerful overarching environmental institution may be very difficult indeed.

The greening of non-environmental institutions

As noted above, most institutions that guide human behaviour and practices pre-date the modern environmental era and do not have an environmental rationale at their core. While the creation of new institutions specifically aimed at advancing environmental concerns has been an important step in addressing environmental problems, their effectiveness has been and will continue to be constrained, by non-environmental institutions as long as these promote and protect ideas, behaviour and practices that are not compatible and in conflict with environmental interests. Whether and how prevailing non-environmental institutions can be greened remains one of the most vexing questions of the environmental integration challenge, and the subject of much doubt and debate. In this section, I will only briefly touch upon this sub-challenge as the issues it raises are linked to the systemic obstacles to environmental integration that will be elaborated upon in Chapters 3 to 6.

As discussed above, by and far, governments have created weak and fragmented environmental states. The mandates and efforts of environmental government agencies are mostly confined to what are considered to be environmental matters, such as nature conservation, pollution control, and waste management and recycling (the “environmental sector”). While they may play some role in advising governments in “non-environmental” areas like energy, transport, and agriculture, they usually have no formal responsibilities and power in those areas. While some governments have, at some stage, indicated to be committed to the greening of the whole machinery of government, this has not led to demonstrable changes in sector policies.⁶⁶ Sectoral departments and agencies have generally retained that responsibility, and while they may claim to be concerned about the environment and to be committed to sustainability, their efforts have been almost exclusively modest policy changes aimed at mitigating the effects of the practices of the sector involved. Meanwhile, the basic rationales for which they have been created remain unchanged, and so do their mandates and the requirements imposed on the (specialised) staff employed by these organisations.

As discussed earlier in this chapter, the realm of economics is arguably responsible for most environmental impacts. Yet, economic policies have remained largely untouched by environmental concerns and demands, with high (infinite) economic growth remaining the overriding goal (while keeping inflation and, if possible, unemployment, down). With the rise of neoliberalism from the 1980s, in many countries, “free trade” became the holy grail for the pursuit of economic growth, not only by the promotion of exports (export-led growth) but also by reducing or eliminating the obstacles to imports and foreign investments around the world. At the same time, neoliberalism promoted shifting ownership and control of assets from governments to the so-called free market, leading to the privatisation of previously state-owned enterprises in all or most sectors of the economy, including those that

⁶⁶ For a discussion of such initiatives, see Bührs, Ton, *Environmental Integration: Our Common Challenge*, 149-157.

played a key role in energy, communications, and transport. It also prescribed the deregulation of the financial sector and allowed the free movement of capital between countries and floating currencies. Another key plank of neoliberal institutional reform was the creation of 'independent' Central Banks to take monetary policy out of the political sphere. Broadly, neoliberalism involved the minimisation of government "interference" with the economy based on the claim that leaving economics to the free market would lead to the best outcomes for society and in the most efficient way.

Here, I will not elaborate on these claims and the political-economic aspects of neoliberalism, as these will be discussed in several later chapters. The main reason for mentioning it here is that the adoption of neoliberalism led not only to a comprehensive (some argue revolutionary) reform of economic institutions and policies that had serious social, environmental, and political consequences, but made the greening of economic institutions and policies even more problematic. It made it virtually illegitimate for governments to create rules and organisations that would require economic actors to assign priority to environmental and/or social values, goals, or imperatives. At most, it allowed for the use of economic instruments (including taxes and tradeable "pollution rights") that were claimed to be most efficient in advancing such goals. More fundamentally, it relegated the idea that governments (and politics, or societies) have a key role to play in economic matters to the fringes of economic thinking.

Thus, the primacy of the free market and export-led economic growth has been institutionally entrenched, with significant environmental, social, and political consequences. If or when these concerns are addressed, they are tagged on to economic institutions and policies, without changing their dominant rationales. This is a far cry from the creation of economic institutions based on environmental and social imperatives (for instance, laid down in a green plan or a societal vision), with economic policies being designed to meet the goals and objectives of a society. Although governments have long been instrumental in disembedding the economic sphere from societies and the environment, after the neoliberal revolution, the sphere of government and public policy has now been embedded into what could be referred to as a sovereign economic sphere that circumscribes or even dictates what governments can, must and should do (or not do). This also implies that, unless states (or rather, the people) reclaim their sovereignty, the prospects for greening economic institutions are virtually nil.

This statement indicates that achieving meaningful environmental integration in the institutional realm is, fundamentally, a political-economic challenge. Transforming the state's, and society's, economic institutions will require a new counter-revolution that restores the right and capacity of societies, and their governments, to determine economic, social, environmental, legal, ethical, and other goals, standards, rights, obligations, and requirements that are considered to be (most) important. Economics needs to be embedded within the sphere of democratic politics if societies, rather than the most powerful and unaccountable economic actors, are to steer towards a future of their choosing.

Conclusion

This chapter has explained the notion of environmental integration and its six sub-challenges. These comprise the integration of environmental considerations into the cognitive, policy and institutional domains of collective management, and with two dimensions of environmental integration (internal and external). The internal dimension (referred to as environmental-internal integration) relates to the need to create clarity about what environmental principles, goals, imperatives, bottom lines, limits, rules, or other, need to be integrated. This assumes the creation of a cognitive environmental framework of some kind, the development of a comprehensive and integrated environmental policy, and the existence or creation of core environmental institutions in support of the former two. The external dimension refers to the need to incorporate these environmental principles, goals etc. into non-environmental cognitive frameworks, policies, and institutions.

The main argument advanced in this chapter is that environmental integration needs to occur in all six areas in mutually consistent and complementary ways to be (more) effective and enduring. Absent or weak integration in one area has (logical and practical) implications for integration in the other areas. Environmental principles and imperatives derived from an overarching cognitive framework need to be translated into the policy realm to become more than rhetorical statements. Given the fickle nature of politics and policy development, environmental integration in the policy realm needs to be supported by an enabling and supporting political-institutional framework to ensure that such efforts have 'teeth' and an enduring character. Without such an institutional framework, environmental policy integration is likely to remain limited to what is commonly regarded to be within the realm of environmental issues (such as integrated pollution and waste management), without addressing the sources of environmental problems located in other policy areas or sectors (such as economic, agricultural, energy and transport policies). However, on its own, institutional environmental integration, not accompanied by serious environmental policy integration efforts, is likely to remain symbolic and insufficient to bring about significant changes in behaviour and practices.

Meeting all six sub-challenges in a concerted way is a requirement for more effectively addressing the environmental challenge. Yet, doing so is no easy task, as the discussion in this chapter may have indicated. While many countries will have undertaken steps in one or more of these areas, there are very few that have made serious efforts towards taking the comprehensive and integrated approach that has been sketched in this chapter.

Chapter 2 – Environmental Integration: The Performance of Nations

Introduction

As discussed in Chapter 1, environmental integration poses a big challenge. This chapter aims to assess how well, or badly, some countries and governments have met this challenge. Are there any leaders who show the way?

As is to be expected, countries and governments differ in the extent to which they have recognised environmental problems, interpreted these issues as parts of a bigger environmental challenge, and the way(s) they have approached environmental integration. Some countries arguably have been leaders, but only in some respects and for some of the time, while many if not most still need to come to grips with the idea that environmental problems need to be addressed in a more integrated way. The main argument of this chapter is that there are no countries that can be said to have a comprehensive and sustained record of environmental integration across all six areas (sub-challenges) discussed in the previous chapter. Governments that have recognised the need for a more comprehensive approach, have commonly placed more emphasis on some of the sub-challenges and developed what could be considered a skewed pattern of environmental integration.

This chapter analyses and assesses the environmental integration efforts of some countries that can be regarded as having been, at least for some time, leaders in environmental integration. By necessity, the discussion of the environmental integration performance of these countries will be brief. It will not do justice to the many environmental efforts and achievements of these political entities over the last five decades or so. But the aim of this chapter is not to provide a comprehensive overview of the environmental performance of these countries, but to assess to what extent these efforts can be said to constitute the kind of comprehensive and sustained approach that I have argued to be necessary to deal more effectively with the environmental challenge as I have described it in Chapter 1. Taking such an approach requires, for a start, recognition of the need for it on the part of governments, and consistently so over time. Hence, at a minimum, the EI performance of countries can be read from the extent to which governments have explicitly pursued such an approach. Further analysis and discussion will be guided by the EI framework presented in Chapter 1, focusing foremost on initiatives that advance environmental integration in the six areas identified by that framework.

First, I will briefly discuss the notion of environmental leadership commonly used in the comparative environmental policy literature, pointing out some of the issues and limitations associated with this label when assessing a country's performance regarding environmental integration. Then, I will look at the EI records of the United States, the Netherlands, New Zealand, and Sweden.

On environmental performance and leaders: a few words of caution

Arguably, much if not most of the literature in the field of comparative

environmental politics and policy has been written to assess and explain the relative performance of countries or governments concerning environmental issues. Here, I will only dip into some of that literature to raise a few points of caution about the limitations associated with the notion of environmental leadership, notably in an assessment of environmental integration efforts. The main argument is that there appears to be little consistency in the way environmental performance has been defined in the literature, which makes the notion of environmental leadership problematic. Moreover, most definitions are based on a narrow interpretation of the environment, and hence of environmental performance, making them unsuitable for assessing the environmental integration efforts of countries and governments.

While the field of comparative environmental policy and politics that emerged in the 1970s has been and still is, largely aimed at identifying and explaining differences in approaches to environmental issues between countries,¹ it also led to some countries gaining a reputation as environmental pioneers or leaders. Although initially, such characterisations tended to be based on mostly qualitative research comparing only a handful of countries, over time, a growing number of researchers have tried to give a more quantitative (scientific or objective) basis to the assessment of the environmental performance of a greater number of countries. For instance, several authors have used data on pollution collected by the OECD as a basis for assessing and analysing variations in the environmental record of countries.² In these efforts, the trend has been towards broadening the environmental data basis (a wider range of measures and longer time series) as well as towards increasing the number and range of countries included, as reflected in studies that rely on the ENVIPOCON data set.³ Arguably, the most comprehensive assessment, in terms of criteria and the

¹ Lundqvist, Lennart J. (1974), "Do Political Structures Matter in Environmental Politics? The Case of Air Pollution Control in Canada, Sweden, and the United States", *Canadian Public Administration*, Vol.17, No.1, 119-141; Enloe, Cynthia (1975), *The Politics of Pollution in Comparative Perspective*. New York: David McKay; Wall, G. (1976), "National Coping Styles: Policies to Combat Environmental Problems", *International Journal of Environmental Studies*, Vol.9, 239-245; Lundqvist, Lennart J. (1980), *The Hare and the Tortoise: Clean Air Policies in the U.S. And Sweden*. Ann Arbor: University of Michigan Press; Vogel, David (1986), *National Styles of Regulation: Environmental Policy in Great Britain and the United States*. Ithaca: Cornell University Press; Vogel, David and Veronica Kun (1987), "The Comparative Study of Environmental Policy: A Review of the Literature", in M. Dierkes, et al. (eds.), *Comparative Policy Research. Learning from Experiences*, 99-171.

² Crepaz, Markus M.L. (1995), "Explaining National Variations of Air Pollution Levels: Political Institutions and Their Impact on Environmental Policy-Making", *Environmental Politics*, Vol.4, No.3, 391-414; Jahn, Detlef (1998), "Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries", *Policy Sciences*, Vol.31, No.2, 107-131; Scruggs, Lyle (2003), *Sustaining Abundance: Environmental Performance in Western Democracies*. Cambridge: Cambridge University Press.

³ Liefferink, Duncan, et al. (2009), "Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs", *Journal of European Public Policy*, Vol.16, No.5, 677-700; Knill, Christoph, et al. (2012), "Really a Front-Runner, Really a Straggler? Of Environmental Leaders and Laggards in the European Union and Beyond — a Quantitative Policy Perspective", *Energy Policy*, Vol.48, 36-45; Sommerer, Thomas and Sijeong Lim (2016), "The

number of countries included, is the Environmental Policy Index (EPI) produced bi-annually by the Yale Center for Environmental Law and Policy of Yale University.⁴

Based on these studies, several countries have often been identified as good environmental performers or even leaders. Jahn found that the Netherlands, Germany, Austria, Switzerland, Denmark, Japan, Finland and Belgium had "a more positive environmental performance" while Scruggs concluded that Germany had the best performance, followed by Sweden, the Netherlands, Denmark and Austria.⁵ Liefferink identified Germany, the Netherlands and Austria as the top-three performers, before Sweden, Italy and Finland.⁶ Sweden, the United States, and Japan are usually seen as having led the way in the early 1970s, but the latter two are considered to have lost momentum in the following decades. Belgium, France, and Italy are often included in a middle group of environmental performers.⁷

However, it should be noted that there is no full agreement on who the environmental leaders are. For instance, in Knill's study, Sweden, Finland and Denmark are not in the top group of "all-time" best performers (between 1970 and 2000), with Denmark even being depicted as a laggard.⁸ Germany, Austria and Switzerland are ranked as the top three, while Italy, Hungary, Belgium and France, and the Netherlands make up the rest of the leaders group. The picture becomes even more confusing when we look at the rankings of countries in Yale's Environmental Policy Index. Because the indicators on which the EPI is based have changed frequently over the years, the scores and rankings of countries over time are not comparable, which limits their usefulness in identifying consistent environmental leaders. Yet, over the years, the EPI's rankings have produced some rather surprising results, as we can see below in Table 2.

Even considering that the indicators on which the EPI rankings are based have been amended over time, making them not comparable, it is striking that Germany made it into the top ten performers only once, in 2014, only to drop back to 30th place in 2016. This put it well behind Finland which, in 2016, took first place, and Greece (in 21st place), a country which was found to be a "laggard" in Knill's research.⁹ In 2016,

Environmental State as a Model for the World? An Analysis of Policy Repertoires in 37 Countries", *Environmental Politics*, Vol.25, No.1, 92-115.

⁴ Yale Center for Environmental Law and Policy (2016), Environmental Performance Index. Global Metrics for the Environment, Yale University, <http://epi.yale.edu/> (Accessed: 29 July 2016).

⁵ Jahn, Detlef (1998), "Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries"; Scruggs, Lyle, *Sustaining Abundance: Environmental Performance in Western Democracies*.

⁶ Liefferink, Duncan, *et al.* (2009), "Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs".

⁷ Knill, Christoph, *et al.* (2012), "Really a Front-Runner, Really a Straggler? Of Environmental Leaders and Laggards in the European Union and Beyond — a Quantitative Policy Perspective", 37-38; Liefferink, Duncan, *et al.* (2009), "Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs".

⁸ Knill, Christoph, *et al.* (2012), "Really a Front-Runner, Really a Straggler? Of Environmental Leaders and Laggards in the European Union and Beyond — a Quantitative Policy Perspective", 41-42.

⁹ *Ibid.*, 41.

the Netherlands was ranked in the 36th position, several steps below Russia (in 32nd place).¹⁰ Of the countries that have often figured as environmental leaders in other studies, in the EPI tables only Sweden has consistently been among the top ten, despite the amendments to the indicators. However, given the rather erratic changes in the EPI’s rankings of most countries, one cannot but doubt the merits of this approach to assessing the environmental performance of countries, for any year.

Table 2 - Environmental Performance Index – Rankings of Selected Countries

Country/Year	2006	2008	2010	2012	2014	2016
Denmark	7	25	32	21	13	4
Finland	3	4	12	19	18	1
Germany	22	13	17	11	6	30
Japan	14	21	20	23	26	39
Netherlands	27	55	47	16	11	36
New Zealand	1	7	15	14	16	11
Norway	18	3	5	3	10	17
Sweden	2	2	4	9	9	3
United Kingdom	5	14	14	9	12	12
United States	28	39	61	49	33	26

Even this cursory overview of the research on the environmental leadership of countries gives reason for caution about the use of such characterisations and rankings of countries. This goes beyond the observation that in such assessments the performance of countries commonly changes over time. Countries that at some stages were considered to be good performers or even leaders may indeed turn into poorer performers or even laggards at some later point of time, and vice versa. This is perhaps hardly surprising and illustrates that environmental commitment and performance often vary from government to government, arguably to the point that it is questionable whether it is appropriate to speak of the environmental performance of countries rather than of governments. While there is still much merit in analysing environmental (policy) developments on a country basis, given the variety of factors that affect these developments (discussed in the following chapters), we should be very cautious to ascribe environmental leadership status to countries based on assessments such as those referred to above, for several reasons apart from the variability in rankings.

First, such assessments are based on widely different conceptualisations and methodologies. Some conceive of performance in terms of policy outputs (such as legislation, pollution standards), and do not consider matters related to implementation and enforcement. Others are based on changes in environmental indicators over time, for instance, for pollution, and assume that such changes can be

¹⁰ Hsu, A. et al. (2016), *2016 Environmental Performance Index* New Haven, CT: Yale University, 18.

attributed to government policies, not considering the possible role of factors like economic growth or decline, changes in other environmental conditions, such as weather, droughts etc., and cross-border movements, for instance, of air pollution, waste, or dirty industries. Some, like the EPI, are based on a mix of both types of variables but do not systematically link changes in environmental conditions to policy outputs and their implementation, not providing much, if any, analysis, or explanation.

Also, assessments may be based on questionable assumptions, criteria, and databases. For instance, many comparisons appear to equate environmental performance foremost with pollution control, reflecting a narrow interpretation of the environmental challenge. Related to that, the criteria used are often skewed towards a particular range of environmental problems, even though these may not be equally relevant to all the countries involved, for instance, when some forms of pollution are more prevalent in some countries than others. Some assessments are based on the most stringent policies or standards adopted by a particular country (defined as the leader) or on internationally agreed targets, however inadequate or debatable these may be. This may lead to assigning high scores, suggesting that many countries are doing very well in coming to terms with the environmental challenge. For example, in the EPI's 2016 report, more than forty countries scored 80% or higher and the top three even more than 90%, not too far from a perfect score.¹¹ Also, the data and information on which assessments rely often have significant gaps and can raise issues of reliability. Given such differences and issues, it is understandable that evaluations and rankings of environmental performance differ, sometimes surprisingly so, and are always debatable.¹²

More fundamentally, in line with the main argument put forward in Chapter 1, most of the assessments of environmental performance give a wrong impression of the extent to which countries and governments are dealing effectively with the environmental integration challenge. Based on a narrow and fragmented interpretation of the environmental challenge, most evaluations seem to assume that this challenge is nothing more than a bundle of separate issues which can be addressed or even resolved separately, notably by the adoption of more stringent policies for each of these issues. This interpretation of, and approach to, environmental problems ignore not only the interconnected nature of the environment, and hence the multifarious impacts of environmental policies, but also the role and importance of non-environmental cognitive frameworks and institutions. In particular, many of these assessments do not consider the extent to which the causes of environmental problems, most of which lie outside the realm of environmental policy, notably in the economic, transport, energy, and agricultural sectors, are or have been addressed. Although some assessments may include indicators for energy production or consumption, they have little if anything to say about whether governments have

¹¹ Ibid.

¹² For instance, many environmental advocates in New Zealand challenged the EPI architects on the high scores obtained by their country – it was even ranked first in 2006 – on the grounds that much of the data/information on which the scores were based did not match the reality on the ground. Yale Center for Environmental Law and Policy, Environmental Performance Index. Global Metrics for the Environment.node/12129

seriously committed themselves to, and are in the process of, integrating environmental considerations across all sectors that harbour most of the drivers behind environmental problems.

Given the shortcomings and limitations of the assessments of environmental policy performance discussed above, and their misleading nature as scorecards for the efforts and achievements of governments in addressing the multifaceted and interconnected nature of the environmental challenge as discussed in Chapter 1, they provide poor guidance for identifying which countries or governments have undertaken more serious efforts towards environmental integration, and to what effect. This is not to dismiss the value or merits of quantitative assessments of environmental performance studies - they can provide at least an indication of which countries have tended to take environmental issues more or less seriously, and of a range of important factors. But we need to look at more qualitative comparative research to identify countries or governments that have adopted and developed a more comprehensive approach to the environmental challenge, even if not consistently so.

As pointed out in the preceding chapter, environmental integration can be conceived of as encompassing six sub-challenges that are all interrelated and that (ideally) need to be addressed in a concerted manner if environmental problems are to be tackled more effectively. These sub-challenges, summarised in the Environmental Integration Matrix presented in Chapter 1, are:

- The development of an overarching cognitive framework, comprising both knowledge about the environment and how it “works” and a collective vision of what constitutes a desirable environment (cognitive-internal EI).
- The incorporation of the core components of that framework into non-environmental cognitive frameworks, notably those that guide decisions, policies and institutions related to science, technology, and the economy (cognitive-external EI).
- The development of comprehensive and coherent environmental policy, linked to the overarching cognitive framework (policy-internal EI).
- The integration of the core components of that policy into non-environmental policy areas (policy-external EI).
- The creation of strong overarching and enduring environmental institutions that guide and support environmental integration across the board (Institutional-internal EI).
- The greening of non-environmental institutions (institutional-external EI).

In the following section, the environmental integration performance of four countries that, in some respects and/or at some stage, may be considered to have been pioneers or leaders, will be discussed based on the extent to which these six sub-challenges have been addressed in a concerted manner, and consistently so over time.

Environmental integration: the record of some of the environmental pioneers

Given the size and complexity of the environmental integration challenge, it is not surprising that it is difficult to identify a country that can be said to have been, and

still is, a clear leader on this front. As discussed in the preceding section, quite a few countries have been (and still are) seen as environmental leaders, based on a variety of criteria for environmental performance. Yet, as argued above, environmental leadership does not necessarily imply that the governments of such countries have undertaken comprehensive efforts in environmental integration: in most cases, environmental integration efforts have been skewed, favouring one domain, or even only one of the six areas of the environmental integration matrix.

Here, I focus on four countries: the United States, the Netherlands, New Zealand, and Sweden. The rationale for including the first three countries is that, arguably, they were pioneers of environmental integration in different domains of environmental integration: the United States in the cognitive domain, the Netherlands in the policy domain, and New Zealand in the institutional domain. Sweden has been selected because it was an early pioneer in the adoption of a more comprehensive and integrated approach and is often still regarded as a country that is an all-time environmental leader and model.

This selection does not mean that other countries have not seriously pursued environmental integration efforts, or that arguably they have been leaders in some respects. A selection of this nature is always contestable, and (many) other countries might have been selected or added to this group. The choice has been determined by the following considerations: First, the limitations of capacity (time, resources) of a single author, and space given the scope of this book. Second, the selected countries appear to have been real pioneers in the sense of introducing innovative forms of environmental integration in one of the three domains (cognitive, policy or institutional), forms that have often been emulated by other countries. This raises the interesting question, which I will not explore here further, why countries differ in their emphasis on a particular domain (or even area) of environmental integration while neglecting other domains, which could be called a single-track approach.¹³

The United States

The United States was one of the first countries where the environment became a subject of public concern and consequently of public policy.¹⁴ The publication, in 1962, of Rachel Carson's *Silent Spring* played an important role in raising environmental awareness and the emergence of the environmental movement. The extent of environmental concern in the United States, boosted also by a major oil spill in California in 1969, was reflected in the twenty million people around the country who got inspired into some form of action by the first Earth Day on 22 April 1970.¹⁵

In 1969, the United States government introduced the National Environmental Protection Act which came into force in 1970 and created the Environmental Protection Agency (EPA) and the Council on Environmental Quality (CEQ). Among

¹³ For an exploration of this question, see Bührs, Ton (2015), "Challenging Contexts - Addressing Obstacles to Environmental Integration", Paper presented at *New Zealand Political Science conference*, Massey University, Palmerston North, 30 November - 2 December.

¹⁴ Caldwell, Lynton K. (1963), "Environment: A New Focus for Public Policy", *Public Administration Review*, Vol.23, 132-139.

¹⁵ Earth Day Network, The History of Earth Day.

other things, the EPA was tasked with the implementation of a new environmental integration mechanism, Environmental Impact Assessment (EIA), referred to as Environmental Impact Statements Review. The provision required federal agencies to assess the potentially significant environmental impacts of their proposals and to describe these in a statement that is subject to review by the EPA and open to public scrutiny. Environmental impact statements were required to be rigorous and scientifically based. Thus, EIA is foremost an informational decision aid tool aimed at identifying important foreseeable environmental impacts of decisions and assessing how these can be prevented or mitigated.

The introduction of this new tool made the United States a leader in the development of knowledge-based environmental integration. This leadership role was not confined to EIA but was also extended to other forms of cognitive environmental integration, notably Risk Analysis and (Comparative) Risk Management. It was also the first country to develop and apply Cost-Benefit Analysis (CBA) systematically.¹⁶ Each of these mechanisms has become a discipline in its own right, practised by professionals, and generating an extensive literature and its own journals and training courses. This professional development has given these tools a solid standing and a science-like status. They have also been institutionalised in legislation, regulations, and executive orders encouraging or mandating their use and further entrenching them as areas of professional practice and career opportunities. These developments have also encouraged the transfer and diffusion of these instruments to other countries, especially of EIA and CBA, although the USA remains the main centre of application and development of these tools and disciplines.

Although the introduction of EIA and other mechanisms aimed at integrating environmental knowledge in decision-making was innovative, and likely has helped to mitigate and/or prevent environmental impacts, the significance of these tools should not be over-estimated. As discussed elsewhere,¹⁷ such mechanisms are shaped by politically defined parameters (for instance, regarding the extent of public input in the process, and the scope of the assessment), and their application is influenced by assumptions, interpretations, value judgements, decision rules, and political wrangling. While potentially mitigating the effects of (some) development projects, they have seldom led to halting them and they have not stemmed the flow of environmentally damaging developments. Worse, they can be used to legitimise environmentally damaging development and/or to downplay the importance of or need for more stringent environmental regulation. There is no evidence that the use of EIA or any of the other tools mentioned has contributed to a change in the cognitive frameworks that guide economic policy or the development of science and technology, two key drivers behind the continuous streams of environmental pressure. Thus, at most, these tools are quite limited means to advance environmental integration and need to be accompanied by environmental integration in other areas to have a significant (mitigating) effect.

¹⁶ Pearce, David W. (2000), "Cost-Benefit Analysis and Environmental Policy", in D. Helm (ed.) *Environmental Policy. Objectives, Instruments, and Implementation*, 48-74, 49.

¹⁷ Bührs, Ton, *Environmental Integration: Our Common Challenge*, chapter 2.

The pioneer and leadership role of the United States in the cognitive-external area has not been matched by the development of an overarching cognitive environmental framework (cognitive-internal environmental integration). As discussed in Chapter 1, the development of such a framework requires two things: a good understanding of how the environment works, including the links between problems, pressures, or drivers, and causes; and the formulation of (inevitably values-based) goals and priorities. In some respects, the United States has been a leader in environmental science and the development of knowledge in some areas, such as hazardous substances, environmental health, and climate change, and in making information available to the public, among other, by the introduction of the Freedom of Information Act and the Toxic Release Inventory.¹⁸ But, thus far, no US government has spent much time and effort on the development of an overarching view of the environmental challenge.

As for the creation of a solid information basis, the United States does not have a strong record in comprehensive and continuous state of the environment reporting. The EPA initiated its environmental reporting programme in 2001, produced a draft state of the environment report in 2003, and a final report in 2008. However, its capacity to produce comprehensive nationwide assessments has been hampered by the fragmentation of data collection and information systems, the absence of a nationally standardised set of environmental indicators, and data of mixed quality.¹⁹ According to the OECD, the dominant focus at the federal level has appeared to be on mitigating specific pressures without an overarching framework, and without addressing underlying causes.²⁰ While the EPA has gradually improved the set of indicators used and adopted the concept of sustainability as a unifying framework, its reporting efforts (now only online) still fall short of providing an integrated picture of environmental trends and developments at the national level.²¹ Moreover, these efforts did not mark a beginning towards analysing and understanding environmental developments related to pressures, drivers and/or causes, which is a requirement for making environmental reporting more policy-relevant, a need highlighted by the OECD in its assessments of US environmental performance.²²

The weakness of the EPA's and CEQ's efforts in these areas can be largely attributed to the lack of interest that US governments have generally shown in gaining a deeper understanding of the environmental challenge, let alone in developing a vision for addressing it. One early and ambitious attempt at such an effort was undertaken by the Council on Environmental Quality, commissioned in 1977 by President Carter, which led to the publication of the Global 2000 Report to the

¹⁸ Kraft, Michael E. (1996), *Environmental Policy and Politics: Toward the Twenty-First Century*. New York: HarperCollins, 42-44.

¹⁹ Organisation for Economic Co-operation and Development (2005), *OECD Environmental Performance Reviews: United States* Paris: OECD, 27, 172-174.

²⁰ *Ibid.*, 129.

²¹ Office of the Administrator, Science Advisory Board (2015), Review of the EPA's Draft Report on the Environment 2014, [https://yosemite.epa.gov/sab/sabproduct.nsf/0/80C3CDC88BF0552B85257DF900752F46/\\$File/EPA-SAB-15-007+unsigned.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/0/80C3CDC88BF0552B85257DF900752F46/$File/EPA-SAB-15-007+unsigned.pdf) (Accessed: 20 February 2017).

²² Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: United States*, 173.

President, which was said to “serve as the foundation of our longer-term planning”.²³ However, after President Reagan came to power in 1981, this initiative was not taken any further. Arguably, the closest the United States got to developing an overarching cognitive framework that could have functioned as a basis for environmental integration efforts was a report (*Sustainable America*) produced by the Council on Sustainable Development in 1999. However, the report did not catch the public’s imagination or trigger any policy changes, and the Council ceased to exist in the same year.²⁴ As noted by Bryner, it seems that American political leaders generally have taken the view that sustainability was not their problem.²⁵

Similarly, the notions of ecological modernisation and environmental space, which gained considerable currency in European countries during the 1990s and 2000s, never gained a strong foothold in the dominant political-environmental discourse in the United States. The idea of ecosystem management, a concept which has also been touted as an overarching cognitive framework for environmental efforts, and that attracted some support in academic and policy circles, has been applied mainly at the catchment and regional level, and largely on an ad hoc and experimental basis.²⁶ Likewise, the precautionary principle and the polluter pays principle have also played less of a role in guiding US environmental policy than in some other countries. Although it has been suggested that the precautionary principle has played a role in American environmental decision-making, it has never functioned as a guiding principle for all environmental policy. Moreover, where and when applied, the principle has tended to be interpreted narrowly, as reflected in policy differences between the United States and the EU regarding genetically engineered organisms and the regulation of hazardous substances.²⁷

These observations do not mean to imply that there is a paucity of integrative or holistic environmental thinking in the United States. If anything, the United States has been a major source of environmental thinking that propagates awareness of environmental interconnectedness, from David Thoreau and Rachel Carson to Fritjof

²³ Council on Environmental Quality and Department of State (1980), *The Global 2000 Report to the President. Entering the Twenty-First Century*. Harmondsworth, Middlesex, England: Penguin Books, Preface.

²⁴ Maurer, Crescencia, *Rio+8: An Assessment of National Councils for Sustainable Development*; Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: United States*, 241.

²⁵ Bryner, Gary C. (2000), “The United States: ‘Sorry--Not Our Problem’”, in W. M. Lafferty and J. Meadowcroft (eds.), *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*, 273-302.

²⁶ Cortner, H. Hanna and Margaret A. Moote (1998), *The Politics of Ecosystem Management*. Washington, D.C.: Island Press; Caldwell, Lynton K. (1970), “The Ecosystem as a Criterion for Public Land Policy”, *Natural Resources Journal*, Vol.10, No.2, 203-221.

²⁷ Christoforou, T. (2004), “The Precautionary Principle, Risk, Assessment and the Comparative Role of Science in the European Community and the US Legal System”, in N. Vig and G. Faure (eds.), *Green Giants? Environmental Policies of the United States and the European Union*, 17-51; Bodansky, Daniel (1994), “The Precautionary Principle in US Environmental Law”, in T. O’Riordan and J. Cameron (eds.), *Interpreting the Precautionary Principle*, 203-228; Jasanoff, Sheila (2003), “A Living Legacy: The Precautionary Ideal in American Law”, in J. A. Tickner (ed.) *Environmental Science and Preventive Public Policy*, 227-240.

Capra, to name just a few.²⁸ That such awareness needs to guide decision-making affecting the environment was a view also advanced in policy and government circles, as reflected in the work of Caldwell²⁹ and the adoption of EIA and the other tools mentioned above. However, federal governments in the United States have never adopted an overarching, knowledge- and inherently values-based, cognitive framework to guide environmental integration.³⁰

Concomitantly, it comes as no surprise that governments in the United States have never embraced green planning, the development of a comprehensive environmental policy, as a cornerstone of environmental policy development. Although the Clinton administration demonstrated an interest in the green planning experiences of the Netherlands, which led to the adoption of the report *Sustainable America* referred to above, the report did not amount to or lead to the development of, a comprehensive, long-term federal environmental policy. Although the report put forward ten "ambitious goals", it "lacked a sense of strategic purpose, of identifying opportunities, key players, and timing, and specifying policies to pursue", and did not result in any changes in government policy.³¹ No other presidents have even expressed an interest in the development of a comprehensive and integrated environmental policy, an indication that the development of such a policy in the United States is indeed very difficult if not well-nigh impossible.³² Although the EPA did at some stage adopt a strategic plan, this was largely issue-focused and foremost concerned with setting its own priorities.³³

US Government efforts aimed at policy-external environmental integration (the greening of policies for sectors from which most environmental problems emerge) have been far and in between. The energy, transport, industrial and agricultural lobbies, among others, have been able to ensure that their sectoral interests were well-heeded, making it very difficult for environmental advocates to get a grip on these policy areas.³⁴ Given that policy gridlock has been the prevailing condition since the 1980s, environmental advocates had to rely predominantly on the limited knowledge-

²⁸ Thoreau, Henry David, *Walden, or, Life in the Woods*; Carson, Rachel, *Silent Spring*; Capra, Fritjof (2002), *The Hidden Connections. Integrating the Biological, Cognitive, and Social Dimensions of Life into a Science of Sustainability*. New York: Doubleday.

²⁹ Caldwell, Lynton K. (1963), "Environment: A New Focus for Public Policy"; Caldwell, Lynton K. (1970, 1st ed.), *Environment: A Challenge for Modern Society*. Garden City, New York: Published for the American Museum of Natural History by the Natural History Press.

³⁰ Henning, Daniel H. (1974), *Environmental Policy and Administration*. New York: American Elsevier Pub. Co., 18-19; Guruswamy, Lakshman (1989), "Integrating Thoughtways: Re-Opening of the Environmental Mind?", *Wisconsin Law Review*, Vol.3, 463-537.

³¹ Bryner, Gary C., "The United States: 'Sorry--Not Our Problem'", 296.

³² Rabe, Barry G. (1986), *Fragmentation and Integration in State Environmental Management*. Washington, D.C.: The Conservation Foundation; Bryner, Gary C., "The United States: 'Sorry--Not Our Problem'", 302.

³³ United States Environmental Protection Agency (2014), Fiscal Year 2014-2018. EPA Strategic Plan. Washington D.C., <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100KB1L.PDF?Dockey=P100KB1L.PDF>, (Accessed: 20 February 2017).

³⁴ McGrovy Klyza, Christopher and David J. Sousa (2013, e-book ed.), *American Environmental Policy: Beyond Gridlock*. Cambridge, Mass.: MIT Press.

based integration mechanisms discussed above (including EIA, Risk Assessment, and CBA), and on legal action, to have their concerns recognised. However, since the 1980s, policy developments in this area have been mostly regressive rather than progressive, as several presidents (particularly Ronald Reagan and George W. Bush Jr, and especially Donald Trump) actively sought to minimise the impact of environmental policies and regulations on businesses and economic development.³⁵ The precarious status of many habitats and species in the US reflects the weak integration of environmental concerns in agriculture, forestry, and land use planning, among other areas.³⁶ The OECD, in its 2005 review of US environmental performance, made the understatement that “*room remains for further progress* in integrating environmental concerns into economic policies and decisions”.³⁷

The election of President Obama, in 2008, raised hope and expectations that environmental concerns would be taken (much) more seriously. Early decisions under his presidency indicated that this was indeed the case. For instance, Obama introduced a raft of measures aimed at increasing energy efficiency, reducing air pollution from power plants, promoting investments in renewable energy, and combatting climate change. It can be argued that his focus was foremost on the greening of energy policy, although it has been noted that he sold his proposals in this area on the grounds of national economic and security (energy independence) interests.³⁸ Much of the multi-billion dollar energy programme was aimed at reducing the country’s dependence on imported oil, including by fostering the exploration of new sources of oil and gas, but also by boosting energy efficiency and conservation and promoting renewable energy generation.³⁹ While it may be another understatement to say that Obama has not been very successful in achieving his stated objectives and/or meeting (unrealistic) expectations, notably in the area of climate change,⁴⁰ it is hard to overestimate the political-economic obstacles to the greening of non-environmental policy areas that are inherent to the American political system, especially in times of economic decline or crisis.⁴¹

³⁵ Cohen, Maurie J. (2004), “George W. Bush and the Environmental Protection Agency: A Midterm Appraisal”, *Society & Natural Resources*, Vol.17, No.1, 69-88; Vig, Norman (2000), “Presidential Leadership and the Environment: From Reagan to Clinton”, in N. Vig and M. Kraft (eds.), *Environmental Policy*, 98-120; Giles, Jim (2008), “George Bush’s Parting Swipe at the Environment”, *New Scientist*, Vol.200, 29 November, 14.

³⁶ Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: United States*, Chapter 4.

³⁷ *Ibid.*, 121. [original emphasis]

³⁸ Bomberg, Elizabeth and Betsy Super (2009), “The 2008 US Presidential Election: Obama and the Environment”, *Environmental Politics*, Vol.18, No.3, 424-430.

³⁹ Custers, Peter (2009), “Less Green Than He Promised”, *Le Monde Diplomatique (English edition)*, June.

⁴⁰ Bailey, Christopher J. (2019), “Assessing President Obama’s Climate Change Record”, *Environmental Politics*, Vol.28, No.5, 847-865.

⁴¹ McChesney, Robert W. and John Nichols (2016, e-book ed.), *People Get Ready: The Fight against a Jobless Economy and a Citizenless Democracy*. New York: Nation Books; McGrory Klyza, Christopher and David J. Sousa, *American Environmental Policy: Beyond Gridlock*.

While Obama may have disappointed many of his supporters, President Trump surely did not when it came to meeting anti-environmental expectations. Trump's goal was to roll back environmental policies, and he did not linger on repealing a raft of environmental regulations that were introduced by Obama. He took every opportunity, including during the COVID-19 crisis, to attack and dismantle the US regulatory environmental framework and administrative capacity.⁴² As a climate sceptic, he continued to financially support the fossil fuels industry and took the US out of the 2005 Paris climate agreement.⁴³ Trump's anti-environmental measures and record amounted to arguably the most comprehensive efforts towards environmental *disintegration* undertaken by any American president, rolling back rules aimed at the integration of environmental concerns across a wide range of policies.⁴⁴

Although at the time of writing (December 2021), it is still too early to evaluate President Joe Biden's environmental performance, it seems safe to say that, under his presidency, the United States is unlikely to become a leader in environmental integration. Thus far, many of Biden's measures are aimed at rolling back the enormous damage done to the US's environmental institutions and policies by his predecessor. On the positive side, many of his efforts are focused on combating climate change, notably through (renewable) energy and infrastructure policies. But again, US politics makes even modest progress on these fronts very difficult, let alone any significant moves towards a more comprehensive and integrated approach to environmental integration as advocated in this book.⁴⁵

Although the United States was a pioneer in the creation of an environmental-institutional framework that held the promise of an integrated approach towards tackling a range of environmental problems (institutional-internal environmental integration), this potential was never realised. Initially, the EPA was tasked to view "the environment as a whole" and to treat "air pollution, water pollution and solid wastes as different forms of a single problem", and set out to take a systems approach,⁴⁶ but it did not take long before its many units started to operate more or less on their own. This was a legacy of the fact that the creation of the EPA was the result of a merger of a raft of functions previously located in different departments, each with its own

⁴² Eilperin, Juliet and Steven Mufson (2017), "Trump to Roll Back Obama's Climate, Water Rules through Executive Action", *The Washington Post*, 20 February; Popovich, Nadia, *et al.* (2018), "67 Environmental Rules on the Way out under Trump", *New York Times*, 31 January.

⁴³ Friedman, Lisa (2019), "Trump Serves Notice to Quit Paris Climate Agreement", *The New York Times*, 4 November; Holden, Emily (2020), "What the US Exiting the Paris Climate Agreement Means", *The Guardian*, 27 July.

⁴⁴ Chang, Alvin, *et al.* (2020), "75 Ways Trump Made America Dirtier and the Planet Warmer", *The Guardian*, 22 October; Environmental & Energy Law Programme (2020), Regulatory Rollback Tracker, Harvard Law School, Environmental & Energy Law Programme, <https://eelp.law.harvard.edu/regulatory-rollback-tracker/> (Accessed: 22 October 2020).

⁴⁵ Wikipedia (2021), Environmental Policy of the Joe Biden Administration, https://en.wikipedia.org/wiki/Environmental_policy_of_the_Joe_Biden_administration (Accessed: 16 December 2021); Milman, Oliver and Alvin Chang (2021), "How Biden Is Reversing Trump's Assault on the Environment", *The Guardian*, 2 February.

⁴⁶ Lewis, Jack (1985), "The Birth of EPA", *EPA Journal*. <https://archive.epa.gov/epa/aboutepa/birth-epa.html>.

culture and goals, and because of the fragmentation of responsibilities in environmental legislation assigned to different units. The EPA's organisational structure remained a big obstacle to a more comprehensive and integrated approach even in the area of pollution control alone. Consequently, environmental policy continued to be made in a piecemeal fashion by a "multiplicity of agencies implementing a growing number of largely uncoordinated statutory mandates that affect the environment in conflicting ways."⁴⁷

Given this lack of capacity for institutional-internal integration, it is also not surprising that the EPA has not been in a position to effect environmental integration in the institutional frameworks (organisations and laws) that guide the development of policies in non-environmental areas or sectors, including energy, transport, agriculture, economic, and science and technology policy. Apart from the usual resistance of other government agencies against what tends to be perceived as an intrusion on their terrain and power, the ability to meet this institutional-external integration challenge has also not been helped by the fact that the EPA has the status of an independent agency, not that of a department at the Cabinet level, giving it less power and opportunity to counterbalance non-environmental interests at the highest level.⁴⁸ Despite the initial promise, neither the EPA nor any other US agency, gained the capacity or even the responsibility for dealing with environmental policy comprehensively, let alone for greening non-environmental institutions.⁴⁹

Given the lack of progress in environmental integration efforts in the United States since the early 1970s, it comes as no surprise that, although in some respects the state of the environment has not deteriorated, or even improved, on many fronts the problems and pressures have grown rather than decreased. Rather than offering a litany of those problems and trends, I refer here to some of the information sources and summaries of the state of the environment in the United States, such as the OECD's review of the environmental performance of the US, the USEPA's Report on the Environment website, and the overview provided by Gustav Speth.⁵⁰ Speth concluded that "Environmental deterioration in the United States remains surprisingly severe" and that although "environmentalists have been winning battles, [they] are losing the war."⁵¹ It is hard to disagree with this statement apart from the "surprising"

⁴⁷ Andrews, Richard N. L. (1999), *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*. New Haven: Yale University Press, 11.

⁴⁸ Arnold, Richard and Andrew B. Whitford (2005), "Organisational Dilemmas of the US EPA: Why Structures Matter for Environmental Protection", *Environmental Politics*, Vol.14, No.1, 118-123, 121.

⁴⁹ Cohen, Maurie J. (2004), "George W. Bush and the Environmental Protection Agency: A Midterm Appraisal", 85.

⁵⁰ Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: United States*; United States Environmental Protection Agency (2020), EPA's Report on the Environment (ROE), <https://www.epa.gov/report-environment> (Accessed: 20 October 2020); Speth, James Gustave (2008, e-book ed.), *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*. New Haven and London: Yale University Press.

⁵¹ Speth, James Gustave, *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*, Loc 44.

bit. What is perhaps surprising is that, despite the multitude of publications on the environmental policy of the United States, it is difficult to find an official, comprehensive assessment and analysis of the environmental problems and trends in the country. While the EPA Report on the Environment website, for instance, presents a large amount of data on particular issues, it does so in a very fragmented way, does not offer a summary discussion of the main trends, and certainly no analysis and discussion of the underlying pressures and drivers. This seems to confirm that in the United States, the environmental challenge is still interpreted and treated as a largely disjointed set of issues rather than being looked at holistically.

Table 3 - Environmental Integration - United States

Domain Dimension	Cognitive domain	Policy domain	Institutional domain
Internal dimension	Government efforts not guided by an overarching cognitive environmental framework; fragmented cognitive capacity	No serious efforts towards green planning	Some strong environmental institutions (NEPA, EPA), but stagnation & under threat, and weak integrative capacity
External dimension	Innovative tools for considering environmental concerns in non-environmental decisions, but no greening of the dominant cognitive economic framework and science and technology	Weak government efforts towards the greening of non-environmental policies: economic, energy, transport, agriculture, urban development, and science & technology policies	Few government moves towards the greening of non-environmental institutions (government agencies, economic and sectoral institutions)

To conclude, although the United States has been an early leader, in some respects, in the area of cognitive-external environmental integration, aimed at the enhancement of the knowledge basis for decision-making, in particular on specific proposals and projects, it has been a laggard rather than a leader in most of the other areas of environmental integration. This assessment concurs with that of other analysts of the environmental performance of the US, who argue that, in the 1970s, the country was at the forefront of environmental policy and innovation, but that it lost its leadership status ever since, to the point that it has become an environmental

laggard.⁵² Set against the broad framework for the analysis of environmental integration efforts, the assessment here is arguably even more damning as it shows no significant movement towards advancing environmental integration in four of the six areas where it is needed, and rather limited progress and stagnation in the two remaining areas, as summarised in Table 3.

The Netherlands

Although environmental integration in the Netherlands has been pursued in a variety of ways, the country stood out for its environmental *policy* integration (or green planning) efforts during the 1990s, in particular in the form of the adoption of a comprehensive environmental policy (plan), its implementation, and follow-up plans. Although Dutch governments also introduced forms of cognitive-external environmental integration, such as EIA, formally expressed a commitment to sustainable development (cognitive-internal environmental integration) and introduced an environmental clause (Article 21) in the constitution (institutional-internal integration), it is the Dutch approach to green planning that constituted the core of its environmental integration efforts.

During the 1990s, the Netherlands was widely regarded as a leader in the development of comprehensive environmental policy or green planning.⁵³ This gave it the status of one of the world's environmentally progressive nations, a model from which other countries could or should learn. However, as the discussion here will demonstrate, green planning in the Netherlands, although innovative, partially successful, and in many ways still exemplary, arguably reached its limits and came to a standstill in the 2000s.

In 1989, following the publication of the first national state of the environment report that sketched a very gloomy picture of the country's future,⁵⁴ the Dutch government adopted the first National Environmental Policy Plan (NEPP1). The plan was remarkable in many ways. It provided not only a broad factual overview of the state of the environment, but also a rigorous scientific analysis of the drivers behind the environmental problems, making explicit the extent to which all sectors of society, including the main industries, contributed to problems. The plan put forward very ambitious objectives and specific targets for tackling these problems, focused on their immediate sources, often in the order of a 70 to 90% reduction of then-existing levels

⁵² Liefferink, Duncan, *et al.* (2009), "Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs"; Schreurs, Miranda A. (2002), *Environmental Politics in Japan, Germany, and the United States*. Cambridge England: Cambridge University Press; Knill, Christoph, *et al.* (2012), "Really a Front-Runner, Really a Straggler? Of Environmental Leaders and Laggards in the European Union and Beyond — a Quantitative Policy Perspective".

⁵³ Johnson, Huey D., *Green Plans: Blueprint for a Sustainable Earth*; Bennett, Graham (1997), "The Dutch Environmental Policy Plan", in M. Jänicke, *et al.* (eds.), *Nationale Umwelpläne in Ausgewählten Industrieländern*, 73-85; Van der Straaten, Jan (1992), "The Dutch National Environmental Policy Plan: To Choose or to Lose", *Environmental Politics*, Vol.1, No.1, 45-71; Jänicke, Martin and Helge Jörgens (1998), "National Environmental Policy Planning in OECD Countries: Preliminary Lessons from Cross-National Comparisons".

⁵⁴ Langeweg, F. (ed.) (1988), *Zorgen Voor Morgen (Concern for Tomorrow)*. Bilthoven Netherlands: Rijksinstituut voor Volksgezondheid and Milieugygiene (RIVM).

over twenty years, with the official aim of making the Netherlands a sustainable country within one generation. Moreover, it laid much of the responsibility for achieving these targets with the industries and sectors that contributed to the problems (referred to as “target groups”), based on the idea that those responsible for a problem should own and “internalise” it. Although the ultimate targets were set by the government, industries and sectors were given considerable flexibility to identify and implement the most cost-effective ways to achieve the reductions required. Yet, the government set up a system, including mandatory reporting, to goad target groups towards action and to hold them accountable for achieving interim targets. Meanwhile, it made clear that it would introduce stringent measures if progress towards the targets proved to be inadequate (“the stick behind the door”).⁵⁵

The approach was accompanied and supported by a comprehensive monitoring and reporting system. The degree of progress was assessed and reflected upon in annual state of the environment reports produced by an independent scientific body, the Rijksinstituut voor Volksgezondheid en Milieu (RIVM). Observers were impressed by the frankness that characterised these reports,⁵⁶ which made it difficult for the government to claim success if this was not backed up by the facts. These strengths are essential elements of the capacity for cognitive-internal environmental integration, as they provide a basis for assessing where the environment is at, and for understanding how the environment works.

As the Dutch plan was very comprehensive in its coverage of the environmental problems that affected the Netherlands, identified all the major (proximate) sources of the problems based on independent scientific research and analysis, and laid much of the responsibility for addressing them at the door of those who were found to contribute to them (all the sectors), it was a remarkable example of rational-comprehensive environmental policy. It provided an overarching policy framework for environmental integration across all sectors and levels of society (policy-internal integration), and facilitated environmental integration within each sector, including all non-environmental sectors (policy-external environmental integration).

However, it can be argued that the way environmental problems were defined and analysed, with a strong focus and emphasis on pollution and its immediate sources, gave the Dutch approach a technocentric or even technocratic character. Environmental issues were largely interpreted as technological and/or managerial problems that required solutions in kind, developed mainly by experts. According to Hajer, ecological modernisation, with its belief in the possibility of solving environmental problems mainly through technological innovation, had become the dominant environmental discourse in the Netherlands.⁵⁷ Even though NEPP1 was sometimes (mistakenly) said to have been a participatory exercise it was produced with very little public input. As such, it has been referred to as a technocratic, top-

⁵⁵ Winsemius, Pieter (1998), Interview, 20 May.

⁵⁶ Johnson, Huey D., *Green Plans: Blueprint for a Sustainable Earth*.

⁵⁷ Hajer, Maarten A. (1993), *The Politics of Environmental Discourse: A Study of the Acid Rain Controversy in Great Britain and the Netherlands*. PhD thesis. Oxford: University of Oxford, Trinity, Faculty of Social Studies.

down approach,⁵⁸ – albeit “the best job of technical environmental planning done by any nation to date”.⁵⁹ It defined sustainability (“duurzaamheid”) mainly in biophysical terms and objectives, which is not necessarily a bad thing, as argued in Chapter 1, as it makes the concept concrete and meaningful. But it largely ignored issues associated with unsustainable levels of resource exploitation and consumption for which the Netherlands was responsible at the global level. As a small but highly industrialised country with relatively few domestic natural resources and being a high-income and high-consumption society of 17 million people, the Netherlands has a significant impact on the environment outside its borders, an impact that was not adequately accounted for in Dutch green planning, although increasingly recognised. But arguably the greatest limitation of the Plan was that it was not placed within a broader, collectively produced vision of what a “good” as well as a sustainable society (including the economy), should look like, based on collectively deliberated and determined values. Thus, it did and could not provide policy guidance for transformational change, a limitation that was recognised in the fourth iteration (NEPP4) of the plan.

Yet, one of its strengths was that it acknowledged that, to address environmental problems effectively, all the groups that contributed to the problems must carry responsibility for addressing them, even though it allowed flexibility in the ways groups chose to achieve the set targets. As no group or industry was singled out and everyone was expected to “do their bit”, the approach was widely perceived to be fair, even by the industries involved. The express goal was the internalisation (“verinnerlijking”) of environmental concerns and responsibilities by all the main groups in society. Hence, the plan recognised the need to involve all the main stakeholders in its implementation. As such, it provided a sound basis for policy-external environmental integration across all the main sectors.

What distinguished Dutch green planning from the efforts in many other countries was that it was not a one-shot exercise. It was set up as an ongoing process involving regular updates, with four-yearly reviews being made a statutory requirement. In 1990, the plan was amended to include new CO₂ emission targets and some additional measures (NEPP-Plus). Further reviews were published in 1994 (NEPP2), 1998 (NEPP3), and 2001 (NEPP4). The reviews left most of the initial plan (NEPP1), and the targets contained therein, intact. NEPP2 and 3 focused foremost on implementation issues. Over time, however, it became apparent that the implementation of the plan was very challenging, and that many of the targets (including interim targets) would not be achieved. Although at times, the government allocated additional funding to address some of the sticky problems, this appeared not to be sufficient.

In many ways, NEPP4 marked a major step towards recognising the broader and deeper nature of the environmental challenge. It recognised that many of the problems were systemic and that achieving the objectives of NEPP1 would require more fundamental change, among other, in production systems and consumption patterns, institutions, including the role of government, and social attitudes. It also identified the emergence of potentially new and very serious problems (notably

⁵⁸ Bennett, Graham, “The Dutch Environmental Policy Plan”, 81.

⁵⁹ Johnson, Huey D., *Green Plans: Blueprint for a Sustainable Earth*, 45.

associated with biotechnology, nanotechnology, and robotics) – touching upon the question of how society could and should gain control over the development of science and technology - and looked at the issues in a global context, recognising the interdependence of the Netherlands with the rest of the world. To advance this systemic change, NEPP4 pointed out the need for the development of a transition policy to bring about the technological, economic, socio-cultural, and institutional change that is required to move towards a sustainable future. Altogether, the report makes fascinating reading, which is unusual for government publications.⁶⁰

However, ironically, the publication of NEPP4 also signalled the demise of the Dutch green planning effort. Arguably, with the publication of NEPP4, the government took the view that the approach that had been followed during the 1990s had run its course and had addressed and reduced the most pressing problems to manageable levels. The remarkable change in the interpretation of the environmental challenge expressed in NEPP4 was never adopted by the government. Rather, it was used to justify a major shift in the role and responsibility of the government. The government that came to power in 2002 significantly lowered its environmental ambitions, while delegating much of the responsibility for environmental policy to the business sector.⁶¹ Although the government did not formally relinquish all responsibility, in practice, it abandoned the previously strong commitment toward policy integration (both internal and external), allowing businesses to set their own “realistic” environmental objectives. Misleadingly, this change in approach was presented as being more democratic—a move away from a top-down approach and shifting responsibility to society. The government abandoned green planning and even the idea that it is important to have an overarching vision of the environmental challenge, as reflected in the fact that after NEPP4 no other green plan was produced. The end of Dutch green planning was also noted by the OECD which, in its 2015 review of the Netherlands’ environmental performance, stated that “Although the Netherlands was a pioneer in the elaboration of long-term comprehensive visions for environmental policy and planning as early as the 1980s, an effective long-term vision has been lacking over the review period.”⁶²

In practice, from the early 2000s, environmental concerns were put on the back burner, even to the point that the main responsibility for environmental matters was delegated to a state secretary (not in Cabinet) instead of to a government minister. Although, in 2007, an environment minister was again appointed, government commitment to environmental interests arguably reached a new low when, in 2010, the environment ministry was dismantled, and its responsibilities scattered over other government departments with predominantly development-related mandates. Hence, the state’s capacity for institutional-internal environmental integration was

⁶⁰ Ministerie voor Volkshuisvesting, Ministerie voor Volkshuisvesting, Ruimtelijke Ordening and Milieu (VROM) (2001), *Een Wereld En Een Wil. Nationaal Milieubeleidsplan 4*. The Hague: VROM.

⁶¹ Hoogervorst, N. J. P. and F. J. Dietz (2015), *Ambities in Het Nederlandse Milieubeleid: Toen En Nu*. Den Haag: Planbureau voor de Leefomgeving.

⁶² Organisation for Economic Co-operation and Development (2015), *OECD Environmental Performance Reviews: The Netherlands*. Paris: OECD, 25.

significantly weakened. Many environmental targets were relaxed, postponed, or even abandoned altogether. In 2010, the government openly admitted that it no longer wished to play the role of environmental leader and that it would adjust Dutch environmental norms and ambitions to those set by the EU, which it already found difficult to comply with.⁶³

Overall, we can conclude that, during the 1990s, Dutch environmental integration efforts were most pronounced and strongest in the policy-internal area, backed up by excellent capacity in the cognitive-internal field (knowledge basis; environmental monitoring and reporting). These efforts were also well supported institutionally (formal green planning requirement; key role of environment ministry) and made the Netherlands a leader in these areas. They also provided a promising basis for policy-external and institutional-external environmental integration, although efforts in these areas were never strong. NEPP4 signalled a possible move towards a broadening and deepening of the interpretation of the environmental challenge, hinting at the need for transformational change and the greening of non-environmental cognitive frameworks. However, from 2002 onwards, government commitment to environmental integration declined to the point that in virtually all areas environmental capacity was weakened or even dismantled.

This assessment of the environmental integration efforts of the Netherlands concurs only partially with most other assessments of the environmental (policy) performance of the country, as mentioned above, which consistently rank it near the top.⁶⁴ However, it should be noted that some of these assessments were based on information dating from before the significant change in government policy in 2002 and that more recently, in the words of the OECD, the Dutch government has "reined in ambitions for environmental policy objectives". Yet, the country still faces serious environmental issues, in particular in the areas of biodiversity protection (with 95% of habitat types and 75% of species being threatened), climate change, diffuse sources of pollution, and water management. By 2015, in many respects, the environmental performance of the Netherlands was not better than the OECD average, leaving no ground for a claim to environmental leadership.⁶⁵ Table 4 summarises the Dutch environmental integration efforts.

With the demise of green planning, the Netherlands also relinquished its status of an environmental leader in environmental integration, and arguably even became an environmental laggard. Given the rather impressive and promising moves towards environmental integration undertaken in the Netherlands between 1989 and 2001, this development is not only highly disappointing but also indicative of the political frailty of such efforts and the formidable obstacles to environmental integration.

⁶³ Hoogervorst, N. J. P. and F. J. Dietz, *Ambities in Het Nederlandse Milieubeleid: Toen En Nu*, 19-20.

⁶⁴ Jahn, Detlef (1998), "Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries"; Liefferink, Duncan, *et al.* (2009), "Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs"; Scruggs, Lyle, *Sustaining Abundance: Environmental Performance in Western Democracies*.

⁶⁵ Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: The Netherlands*, 6,17,65-69,99.

Table 4 - Environmental Integration – The Netherlands

Domain Dimension	Cognitive domain	Policy domain	Institutional domain
Internal dimension	Excellent cognitive capacity, but narrow (technocratic) interpretation and mainly domestically focused	Strong green planning effort between 1989 – 2001; then demise	Weak overall environmental capacity within the government system (Environment Ministry)
External dimension	EIA, but no greening of economic framework; no greening of science and technology	Official commitment, but de facto left to the business sector	Dismantling of institutional capacity to advance greening of non-environmental institutions

Nonetheless, despite its limitations, the Dutch approach to green planning remains worthy of note and still offers valuable lessons for future efforts towards environmental policy integration if the fundamental obstacles to it can be overcome or eliminated.

New Zealand

Some people may find it surprising that I have selected New Zealand as one of the countries to assess its environmental integration efforts, as it has not often been referred to as an environmental leader, even though it topped the Yale index in 2006, as mentioned above. In part, the reason why New Zealand has not often been identified as an environmental leader is that it does not figure often in comparative studies of environmental performance, which are often confined to a relatively narrow range of countries, notably the United States, Western-European countries and, to a lesser extent, Japan. Moreover, there are good reasons for being sceptical about New Zealand's claims of being "clean and green",⁶⁶ a portrayal promoted by its government and business sector. Nonetheless, in the second half of the 1980s, the New Zealand government embarked on a path of reform that held considerable promise for advancing environmental integration. Although, as the discussion below will show, subsequent governments failed to deliver on that promise, the reforms that were undertaken can still be regarded as an example of an environmental integration pathway that emphasises institutional change rather than changes in the cognitive domain (as in the United States), or in the policy domain (as in the Netherlands).

⁶⁶ Bührs, Ton and Robert V. Bartlett (1993), *Environmental Policy in New Zealand. The Politics of Clean and Green?* Auckland, N.Z.: Oxford University Press.

In the late 1980s and early 1990s, New Zealand arguably went further than most countries in creating an integrated institutional framework for environmental management. Institutional-internal integration, as discussed earlier, refers to the creation of institutions (rules and organisations) that promote coherence and consistency between environmental integration efforts, for instance, by integrating legislation covering different areas of environmental management (such as land use, water management, air pollution), based on common principles or goals.

Between 1984 and 1990, New Zealand's fourth Labour government embarked on a programme of institutional and policy reform that left few areas untouched. Based on the ideas and principles commonly associated with neoliberalism or the New Right philosophy, including public choice theory, New Public Management theory, and a belief in the superiority of the free market, the government overhauled the public service, and devolved much of its traditional involvement in the production of goods and services to semi-independent state corporations and increasingly to the private sector through a programme of privatisation. It also radically reformed policies in virtually all areas. The main principles on which the reforms were based were the separation between commercial and non-commercial activities, the separation between policy, regulatory and management functions, enhanced accountability (to Ministers), transparency (reporting requirements), and efficiency.⁶⁷

Based on these ideas and principles, the institutional framework for environmental decision-making was also drastically changed. Much of the responsibility for environmental decision-making, previously spread over a raft of public bodies at different levels, was devolved to and concentrated in local government, including newly established Regional Councils. More than 70 environmental laws were consolidated into one, the Resource Management Act 1991 (RMA). The Act introduced the sustainable management of natural and physical resources as its main goal and provided an integrated process for decision-making on activities that potentially impact the environment. Responsibilities for nature conservation and the management of national parks, previously also scattered, were concentrated in the Department of Conservation. An independent environmental watchdog, the office of the Parliamentary Commissioner for the Environment, was established to keep an overview of the functioning of the whole environmental management system and to advise on how to address possible shortcomings, gaps and weaknesses in that system, a world-first in environmental-institutional learning of a systemic nature.⁶⁸

When they were introduced, despite their political-ideological basis, the new institutional arrangements held considerable promise. The premises and processes contained in the RMA made it compulsory for all development proposals, not just the

⁶⁷ Boston, Jonathan (1991), "The Theoretical Underpinnings of Public Sector Restructuring in New Zealand", in J. Boston, et al. (eds.), *Reshaping the State. New Zealand's Bureaucratic Revolution*, 1-26.

⁶⁸ Bührs, Ton and Robert V. Bartlett, *Environmental Policy in New Zealand. The Politics of Clean and Green*; Bührs, Ton (1996), "Barking up Which Trees? The Role of New Zealand's Environmental Watchdog", *Political Science*, Vol.48, No.1, 1-28; Memon, P. A. (1993), *Keeping New Zealand Green: Recent Environmental Reforms*. Dunedin, N.Z.: University of Otago Press.

government's but also those initiated in the business sector, to be assessed on their environmental effects. Previously, only developments that were initiated or sponsored by the state had been subject to environmental impact assessment procedures. Also, as the New Zealand state (both governments and government departments) had been a major driver of development, mostly through state-owned enterprises and government departments with development-oriented mandates (sometimes combined with environmental responsibilities that usually took a back seat), "getting the government out of business" seemed a positive step, enabling the state to keep some distance from specific development proposals and to take its environmental (regulatory) responsibilities more seriously. Moreover, the RMA provided for virtually unlimited public participation in the approval processes, and in the development of environmental policies of local and regional governments that were supposed to guide development in their areas. It also provided for the adoption of National Policy Statements where national-level guidance was deemed desirable or necessary. Hence, the new institutional framework appeared to provide for the greening of on-the-ground (economic) development across the whole country consistent with national-level policies based on the principle of sustainable management.⁶⁹

However, over time, it became clear that the reform's promise of an integrated approach to the environmental challenge was not being delivered. In practice, the implementation of the Act by local and regional councils was based on different criteria for what was considered sustainable in terms of environmental effects, including pollution. While such differences could to some extent be justified by different ecological conditions, they also led to inconsistencies, for instance, varying standards for air and water quality. For a long time, the central government was unwilling to introduce National Environmental Standards and National Policy Statements, as these were considered to be unnecessary and/or undesirable forms of government interference. By 2016, only four National Policy Statements had been adopted, only two of which (on coastal policy and freshwater management) for mainly environmental reasons, and five National Environmental Standards.⁷⁰ Hence, the RMA provided very little in the way of comprehensive and integrated environmental policy, as some commentators mistakenly thought.⁷¹ The Act constituted an institutional framework and was never a comprehensive environmental policy, let alone intended as a green plan or a blueprint.⁷² National Policy Statements and National Environmental Standards were produced only when actual or potential problems associated with specific issues made them necessary. In the absence of an independent, comprehensive evaluation of environmental outcomes, it is debatable

⁶⁹ For a discussion of these reforms, see Bührs, Ton and Robert V. Bartlett, *Environmental Policy in New Zealand. The Politics of Clean and Green?* and Memon, P. A., *Keeping New Zealand Green: Recent Environmental Reforms*.

⁷⁰ Organisation for Economic Co-operation and Development (2017), *Environmental Performance Review: New Zealand* Paris: OECD, 94.

⁷¹ Johnson, Huey D., *Green Plans: Blueprint for a Sustainable Earth*.

⁷² Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 94.

whether the Act has been conducive or an impediment to sustainable development.⁷³ Apart from two weak efforts that were short-lived and of little if any consequence, New Zealand governments never engaged seriously with the need to develop a comprehensive environmental policy (green planning or sustainable development strategy), let alone institutionalised it.⁷⁴

This means that environmental policy, despite the institutional reforms, continued to be developed in a fragmented, ad hoc, and reactive way. New Zealand does not have an integrated pollution control strategy. Waste management policy, which is largely left to councils, does not encompass hazardous substances. Although governments adopted a range of strategies for particular issues, these were never integrated into an overarching policy.⁷⁵ Climate change policy focused on GHG emissions from a limited range of sources, with solutions sought almost exclusively in carbon trading and research on possibilities of mitigating methane emissions from cattle, one of the main sources of emissions in New Zealand. Although New Zealand's nature conservation policies arguably have been the most ambitious and integrated of New Zealand's environmental policies, their effectiveness has been limited by the ongoing development of tourism, mining, and land-use change (notably on private land), as well as insufficient funding. Urban development and the environmental consequences thereof, delegated to local councils, occurred virtually without integration with transport, energy, and climate change policies.⁷⁶ As noted in Chapter 1, this lack of integration between environmental policies creates inconsistencies and inefficiencies and limits their effectiveness.

But the ineffectiveness of New Zealand's environmental policies results foremost from the failure to address the underlying sources and causes of environmental pressure that are common to many or most environmental problems. In the absence of a comprehensive environmental policy or green plan, based on an analysis of the factors that cause and contribute to environmental problems, and on overarching goals and objectives, it is also not surprising that New Zealand government efforts aimed at the greening of non-environmental policies (policy-external environmental integration), including agriculture, energy, transport, and economic policy, have been fragmented, haphazard and inadequate. Agricultural policy has been foremost

⁷³ Parliamentary Commissioner for the Environment (2002), *Creating Our Future: Sustainable Development for New Zealand*. Wellington: Office of the Parliamentary Commissioner for the Environment, 93-96; Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 16.

⁷⁴ Bührs, Ton (2002), "A New Zealand Sustainable Development Strategy: How Meaningful Can and Will It Be?", in S. Kerr, et al. (eds.), *Green Governance: From Periphery to Power. Proceedings of the Ecopolitics XIII Conference, 29 November - 1 December, Canterbury University*, 26-30; Bührs, Ton and Robert V. Bartlett (1997), "Strategic Thinking and the Environment: Planning the Future in New Zealand?", *Environmental Politics*, Vol.6, No.2, 72-100; Parliamentary Commissioner for the Environment, *Creating Our Future: Sustainable Development for New Zealand*.

⁷⁵ Parliamentary Commissioner for the Environment, *Creating Our Future: Sustainable Development for New Zealand*, 103-105.

⁷⁶ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, Chapter 5.

facilitative of an expansion of the dairy industry, among other by subsidising irrigation and funding research to reduce its environmental impacts, as it has been regarded as crucial to boosting exports and economic growth. But it also greatly increased the pollution of lakes and rivers.⁷⁷ The agricultural sector has been exempted from the Emissions Trading Scheme, New Zealand's main policy instrument for reducing GHG emissions, until at least 2025, even though it is the biggest contributor, especially because of methane emissions from cattle. The integration of environmental considerations into energy policy has been largely left to the market. Despite official declarations of commitment towards moving New Zealand towards 100% renewable electricity in 2030, no clear pathway has been provided for achieving this, while expressions of commitment towards the promotion of energy efficiency have also been largely symbolic.⁷⁸ Meanwhile, the government's Mineral and Petroleum Resource Strategy, adopted in 2019, remains firmly wedded to the facilitation of future resource exploitation, including of cobalt and lithium, to "meet our needs", albeit that the sector will need to "do some things differently".⁷⁹ Likewise, the greening of transport policy has been lacking, with road transport (road building) being favoured heavily over public transport, and the environmental effects of the former remaining minimally regulated in the absence of mandatory fuel efficiency and emission standards while financial incentives for the purchase of electric cars were non-existent until 2021. Between 1990 and 2019, CO₂ emissions from transport rose from 9 Mt to 16 MT (78%).⁸⁰

Policies in all these areas have been underpinned by the overarching priority of economic growth. While the government created a Natural Resources Sector comprising eight government agencies, and a Green Growth Advisory Group which are meant to integrate environmental concerns into economic policy, these operate within the context of a "Business Growth Agenda" (BGA) aimed at building a more competitive and productive economy. While natural resources (and the environment more broadly) are a key pillar for realising the Agenda's objective of boosting exports (from 30% of GDP in 2015 to 40% by 2025), it is hard to see how this policy will not significantly add to the already major environmental pressures and problems. As the OECD notes, "the BGA is far from a long-term vision for the transition of New Zealand

⁷⁷ Gluckman, Sir Peter (2017), *New Zealand's Fresh Waters: Values, Trends and Human Impacts*. Auckland: Office of the Prime Minister's Chief Science Advisor; Parliamentary Commissioner for the Environment (2013), *Water Quality in New Zealand: Land Use and Nutrient Pollution*. Wellington: Parliamentary Commissioner for the Environment.

⁷⁸ Ministry of Business, Innovation and Employment and Energy Efficiency and Conservation Authority (2017), *Unlocking Our Energy Productivity and Renewable Potential. New Zealand Energy Efficiency and Conservation Strategy 2017 - 2022*. Wellington: Ministry of Business, Innovation & Employment.

⁷⁹ New Zealand Government (2019), *Responsibly Delivering Value. A Minerals and Petroleum Resource Strategy for Aotearoa New Zealand: 2019 - 2029*, 5.

⁸⁰ International Energy Agency (IEA) (2021), New Zealand - Energy Transition Indicators, CO₂ emissions by sector, <https://www.iea.org/countries/new-zealand> (Accessed: 17 December 2021).

to a low-carbon, greener economy.”⁸¹ Although, in 2019, the government introduced a “Wellbeing Budget”, more explicitly targeting issues and problems (like child poverty) that affect the least well-off in society, this did not signal a departure from a commitment to economic growth (measured in terms of GDP) and from neoliberal principles regarding “fiscal responsibility” and the reduction of government debt.⁸² While, in 2020, the COVID-19 crisis led the government to significantly increase government spending to keep the economy afloat, this has made restoring economic growth an even greater priority, while the commitment to fiscal responsibility (and the reduction of government debt in future years) has been maintained.⁸³

The RMA has meant little if anything for the greening of non-environmental institutions, such as the formal and informal rules that guide the behaviour and practices in the economic arena, transport, the use of energy, or agriculture. Behaviour and practices in these areas continue to be guided foremost by the rules and organisations that govern these sectors and their priorities. While all New Zealand government agencies are expected to consider (potential) environmental implications of their policies and decision, this does not imply that their priorities, goals, and practices are shaped by environmental considerations and priorities in more than a symbolic way; at best, environmental considerations are tagged on to the behaviour and practices that remain firmly focused on non-environmental goals and priorities.

On a related point, although the reforms strengthened the position of environmental agencies within the system of government, these have had little influence on, let alone power over, non-environmental institutions. From its establishment in 1986, the Ministry for the Environment, despite its name, was expected to “balance” the wide range of interests and views on the environment that exist within and outside government. The Ministry has never been a strong advocate for environmental groups and interests. Being a government department, as a rule, it has taken a neutral and expert-based stance on issues, resulting in mostly grey-tinted policy advice. In line with the prevailing ideology and government preferences, the Ministry has held off pushing for strong regulations or ambitious standards. And as its main responsibility has been the provision of policy advice, the ministry has not played a significant role in the enforcement of rules and regulations.

In the cognitive domain, the environmental integration efforts of New Zealand have also been far from impressive. As noted above, although the RMA has the sustainable management of resources as its main objective, what this means has been left largely to local and regional councils to decide, resulting in differences in interpretation and decisions that, from an environmental point of view, have been very contestable. As yet, no comprehensive picture exists of what sustainability in the New Zealand context means or should mean. This is not just a matter of insufficient information and scientific (and other) knowledge about the New Zealand environment, although this is a factor. Foremost, it is a matter of a lack of government commitment

⁸¹ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 117.

⁸² New Zealand Government (2019), *The Wellbeing Budget 30 May 2019*.

⁸³ New Zealand Government (2020), *Wellbeing Budget 14 May 2020 - Rebuilding Together*.

towards the development and adoption of such a collective vision, based on widespread public input and participation.

The lack of a collective vision implies that efforts aimed at the greening of information and knowledge underlying decisions in non-environmental areas occur in an ad hoc and limited way. In New Zealand, the main mechanisms for doing so are environmental impact assessment (referred to as the Assessment of Environmental Effects (AEE)), cost-benefit analysis, and risk analysis and assessments, applied by councils, environmental consultancy agencies, and government agencies. While the use of such tools may have prevented or mitigated some adverse environmental effects, they failed to account for the cumulative and long-term effects of numerous decisions. Also, they have left the dominant cognitive frameworks that guide policy and decision-making in non-environmental areas largely untouched. In particular, New Zealand governments have done little to green the dominant cognitive frameworks guiding science and economics, which are crucial to the development of visions of a sustainable future. Apart from spending money on science to advance technology-based solutions, there is little if any recognition of the need to change the way society predominantly looks at science (how it is conducted, controlled and which goals and priorities it serves) and economics (thinking, theory, principles, goals). As noted above, while the government adopted a vision and strategy for economic development (the *Business Growth Strategy*) built on the notion of "green growth", the environment plays a subsidiary and even subservient role in these efforts, looked at primarily as a pool of resources that can be exploited more efficiently to boost economic growth. Like the governments of many other countries, New Zealand governments have remained firmly wedded to the dominant economic growth paradigm. Environmental problems, after they have emerged, are being looked at separately and as solvable by technological and managerial means, rather than interpreted as parts of a bigger environmental challenge.

In summary, although New Zealand's efforts in the area of institutional-internal integration have been significant and drew attention from around the world, its performance in greening non-environmental institutions and in environmental policy integration (on both external and internal dimensions) has been much less impressive. Although the Resource Management Act provides a framework for integrating decision-making on policies and projects at the local and regional levels, it has done nothing to promote the integration of environmental concerns into non-environmental institutions and policies at the national level. In the cognitive domain, although there has been some improvement in New Zealand's state of the environment reporting,⁸⁴ governments have expressed very little interest in the development of a collective vision for a sustainable future, let alone one that integrates collective views on what constitutes a desirable society. New Zealand's experience demonstrates the limitations of partial environmental integration efforts, in this case, characterised by an emphasis on institutional-internal integration unaccompanied by

⁸⁴ Ministry for the Environment & Stats NZ (2015), *New Zealand's Environmental Reporting Series: Environment Aotearoa 2015*. Ministry for the Environment and Stats NZ; Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 28.

moves towards policy (external and internal) integration and environmental integration in the cognitive sphere, as summarised in Table 5.⁸⁵

Not surprisingly, in the absence of a strong government commitment to comprehensive environmental integration and given the limitations of integration efforts in the institutional domain, environmental pressures and problems in New Zealand have increased rather than diminished. New Zealand’s ecosystems have suffered from further degradation rather than shown improvement. This has become

Table 5 - Environmental Integration – New Zealand

Domain Dimension	Cognitive domain	Policy domain	Institutional domain
Internal dimension	Sustainable management, but no collective vision; weak cognitive environmental capacity	A few weak moves towards the development of an overarching environmental policy (strategy), but to no effect	Integrated environmental legislation, but no central agency with a strong capacity for advancing EI
External dimension	EIA; no greening of economic thinking and science and technology (economic growth-oriented)	No comprehensive greening of sector policies; largely left to “the market”/business sector	No formal requirement for EI at the policy level; no greening of non-environmental institutions

most apparent in the deterioration of freshwater quality in areas where the dairy industry has been significantly expanded, supported by the government. This, combined with other factors, has led to increased pollution of streams, lakes, rivers and groundwater.⁸⁶ Although, in isolated areas, some good results have been achieved with efforts aimed at the protection of threatened species, New Zealand has one of the world’s highest rates of threatened endemic species of flora and fauna, with a worsening trend for 7% of species compared to an improving trend for 1.5%.⁸⁷ New Zealand’s efforts in the area of climate change, which is likely to have serious consequences on all three environmental dimensions (ecosystems, resources and the human/modified environment) have not resulted in a decline in domestic greenhouse

⁸⁵ Bührs, Ton, *Environmental Integration: Our Common Challenge*, 174-179.

⁸⁶ Ministry for the Environment & Stats NZ (2019), *New Zealand’s Environmental Reporting Series: Environment Aotearoa 2019*. Wellington: Ministry for the Environment & Stats NZ, 49-51.

⁸⁷ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 75-77. Some 35% of New Zealand’s endemic species of which the conservation status is known are either at risk or threatened with extinction. Ministry for the Environment & Stats NZ, *New Zealand’s Environmental Reporting Series: Environment Aotearoa 2019*, 17.

gas (GHG) emissions. In 2014, total GHG emissions (including from agriculture) were 20% higher than 2000 levels, and 54% above 1990 levels.⁸⁸ New Zealand has one of the highest rates of emissions per capita.⁸⁹

New Zealand's resource base (notably land and water) has continued to be subjected to forms of development that undermine the availability of natural resources (in quantitative and qualitative terms) in the long run and that hence are unsustainable. In the agricultural sector, the trend has been from extensive towards more intensive forms of agriculture, with concomitant increases in the use of fertiliser and pesticides as well as energy and water.⁹⁰ While some 80% of New Zealand's electricity supply is generated by renewables (mostly from hydropower and geothermal energy), energy consumption in the services, agriculture and transport sectors has grown rapidly while gains in energy intensity have stagnated, in part due to the lack of fuel efficiency standards in the transport sector.⁹¹ Materials consumption, linked with private consumption, remains one of the highest in the OECD and produces a growing waste stream.⁹² Although New Zealand is said to have an exemplary tradable quota system for fisheries, in 2017, 16% of fish stocks were still deemed to be overfished.⁹³

On the human (modified) environment dimension, the increase in water pollution also poses growing human health risks, which have already been demonstrated by instances of the contamination of drinking water supplies, as well as risks associated with water-based recreation. While New Zealand's air pollution problems are mostly confined to a range of "hot spots", New Zealand is one of the few countries where emissions of major air pollutants have increased since 2000, that has no national standards for PM_{2.5} concentrations, and where the health impacts of air pollution are projected to rise. Poor insulation of some 600,000 homes also causes significant levels of disease (New Zealand has the highest rate of respiratory illness in the OECD).⁹⁴ Poorly planned and controlled urban development, notably in the Auckland region, has resulted in housing shortages, congestion problems, and further pressures on the development of green space.⁹⁵

⁸⁸ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 68.

⁸⁹ Ministry for the Environment & Stats NZ, *New Zealand's Environmental Reporting Series: Environment Aotearoa 2019*, 94.

⁹⁰ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 79-81, 159-161; Ministry for the Environment & Stats NZ, *New Zealand's Environmental Reporting Series: Environment Aotearoa 2019*, 57-61. The use of nitrogen-based fertiliser increased with 627% between 1990 and 2015. Statistics New Zealand (2019), Nitrogen and Phosphorus in Fertilisers, Statistics New Zealand, <https://www.stats.govt.nz/indicators/nitrogen-and-phosphorus-in-fertilisers> (Accessed: 26 October 2020).

⁹¹ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 66, 122.

⁹² *Ibid.*, 72-73.

⁹³ *Ibid.*, 75; Ministry for the Environment & Stats NZ, *New Zealand's Environmental Reporting Series: Environment Aotearoa 2019*, 84-85.

⁹⁴ Organisation for Economic Co-operation and Development, *Environmental Performance Review: New Zealand*, 81-83.

⁹⁵ *Ibid.*, Chapter 5.

Overall, New Zealand's environmental performance falls well short of what is needed to move towards a sustainable future. In a classic case of understatement, the OECD noted that "New Zealand's growth model largely based on exporting primary products, has started to show its environmental limits."⁹⁶

Sweden

The inclusion of Sweden in this selection of pioneers in environmental integration is based on several grounds: first, Sweden arguably was the first country to take a comprehensive approach to environmental issues, in particular to pollution control; second, it has gained a reputation as an environmental leader because of the strong support for the environmental cause expressed by its governments, both internationally and in the domestic context; and third, it has been depicted as a leader, particularly in the development of comprehensive environmental policy (policy-internal environmental integration), and sectoral greening (policy-external environmental integration). It also has been a leader in creating an institutional framework that provides strong and enduring backing for environmental integration.

Sweden was the first country to create, in 1967, an Environmental Protection Agency (SEPA) with responsibility for pollution control, the management and protection of National Parks, and environmental policy implementation. The agency also came to play a key role in undertaking and advancing environmental research, information gathering and environmental reporting. While the Ministry of the Environment, created only in 1987, is mainly an environmental policy agency, much of the actual capacity for environmental policy development has been concentrated in SEPA.⁹⁷

Sweden has often been depicted as a pioneer and leader in environmental policy. In part, this reputation is based on the early steps referred to above, and on the fairly consistent record of Swedish governments in expressing their support for and commitment to the environment, both domestically and internationally. Sweden's favourable image is not just based on rhetoric but has been backed up by independent assessments of its environmental performance.⁹⁸ As noted above, Sweden is the only country that has consistently figured among the top ten in Yale's rankings of environmental performance, despite the changes in the criteria underlying these assessments. Although the environmental commitment of governments has been somewhat variable over time – with Social Democratic governments commonly being regarded as having been the most supportive – the OECD, in its 2014 review of Sweden's environmental performance, concluded that the country "remains a front-

⁹⁶ Ibid., 15.

⁹⁷ Lundqvist, Lennart J. (1997), "Sweden", in M. Jänicke and H. Weidner (eds.), *National Environmental Policies. A Comparative Study of Capacity-Building*, 45-71, 50-51; Kronsell, Annica (1997), "Sweden: Setting a Good Example", in M. S. Anderson and D. Liefferink (eds.), *European Environmental Policy: The Pioneers*, 40-80, 50-52.

⁹⁸ Knill, Christoph, et al. (2012), "Really a Front-Runner, Really a Straggler? Of Environmental Leaders and Laggards in the European Union and Beyond — a Quantitative Policy Perspective"; Scruggs, Lyle, *Sustaining Abundance: Environmental Performance in Western Democracies*; Liefferink, Duncan, et al. (2009), "Leaders and Laggards in Environmental Policy: A Quantitative Analysis of Domestic Policy Outputs".

runner in environmental policy and has developed approaches that will be of interest to other countries.”⁹⁹

When assessing Sweden’s performance based on the environmental integration matrix and criteria, two areas stand out: the development of comprehensive environmental policy (policy-internal environmental integration) and its efforts towards the greening of non-environmental policy areas or sectors (policy-external environmental integration).

In 1999, the Swedish government adopted an ambitious set of environmental objectives. The 16 Environmental Quality Objectives (EQOs) (15 at first, one was added later) cover issues along all three dimensions of the environment (ecological, resource and human), including climate change and biodiversity, water and forests, toxins, and the built environment. The objectives were presented as part of the overall aim “to hand over, by 2020, a society in which all the major environmental problems facing the country have been solved” (a “generational goal”), while making sure that this is achieved “without increasing the environmental and health problems of other countries.”¹⁰⁰ The addition of the latter clause reflects a recognition of the importance of placing Sweden’s environmental policy in the global context, which is mirrored also in the country’s record in advancing collective action at the international level, from hosting the first world environmental conference in Stockholm in 1972 to the advocacy of ambitious climate change targets in recent years.

In many ways, Sweden’s comprehensive environmental policy efforts resemble Dutch green planning, discussed above. Like the Dutch, the Swedes were not afraid to be ambitious - the Dutch also initially aimed to achieve sustainability within one generation. Like in the Dutch green planning approach, achieving these objectives was not seen as just the responsibility of the government but, following the idea and principle that such responsibility needs to be internalised, was laid at the feet of those who contribute to the problems and/or have the capacity to address them, including government departments, local government authorities, and the business sector. That the objectives were more than aspirational was reflected in the formulation of interim targets and in SEPA’s role in reporting on the extent to which progress was made (every two years, with a more in-depth assessment being undertaken every four years). Like in the Netherlands, these green planning efforts were accepted by successive governments as a desirable or even necessary (and thus largely non-political) long-term environmental policy framework.

However, the Swedish approach to environmental policy integration went further than that of the Netherlands as the integration of environmental concerns and objectives, as set out by the EQOs, was made a mandatory requirement for all government agencies. Hence, the integration of environmental concerns into non-environmental policies and sectors (policy-external environmental integration) was put on a legal footing, unlike in the Netherlands, where integration in this area relied foremost on a cooperative approach and on voluntary agreements, which eventually

⁹⁹ Organisation for Economic Co-operation and Development (2014), *Environmental Performance Reviews: Sweden 2014* Paris: OECD, 3.

¹⁰⁰ Swedish Environmental Protection Agency (2012), *Sweden’s Environmental Objectives - an Introduction* Stockholm, 1.

caused many of the more difficult targets to be watered down or abandoned altogether. Moreover, in Sweden, the government supported these policy-external integration efforts with the adoption of a broad range of environmental taxes, including a carbon tax, that were presented as part of a “green tax shift”, earning it the status of a front-runner in this area.¹⁰¹ Thus, arguably more so than in many other countries, Swedish governments appear to have taken the sub-challenge of the greening of non-environmental sectors quite seriously, while holding up a set of overarching objectives to guide efforts in this area.

Notwithstanding these stand-out efforts in environmental integration, there were weak spots. For instance, while Sweden (through SEPA) provided access to a wide range of environmental information and data via its website, annual progress reports on the EQOs and in-depth assessments every four years, there is no evidence that the efforts aimed at achieving the environmental objectives have been guided by a thorough analysis of the underlying causes and drivers of these problems. While a summary of the in-depth assessment in 2012 notes that “the study [of] the underlying reasons why they are not being achieved” is “Another way of looking at the conditions for meeting the objectives”,¹⁰² the report itself hardly elaborates on these sources and does certainly not provide an in-depth analysis. It focuses mainly on environmental policy instruments and how these can or should be improved to try to close the gap between the objectives and the existing situation. This lack of analysis of causes, drivers and pressures makes that taking a more strategic and effective approach to environmental problems, and achieving the EQOs, has been problematic. As noted by the OECD, the EQO system, in its current form, does not establish a platform for targeted, effective, and efficient action.¹⁰³

As discussed in Chapter 1, the development of an overarching cognitive framework or vision involves more than gaining a good understanding of how the environment works. Inevitably, addressing environmental problems requires making (values-based) judgements about what is an acceptable or desirable state of the environment as well as society, what are priorities, and the preferred means for advancing objectives. These are not primarily questions for science to answer but are political issues that, ideally, involve broad public debate and input. While the EQOs appeared to enjoy widespread support from across the political spectrum, it is debatable to what extent they reflected or represented a collective vision of a desirable future state of the environment and society. The same can be said about the vision of a green social welfare state that was put forward by Prime Minister Göran Persson in the late 1990s.¹⁰⁴ Arguably, the development of a Sustainable Development Strategy,

¹⁰¹ Organisation for Economic Co-operation and Development (2004), *Environmental Performance Reviews: Sweden*. Paris: OECD, 17, 102.

¹⁰² Swedish Environmental Protection Agency (2012), *Overall Assessment and Analysis. Extract from the Swedish Environmental Protection Agency's 2012 in-Depth Evaluation of Sweden's Environmental Objectives*, 10.

¹⁰³ Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 47.

¹⁰⁴ Lundqvist, Lennart J. (2004), *Sweden and Ecological Governance: Straddling the Fence*. Manchester England: Manchester University Press, 220.

which was adopted in 2002 and revised in 2004 and 2006,¹⁰⁵ constituted a move towards the formulation of a broad, collective vision. However, as a successive government considered these efforts to be redundant to the EQO system, work on the sustainable development strategy was abandoned.¹⁰⁶

In practice, it seems, the environmental integration efforts of Swedish governments have been guided not so much by an overarching collective environmental vision as by the assumption that economic growth and environmental protection can be (made) compatible through technological innovation.¹⁰⁷ This idea, central to the notion of ecological modernisation, proclaims that environmental problems can be solved by technological means and that doing so creates new opportunities for economic growth. Addressing the environmental challenge does not require fundamental economic, political, or social change as, essentially, it is assumed that there is nothing wrong with the existing systems. Hence, the notion of a green welfare state that was put forward by Prime Minister Persson did not imply an agenda for radical change but was rather a call for tagging environmental values onto the already existing systems and practices.

Like many other countries, Sweden has introduced environmental impact assessment (EIA) as a mechanism for integrating environmental considerations into the knowledge basis for decision-making on projects (cognitive-external environmental integration). The EIA regulations are laid down in the Environmental Code and a raft of other Acts and provide for different degrees of assessments depending on the type of project. No single organisation is responsible for EIA, and EIAs are implemented by different authorities. Although the business community complains about the administrative burdens associated with the process, no evidence is available on the (in-) effectiveness of EIA and to what extent it has helped to mitigate environmental impacts.¹⁰⁸

Absent also are signs of government efforts towards the greening of non-environmental cognitive frameworks that guide economic policy and/or technology policy. Although Sweden has developed a system of environmental accounts,¹⁰⁹ there is no indication that this has affected the general framework on which economic decision-making is based. As noted above, Swedish governments put much faith in technological innovation as a means for solving environmental problems (associated with the ecological modernisation school of thinking), and no Swedish government

¹⁰⁵ Nilsson, Måns, *et al.* (2007), "Introduction: EPI Agendas and Policy Responses", in M. Nilsson and K. Eckerberg (eds.), *Environmental Policy Integration in Practice: Shaping Institutions for Learning*, 1-23, 8; Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden*, 47, 98.

¹⁰⁶ Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 47.

¹⁰⁷ Lundqvist, Lennart J., *Sweden and Ecological Governance: Straddling the Fence*, 77-78; Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 89.

¹⁰⁸ Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 49-50.

¹⁰⁹ Lundqvist, Lennart J., *Sweden and Ecological Governance: Straddling the Fence*, 136.

appears to have given much thought to the idea that the assumptions and theories underlying the government's economic decisions need a major review.

By comparison, more consideration has been given to the ways of thinking that guide the development of science and technology, as reflected in Sweden's support for "eco-innovation" which, in financial terms, has been one of the highest among OECD countries. However, much of this research and development has also been based on the "green growth" assumptions referred to above, as reflected in the areas in which it is concentrated, such as the development of clean energy technologies, including second-generation biofuels, smart grids, and carbon capture and storage (CCS), in which Sweden has been labelled a leader. The 2012 Swedish Innovation Strategy emphasised research and development in "strategic" areas like mining, steel, forest products and biomass, as well as sustainable urban development. While seeking to reduce "the negative environmental impact of consumption and production" it was also aimed at "promoting competitiveness and industrial growth".¹¹⁰ Moreover, it should be noted that expenditure on environment-focused research and development, although increasing, has been just a small fraction of total R&D spending (around 2 to 3%).¹¹¹ Most knowledge development continues to be guided by non-environmental priorities without a requirement to consider environmental aspects, and/or a system to independently assess the environmental effects of new technologies.

In the institutional sphere, as noted above, Sweden was one of the first countries to establish an Environmental Protection Agency with a broad mandate, laying the basis for institutional-internal environmental integration, creating an environmental agency that theoretically was capable to guide and advance environmental integration in all the other five areas identified in the EI matrix. But as noted above, although formally the Ministry of the Environment has the responsibility for environmental policy, much of the actual capacity on this front is concentrated in SEPA. Given its scientific capacity and its role in the monitoring of and reporting on progress on the Environmental Quality Objectives, the SEPA has been able to keep a broad overview of environmental problems and developments and to analyse and assess the gaps and shortcomings in the efforts aimed at achieving the objectives. The Environment Code, Sweden's main piece of environmental legislation which came into force in 1999, provided a comprehensive legal framework that covers and regulates all forms of pollution affecting human health and nature, the protection of all valuable human and natural environments and biodiversity, the use of land and water and the physical environment in general "to secure a long term good management in ecological, social, cultural and economic terms," and "reuse and recycling, as well as other management of materials, raw materials and energy" with a view to establishing and maintaining natural cycles. Aimed at the promotion of sustainable development, it lays down the

¹¹⁰ Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 89.

¹¹¹ *Ibid.*, 85.

main principles and rules affecting all three dimensions of the environment.¹¹²

While these environmental institutions can be seen as a good basis for institutional-internal environmental integration, promoting coherence between *environmental* thinking, policy, and institutions, it is questionable to what extent they are capable of ensuring environmental integration in non-environmental areas. Neither SEPA nor the environment ministry has a formal role or power to ensure environmental integration in non-environmental sectors, even though this had become a mandatory requirement. Responsibility for this has been delegated to the authorities in the different policy areas or sectors, and at the local and county level of government. This confines SEPA to an advisory role in these matters and limits its ability to strongly lead and coordinate environmental integration across government policies and institutions. Neither SEPA nor the Ministry of the Environment has formal responsibility for overseeing the implementation of EIA, the development of research and development policy, technology assessment, or the greening of the economy, to just name a few crucial areas of environmental integration. Overall, the environmental institutions make for a reasonably well-integrated "environmental sector", but they do not make it a strong and powerful advocate or driver of environmental integration across all areas.

The main means used by Swedish governments to advance environmental integration in non-environmental policies and institutions, it seems, has been the promotion of Environmental Management Systems (EMS). In 2009, the adoption of an EMS (ISO or EMAS) became mandatory for all government agencies (at all levels). Moreover, from 2007, state-owned enterprises were required to publish sustainability reports which, from 2012, must include targets and define strategies for achieving them. However, these requirements are not linked to the government's Environmental Quality Objectives (or interim targets) and can be met at any level, limiting their usefulness or even meaningfulness as mechanisms for environmental integration. Moreover, since 2009, the number of EMAS registrations declined, mainly due to "low market demand", particularly among small and medium enterprises.¹¹³ To what extent the EMSs adopted by government agencies have brought about the greening of these institutions and their policies, remains unclear.

As the discussion above indicates, Sweden's environmental integration efforts appear to be more impressive on paper than in practice. This applies not just to the area of policy-external integration, where the implementation of the formal requirement upon sectors to integrate environmental concerns has been left largely to the sectors themselves, with variable and debatable results.¹¹⁴ It also applies to the

¹¹² Government of Sweden (1999), Environmental Code. <https://www.government.se/49b73c/contentassets/be5e4d4ebdb4499f8d6365720ae68724/the-swedish-environmental-code-ds-200061> (Accessed: 9 March 2017).

¹¹³ Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 52-53.

¹¹⁴ Eckerberg, Katarina, *et al.* (2007), "Institutional Analysis of Energy and Agriculture", in M. Nilsson and K. Eckerberg (eds.), *Environmental Policy Integration in Practice: Shaping Institutions for Learning*, 111-136; Nilsson, Måns, *et al.* (2007), "Policy Framing and EPI in Energy and Agriculture", in M. Nilsson and K. Eckerberg (eds.), *Environmental Policy Integration in Practice: Shaping Institutions for Learning*, 85-110; Persson, Åsa, *et al.* (2016), "Institutionalization

environmental quality objectives, most of which, according to SEPA's assessments, were unlikely to be met.¹¹⁵ In some respects, notably where meeting objectives depends on international cooperation and action, this is eminently understandable and forgivable. However, meeting many of the domestic objectives, or at least achieving significant progress towards meeting them, in principle should be within the grasp of the Swedes themselves, such as in matters like the protection of wetlands, the improvement of water quality (of rivers, lakes and groundwater), the sustainable management of forests, the management of land and landscapes, and the protection of biodiversity (notably on land). But all those objectives are also unlikely to be met as they are subject to worsening or neutral trends.¹¹⁶

As summarised in Table 6, Sweden's environmental integration efforts have stood out in two areas of the EI matrix: the policy-internal area (the adoption of an overarching environmental policy – green planning), and the policy-external area (the integration of environmental concerns in non-environmental policies). But they were insufficiently backed up in the institutional domain and inadequately guided on the cognitive front. Overall, Sweden's integration efforts have been rather disappointing when looked at more closely, also in terms of outcomes, and do not match the expectations created by Sweden's environmental reputation, creating a gap between rhetoric and reality. Whether this can or must be attributed to variability or decline in the political commitment of governments to the environmental cause, or other factors, is a question open to interpretation and debate.¹¹⁷

As discussed earlier in this chapter, for several reasons, we should be careful to depict countries as environmental leaders (or for that matter, as laggards). Sweden is a good case in point. While it scores high on many environmental performance scorecards, there are good reasons to be less than enthusiastic about the environmental integration efforts and performance of Swedish governments. Even though the general level of environmental awareness and commitment in Sweden may be high compared to that in many other countries, the assessment here indicates that Sweden's environmental integration efforts fall short of the required standard. Whether such a standard is too high or unrealistic, given the obstacles, is a question that I will explore in the remainder of this book. But whatever the answer, there is no denying that even Sweden, one of the countries often regarded as a leading light, has not come even close to solving its environmental problems after some 50 years of good effort.

or Wither Away? Twenty-Five Years of Environmental Policy Integration under Shifting Governance Models in Sweden", *Environment and Planning C: Government and Policy*, Vol.34, No.3, 478-495.

¹¹⁵ Swedish Environmental Protection Agency, *Overall Assessment and Analysis. Extract from the Swedish Environmental Protection Agency's 2012 in-Depth Evaluation of Sweden's Environmental Objectives*.

¹¹⁶ Swedish Environmental Protection Agency (2016), *The Swedish Environmental Agency's Conclusions*, 26-27.

¹¹⁷ Persson, Åsa, et al. (2016), "Institutionalization or Wither Away? Twenty-Five Years of Environmental Policy Integration under Shifting Governance Models in Sweden"; Hysing, Erik (2014), "A Green Star Fading? A Critical Assessment of Swedish Environmental Policy Change", *Environmental Policy and Governance*, Vol.24, No.4, 262-274.

Table 6 - Environmental Integration - Sweden

Domain Dimension	Cognitive domain	Policy domain	Institutional domain
Internal dimension	Sustainable development, de facto ecological modernisation; good cognitive environmental capacity (in SEPA)	Overarching framework of environmental quality objectives (EQOs), but most of these are unlikely to be met	Capable SEPA, but power confined to the "environmental sector"; comprehensive legal framework (Environmental Code)
External dimension	EIA; superficial greening of economic thinking (environmental accounts); marginal greening of science and technology	Official policy, but implementation left to government agencies and the business sector	Formal requirement for EI in sectors, but no central agency role; EMS mandatory for all government agencies

In 2014, the OECD did not offer a pretty picture of Sweden's environment and environmental pressures: the status of some 60% of the habitats and species listed in the EU Habitats Directive was judged to be unfavourable; 861 forest species were endangered, half of the surface water bodies had a moderate ecological status and 16% poor or bad; greenhouse gas emissions had increased by 16% if emissions embedded in trade are taken into account; total domestic material consumption had increased by 12% between 2000 and 2011; forests were unsustainably managed; total energy consumption had grown since 2000, and the production of waste (of the primary and municipal sectors) had increased by 16% between 2000 and 2012; farmland (soils) and grassland areas were in continuous decline, and several stocks of local fish were critically declining, while contamination of fish with persistent organic pollutants posed a major health hazard. And although air pollution from a range of sources had decreased, several other forms of pollution (notably particulates) had increased and exceeded norms in twelve cities, posing a significant health hazard, while emission levels of lead, mercury and cadmium were also still of concern. Some 250,000 homes had radon levels that exceeded acceptable levels, and the population was now "exposed to many more chemicals because of a larger number of products [that] contain harmful substances." There were also approximately 80,000 contaminated sites in Sweden, 1500 of which posed a major environmental and health

risk.¹¹⁸ Altogether, this hardly sketches a picture of a society that has made significant progress in reducing its environmental problems, let alone in becoming sustainable.

Conclusion

From the discussion in this chapter, it will be apparent that countries that are often referred to as environmental leaders do not necessarily perform very well in all areas of environmental integration. Countries or governments may have acquired such a status due to their efforts in one of the three domains of environmental management, and even to having been a pioneer in the creation and/or development of (a) particular form(s) in *one* area of environmental integration (such as the US). However, as demonstrated in this chapter, this does not mean that these countries or governments have taken a comprehensive approach to environmental integration comprising all six areas identified in the framework presented in Chapter 1. Although governments may have adopted or introduced a range and variety of forms of integration, their efforts have left significant gaps. One is hard-pressed to find a country that has advanced environmental integration in a comprehensive and complementary way in all six areas, and that has consistently done so for a longer period, let alone during the last four or five decades. As the brief discussion of the countries in this chapter demonstrates, the lead that countries take in a particular domain or area of environmental integration has not always been enduring; often, progress in that domain or area has stalled, while integration generally stagnated or even went into reverse. The three countries that followed an exemplary single-track approach to environmental integration (the USA, the Netherlands, and New Zealand) subsequently lost any claim they might have had of being environmental leaders and even turned into environmental laggards. When it comes to models of comprehensive environmental integration, Sweden's star has been fading¹¹⁹ and there are no other stars, let alone any bright ones.¹²⁰

The persistence of many environmental problems in the countries surveyed in this chapter demonstrates the limited effectiveness of the environmental integration approaches that have been undertaken. This should not come as a surprise, as these approaches were skewed towards particular areas or domains and left the existing situation, including many obstacles in other areas or domains, largely untouched. This meant that the environmental integration efforts in one domain or area were not supported, and often thwarted, by the conditions and situation in the other domains: cognitive forms of integration were not translated into policies; policy integration was not (adequately) supported by integration efforts in the institutional domain, giving them no "teeth"; institutional forms of environmental integration, even if aligned with

¹¹⁸ Organisation for Economic Co-operation and Development, *Environmental Performance Reviews: Sweden 2014*, 22-35, 145-152.

¹¹⁹ Hysing, Erik (2014), "A Green Star Fading? A Critical Assessment of Swedish Environmental Policy Change".

¹²⁰ To my (admittedly limited) knowledge based on available literature and information, other countries that are often referred to as environmental leaders, including Germany, Bhutan, Costa Rica and, more recently, China, are not following the approach sketched here, let alone that they can be regarded as longstanding and ongoing models of comprehensive environmental integration.

cognitive efforts, were not matched by policy changes, thus limiting the effectiveness of such forms, or even making them largely symbolic.

However, even if environmental integration is pursued in all areas, this does not necessarily mean that the combination of these efforts will be effective. As I have argued elsewhere, forms of integration in each area are commonly designed, shaped, and influenced by particular political interests and considerations, thus pre-determining their implementation, operation, and outcomes.¹²¹ Hence, forms of integration do not necessarily serve the same or even complementary goals and may be counterproductive to each other. To be effective, environmental integration needs to be pursued comprehensively and in at least compatible, and preferably mutually supportive, ways within and across all domains and areas. This is likely to happen only if successive governments deliberately set out and continue to advance environmental integration based on a shared, broad vision, solid environmental knowledge, and clear environmental parameters. This raises the question of why this has not been happening. This is the subject of the remainder of this book.

¹²¹ Bührs, Ton, *Environmental Integration: Our Common Challenge*, 204-210.

Chapter 3 – Explaining Environmental Performance: An Exploration

Introduction

Chapter 1 put forward ideas about the nature of the environmental challenge and what is needed to address it (more) effectively. The environmental challenge was redefined as an environmental integration challenge requiring a comprehensive and coherent approach to the integration of environmental considerations in six areas. Chapter 2 illustrated that even countries that have been regarded as environmental leaders have only partially and inconsistently adopted such an approach. When it comes to environmental integration, there are few if any leading lights.

This chapter explores possible explanations for the widespread failure of states and/or governments to take environmental integration seriously. For a start, it will discuss approaches to explaining environmental policy performance in the comparative environmental policy literature, in particular, some of the problematic assumptions that underlie many of these efforts. These issues raise quite fundamental questions about the aims, ambitions, and limitations of this field of study. While this does not mean that there is no place for comparative environmental policy analysis, there is a need for a more realistic and critical approach and for reconsidering the scope and focus of research in this field.

Reflecting the dominant approach taken by governments, many assessments of the environmental performance of governments are equally based on a narrow interpretation of the environmental challenge, and hence are questionable from a broader environmental integration perspective. Moreover, as researchers use different criteria for environmental performance, one must be careful when drawing general conclusions from this research. Nonetheless, the factors that have been found to be important as (possible) explanations of good or poor environmental performance can also be useful starting points for research on what is conducive and/or obstructive to the environmental integration efforts of governments. In particular, socio-cultural and political-institutional factors that have been found to be important can also provide a useful basis for exploring obstacles to more meaningful and effective approaches to environmental integration. However, given the limitations of much of the research undertaken in this field, other factors also need to be considered, notably the links between political and economic factors and the role of agency and power, both at the national and the international level.

First, I discuss three assumptions that underlie much of the comparative environmental policy research and that are problematic and increasingly untenable; second, drawing on a broad range of literature and perspectives, I will identify and briefly discuss four categories of factors that, in combination, offer a more encompassing and persuasive basis for explaining the fundamental obstacles to environmental integration. While two of these factors have been derived from the comparative environmental politics and policy literature, two others have been extracted from other areas of the study, notably on the role of states, political economy, international relations, and globalisation.

Comparative Environmental Politics & Policy

Trying to explain the differences in environmental efforts between countries has been the main rationale behind research in the comparative environmental politics and policy field from its early beginnings. Since the 1970s, this field and literature have expanded enormously, making it impossible to do justice to the full range of ideas, approaches, and findings in just a few pages.¹ Like in the broader social sciences, there is a wide range of theoretical perspectives within the field of comparative environmental politics and policy, and no agreement on any theoretical framework. As a relatively young field of study, it arguably does not even have identifiable schools of thought, and much of the research undertaken is based on an eclectic approach, with researchers developing their own frameworks. As Steinberg and VandeVeer note: "there is little in the way of a distinctive comparative environmental politics tradition" even compared to the field of comparative politics.² Much of the research clusters around a range of topics, including the role of values, culture and knowledge, social mobilisation, political institutions and, increasingly, the linkages between different levels of governance. One might add that much of the research also focuses on particular environmental topics, such as pollution, climate change, biodiversity, (renewable) energy policies, pesticides policies, environmental justice and a raft of other issues which have also become foci of attention in the field of global environmental politics and policy. There is also a branch that centres on the ability or capacity of countries or political systems to develop environmental policy.³

Although the study of comparative (environmental) politics and policy has been characterised by a diversity of theoretical perspectives and methodological approaches, arguably, from its beginnings it has been based on several common assumptions: first, the idea that (nation-) states are largely autonomous units whose "behaviour" is best explained based on (historically determined) domestic factors; second, that it is possible to derive generalisable conclusions from comparative research, in particular, about the environmental performance of countries and the factors influencing that performance; third, that countries can learn from each other, thus providing a basis for hope that countries or governments will take lessons seriously and adopt measures to improve their performance. All three assumptions are

¹ For broad overviews of the field at different points of time, see Vogel, David and Veronica Kun, "The Comparative Study of Environmental Policy: A Review of the Literature"; Steinberg, Paul F. and Stacy D. VanDeveer (eds.) (2012), *Comparative Environmental Politics. Theory, Practice and Prospects*. Cambridge, Mass.: The MIT Press; Kamieniecki, Sheldon and Eliz Sanasarian (1990), "Conducting Comparative Research on Environmental Policy", *Natural Resources Journal*, Vol.30, No.2, 321-339.

² Steinberg, Paul F. and Stacy D. VanDeveer (2012), "Bridging Archipelagos: Connecting Comparative Politics and Environmental Politics", in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 29-59, 36.

³ Lundqvist, Lennart J. (1974), *Environmental Policies in Canada, Sweden, and the United States: A Comparative Overview*. London: Sage Publications; Enloe, Cynthia, *The Politics of Pollution in Comparative Perspective*; Jänicke, Martin, et al. (1997), *National Environmental Policies: A Comparative Study of Capacity-Building*. Berlin: Springer; Desai, Uday (2002), *Environmental Politics and Policy in Industrialized Countries*. Cambridge, Mass.: MIT Press.

problematic. They have been so from the early days of comparative (environmental) study but have become untenable in an increasingly interdependent world.

That states are largely autonomous units is an assumption that arguably is a necessary condition for comparative study. If the behaviour and practices of states are highly influenced or even determined by outside forces (for instance, in the case of colonies), it makes little sense to look for explanations for their collective choices by comparing them with autonomous states, as those choices are likely to be determined or highly conditioned by external powers. Theoretically, the assumption finds its roots in the notion of state sovereignty which still (formally) underlies the international order (state system), and which predicates that all states are equal and have the supreme right and formal power to make their own decisions, without intervention or interference by other states. But, apart from the question to what extent states have become intertwined in an increasingly globalised world that puts constraints on their ability to act as sovereign powers, it has never made sense to consider all states equal, given the enormous differences in power between states. Arguably, history can be written as a succession of empires or dominant states. While modern states may be formally sovereign and equal, in Orwellian terms, some are (much) more equal than others. Powerful states exert varying degrees of influence over the choices made by weaker states, and so do TNCs and international organisations. The degree of autonomy and external power and influence exerted by a state depends not just on geographical variables but, broadly speaking, on its status and role in the global political-economic order. If we are to make (more) sense of what national-level governments do, can do, and cannot do to advance environmental integration, we need to look at their place in the global political-economic system and at the constraints and opportunities that they face in the global political context. Although there is growing recognition that, in an increasingly interdependent world, an absolute notion of sovereignty is not realistic, and that sovereignty should be conceived of as a relative concept encompassing different elements and degrees of autonomy,⁴ this fundamental fact of enormous inequality between states that influences, circumscribes or even shapes the actions of "lesser" states is commonly ignored in the quantitatively oriented comparative environmental politics literature.

The second assumption, that it is possible (and desirable) to derive generalisable conclusions from comparative research is directly linked to the first. Those who wish to take a more scientific quantitative approach to comparative analysis can only do so if the units that form the basis for comparison are indeed comparable. This is often recognised explicitly by those who take a qualitative approach by selecting countries that are considered to share some similar characteristics, such as the same level of economic development, a federal or unitary political system, or a liberal-democratic system. In general, such studies aim to dig deeper into the particular political-historical, socio-cultural, and political-economic constellations that explain differences in approaches and/or outcomes between countries, shedding more light on each country because of the differences identified.

⁴ Litfin, Karen (1996), "The Greening of Sovereignty: An Introduction", in K. Litfin (ed.) *The Greening of Sovereignty in World Politics*, 2-27; Conca, K. (1994), "Rethinking the Ecology-Sovereignty Debate", *Journal of International Studies*, Vol.23, No.3, 701-711.

By contrast, quantitatively oriented comparative research (notably those based on a "large n" (number of countries), often heap together countries that are quite different, relying on statistical analysis to identify variables (dependent and independent) that come up as (the most) significant. Like the "hard" sciences, this approach is sometimes seen as more systematic and sophisticated (implying more scientific),⁵ and the most promising in terms of arriving at generalisable conclusions (even if not laws) about the behaviour of states. But given the large differences between states, including their relative degree of autonomy or dependence in the international system referred to above, their interactions, and the relatively small number of states (just over 200), the goal of arriving at generalisable conclusions, let alone a general theory about the behaviour of states seems misguided. Such conclusions are more likely to hide than to reveal how particular states behave and why.⁶ Such studies have also little if anything to offer in the way of guidance on how environmental integration could be advanced in particular countries or contexts. For example, even if such research highlights that corporatist political institutions appear to be the most important variable explaining a high level of environmental performance,⁷ this has little to offer with regard to improving the environmental performance of the United States, or for that matter China, even if it helps to explain the performance of Austria and Sweden and a few other countries.

This is not to completely dismiss the usefulness of quantitative comparative (environmental) research, as it may indeed lead to the identification of factors that are important when trying to explain the (environmental) actions of states. But if we wish to advance our understanding of environmental integration in a national and international context, we need to dig deep into the particular (and often unique) constellations of factors that are at work in every country, including its links with other countries and the international system. The relatively small number of players in that system, and the significant differences in status, power and influence among them, including some very big players (the United States, China; arguably, the members of

⁵ Knill, Christoph, *et al.* (2012), "Really a Front-Runner, Really a Straggler? Of Environmental Leaders and Laggards in the European Union and Beyond — a Quantitative Policy Perspective".

⁶ For instance, Neumayer, in a quantitative study about the link between democracy and environmental commitment, argues in a footnote that while bigger countries tend to be more environmentally committed because they are concerned about their international reputation, this does not apply to the United States, as the USA is a "special case", being so dominant internationally that it does not need to worry about its environmental reputation and low level of performance. Neumayer, Eric (2002), "Do Democracies Exhibit Stronger International Environmental Commitment? A Cross-Country Analysis", *Journal of Peace Research*, Vol.39, No.2, 139-164, footnote 15, p.151. This is a rather astonishing argument or insight contained (but buried) in the presentation of general results of a "large n" study.

⁷ Scruggs, Lyle (2001), "Is There Really a Link between Neo-Corporatism and Environmental Performance? Updated Evidence and New Data for the 1980s and 1990s", *British Journal of Political Science*, Vol.31, No.4, 686-692; Lijphart, Arend and Markus M. L. Crepaz (1991), "Corporatism and Consensus Democracy in Eighteen Countries: Conceptual and Empirical Linkages", *British Journal of Political Science*, Vol.21, 235-256; Crepaz, Markus M.L. (1995), "Explaining National Variations of Air Pollution Levels: Political Institutions and Their Impact on Environmental Policy-Making".

the G7, G8, or G20), makes taking a qualitative, in-depth approach to analysing the behaviour and actions of states both feasible and the most promising in terms of arriving at more realistic conclusions that also offer more scope for thinking about potential avenues for strategic action and change.

This brings me to the third problematic assumption mentioned above: the idea that countries can and/or do learn from each other, arguably based in part on the insights or conclusions derived from comparative research, and thus improve their (environmental) performance. A common rationale underlying comparative environmental policy research is the assumption that it is possible to draw lessons from such studies and that states are able and willing to learn from the experiences of other states. By identifying the key factors that are conducive and/or obstructive to improving environmental performance, it is assumed or at least hoped that countries and governments will amend their cognitive frameworks, policies and institutions in ways that have been demonstrated to be more effective and/or efficient.

On the one hand, this may seem a plausible assumption. It is also backed up by research which has demonstrated that many environmental ideas and practices have been transferred or diffused between countries, including environmental impact assessment, cost-benefit analysis, risk analysis, ministries of/for the environment, principles like the polluter pays principle and the precautionary principle, eco-labelling, voluntary agreements, and green planning.⁸ On the other hand, the use of the term "learning" in this context is misleading and inappropriate, for several reasons. First, government decision-making and policy development are *political* processes influenced and shaped by multiple, often conflicting, but also dominant ideologies, goals, and interests. Ideas or "best practices" (domestic or foreign) are adopted only when they are considered to serve these interests. Second, although many of the ideas and practices that have been diffused are often presented as politically neutral ("best practice"), they are far from that. If adopted, they are adapted and cast into a form to

⁸ Dolowitz, David and David Marsh (1996), "Who Learns What from Whom: A Review of the Policy Transfer Literature", *Political Studies*, Vol.44, No.2, 343-357; Stone, Diane (1999), "Learning Lessons and Transferring Policy across Time, Space and Disciplines", *Politics*, Vol.19, No.1, 51-59; Dolowitz, David P. and David Marsh (2000), "Learning from Abroad: The Role of Policy Transfer in Contemporary Policy-Making", *Governance*, Vol.13, No.1, 5-23; Jörgens, Helge (2004), "Governance by Diffusion - Implementing Global Norms through Cross-National Imitation and Learning", in W. M. Lafferty (ed.) *Governance for Sustainable Development: The Challenge of Adapting Form to Function*, 246-283; Bennet, C. (1991), "Review Article; What Is Policy Convergence and What Causes It?", *British Journal of Political Science*, Vol.21, No.2, 215-233; Jörgens, Helge, "Governance by Diffusion - Implementing Global Norms through Cross-National Imitation and Learning"; Aemeels, B., et al. (2001), "The Diffusion of Voluntary Agreements in the European Union: Critical Conditions for Success", Paper presented at *Competitiveness and the Public Trust, Ninth International Conference of Greening of Industry Network*, Bangkok, January 21-25; Hironaka, Ann (2002), "The Globalization of Environmental Protection: The Case of Environmental Impact Assessment", *International Journal of Comparative Sociology*, Vol.43, No.1, 65-78; Kern, Christine, et al. (2000), "Policy Transfer by Governmental and Non-Governmental Institutions. A Comparison of Eco-Labeling and Forest Certification", Paper presented at *Diffusion of environmental policy innovations*, Berlin, 8-9 December; Tews, Kerstin, et al. (2003), "The Diffusion of New Environmental Policy Instruments", *European Journal of Political Research*, Vol.42, No.4, 569-600.

suit the ideologies and interests of governments (Ministries of/for the Environment, for instance, differ greatly in functions; EIA may be implemented in a way that it poses no threat to ongoing development).⁹ Third, and perhaps most important, the learning discourse contributes to the de-politicisation of these processes and that of environmental policy development more generally. It is perhaps not surprising that this discourse, along with the discourse about new policy instruments and that of "governance" (rather than government) emerged at the same time when neoliberalism (with its emphasis on reducing the role of governments and delegating decisions to the free market) became the dominant ideology.

Some of the literature acknowledges that diffusion and transfer have more to do with political power than with learning. The spread or transfer of environmental principles, policies (including regulations), instruments, and institutions is often tied up with international or even global pressures and expectations, such as those associated with international agreements, notably those on free trade, EU membership, and conditions attached to loans from international finance organisations.¹⁰ For instance, it has been noted that some 80% of the environmental policy of EU member states originates at the EU level.¹¹ The main rationale for the EU to have a common environmental policy is to avoid member countries from having a competitive advantage by undercutting environmental requirements. The ten countries that joined the EU in 2004 had little choice but to accept the *Acquis Communautaire*, even if there remain significant differences in how countries implement EU policies.¹²

Coercion or pressure-driven transfer can be subtle rather than blunt but fundamentally comes down to differences in power between countries and governments.¹³ In the context of economic globalisation, the environmental policies of countries are increasingly circumscribed by such international or global political-economic forces and pressures, with (potentially) positive and negative results. In many countries, the best practices associated with neo-liberal economic ideology, policy, and institutional reforms ("structural adjustment") have been imposed by international financial agencies in situations where governments had or were given

⁹ Bührs, Ton, *Environmental Integration: Our Common Challenge*, 42-54.

¹⁰ Tews, Kerstin (2000), "Hierarchical Imposition as Diffusion Mechanism. EU Enlargement and Environment", Paper presented at *Diffusion of environmental policy innovations*, Berlin, 8-9 December; Dolowitz, David P. and David Marsh (2000), "Learning from Abroad: The Role of Policy Transfer in Contemporary Policy-Making".

¹¹ Scheuer, Stefan (ed.) (No date), *EU Environmental Policy Handbook. A Critical Analysis of EU Environmental Legislation. Making It Accessible to Environmentalists and Decision Makers*. European Environmental Bureau.

¹² Andanova, Liliana B. and Stacy D. VanDeveer (2012), "EU Expansion and the Internationalisation of Environmental Politics in Central and Eastern Europe", in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 287-311; Tews, Kerstin (2000), "Hierarchical Imposition as Diffusion Mechanism. EU Enlargement and Environment".

¹³ Hoberg, George (1991), "Sleeping with an Elephant: The American Influence on Canadian Environmental Regulation", *Journal of Public Policy*, Vol.11, No.1, 107-132.

little choice.¹⁴ In the case of the EU and a range of international environmental agreements, countries (new members or parties) may be pressured into lifting their environmental performance. More generally, countries may be prevented or deterred from adopting more stringent environmental policies because of concerns about economic competitiveness.¹⁵

Overall, there is precious little evidence that policy learning and the diffusion and transfer of ideas and best practices have contributed to a significant improvement of environmental performance across the board. As noted in the preceding chapters, government action on the environment has been, and remains, predominantly reactive, ad hoc, and fragmented (issue-focused). To improve the environmental performance and integration record of governments, many other things than learning are needed.

That these three assumptions underlying much comparative environmental research are problematic is increasingly recognised. As Steinberg and VanDeVeer note, the importance of multi-level linkages is becoming a new focus for research, while more attention should be given to the importance of (differences in) domestic institutions in the design of international agreements.¹⁶ As noted above, the importance of unequal power relations between countries and the role of more or less subtle forms of coercion has also been pointed out by some researchers, especially by those who have undertaken qualitative comparative research.¹⁷ However, to develop a better understanding of the interaction between the domestic and international factors affecting environmental politics and policy (and environmental integration), a more comprehensive approach to the study of these interactions will be needed. More specifically, there is a need to look more closely at the role of (systemic) political-economic factors, and at agency and power, factors that have tended to receive little attention in the field of comparative environmental policy and politics, but that have been the subject of study and debate in other disciplines. Practically, this means that the boundaries between the various areas of the study of politics (including comparative, international and global politics), as well as with the field of political economy, must come down. We need to adopt a transdisciplinary approach (one that transcends rather than crosses disciplines) aimed at advancing a broader and deeper understanding of the actions of states in their domestic and global context.

Nonetheless, as noted above, research in the field of comparative environmental politics and policy has led to the identification of a range of factors that can be used

¹⁴ Klein, Naomi (2007), *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Picador.

¹⁵ Eckersley, Robyn (2004), "The Big Chill: The WTO and Multilateral Environmental Agreements", *Global Environmental Politics*, Vol.4, No.2, 24-50.

¹⁶ Steinberg, Paul F. and Stacy D. VanDeveer, "Bridging Archipelagos: Connecting Comparative Politics and Environmental Politics", 37; Steinberg, Paul F. and Stacy D. VanDeveer (2012), "Comparative Theory and Environmental Practice: Toward Doubly Engaged Social Science", in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 371-404.

¹⁷ Hoberg, George (1991), "Sleeping with an Elephant: The American Influence on Canadian Environmental Regulation"; Andanova, Liliana B. and Stacy D. VanDeveer, "EU Expansion and the Internationalisation of Environmental Politics in Central and Eastern Europe".

as a starting point for exploring national-level obstacles to environmental integration, notably socio-cultural and political-institutional factors. I discuss these briefly in the following two sections. Then, I make a start discussing the importance of structural or systemic political-economic factors, in particular as constraints on environmental integration, a discussion that will be further elaborated upon in later chapters. Finally, I dwell upon the role and importance of agency and power as these are crucial to explaining change in the first three categories of factors and to the question of whether the obstacles to environmental integration can be overcome, a topic that will be addressed in the last three chapters.

Socio-cultural factors

Socio-cultural factors relate to the social and cultural conditions in a society that influence how the environment is perceived and how (relatively) important environmental values, interests or concerns are. The general argument or assumption associated with this category of factors is that the more environmentally aware people in a country are, and the greater the importance they assign to environmental values, the greater also the likelihood that governments will (have to) take the environment seriously and the better their environmental performance will be. While plausible— if people do not care about the environment, why would a government? — the connection between societal beliefs and government policies is not as straightforward as the argument suggests. Among the factors that influence or intervene in this relationship are the kind of environmental views that people hold (their interpretation of what the environment is, and of the place of humans), how diverse or homogeneous societal values, beliefs and views are, the way environmental views relate to other or broader views (such as on the “good life”; worldviews, religions), what the dominant or prevailing values, beliefs and views in society are, as well as factors that relate to why governments do what they do (most of which fall in the other two categories). Given the importance of cognitive frameworks for environmental integration, one of the key questions is to what extent the environmental views in a society, and in particular the most prevailing views, are of a holistic nature, as described in Chapter 1. If most people, including those in government, look at the environment in a fragmented or reductionist way, the cognitive basis for adopting a comprehensive approach to environmental integration simply may not exist.

What values, beliefs and views people in a society hold is strongly related to another set of factors, the social composition of a society and the position of groups in society. Values, beliefs, and views can only exist if they have bearers, and in most modern societies there is a plurality of groups with different values, interests and ideologies that also impact their environmental views. Social classes (from a Marxist perspective) and/or the social stratification of societies (from a sociology perspective), the ethnic composition of a society, and the position and role of women, among others, are all significant factors affecting the distribution of values and views in a society, with implications for the way the environment is treated. Another important factor in this context is the existence of, and degree of support for, the environmental movement (in all its diversity). Arguably, the stronger the environmental movement in a country, the more influence it has or can have on the prevailing views towards the environment.

This last statement points to another set of factors that influence which values, beliefs and ideological views are held in a society. While societal values and beliefs are often seen as relatively enduring, passed on from generation to generation, they are subject to change, and arguably increasingly so. Rather than taking them as given, we must take account of the extraordinary efforts exercised by groups in society to change or even shape people's values, beliefs, and views. The environmental movement is not alone in attempting this; businesses and governments also spend a lot of effort (and money) on influencing people's views in what can be characterised as a veritable battle for the hearts and minds. The media and the PR industry play a significant role in this battle.

It is not difficult to see the international dimensions of these socio-cultural factors. With the global spread of radio, tv, the internet, and mobile phones, people are exposed to a broader and more diverse range of values, beliefs, and views than ever before. What this means and where this leads to are questions that are still very open to interpretation, but that this is a potentially crucial factor in the dynamic of socio-cultural change or evolution is hard to deny. From its very beginnings, the rise of environmental awareness and thinking has been an international phenomenon, influencing or shaping people's views as if borders did not exist. The media have also developed into an international force, despite the efforts of governments to keep some degree of control. Although nationalism is far from dead, one can discern the beginnings of the emergence of a global civil society, with many organisations and people within countries developing links at the international or even global level. Although the full significance of these factors still needs to be revealed, these international and global developments are highly relevant to environmental integration.

Political-institutional factors

Political-institutional factors arguably have attracted the most attention in the field of comparative environmental policy. From the beginning, research in this field was foremost focused on exploring the significance of the differences between political systems and institutions for environmental policy (performance) between countries. Over time, attention has shifted to include the role and influence of socio-cultural factors (including the environmental movement), and political-economic factors (notably businesses), but much research and debate remain focused on the importance of political institutions.

At least to some extent, the kind and degree of environmental integration sought and achieved within a political system appear to vary with governments. The weak and limited nature of integration efforts is often blamed on a lack of political will. Governments may be reluctant to take bold steps either because of their political-ideological make-up (as they represent or are close to particular interest groups and share their ideology), or out of concern for their political (-electoral) survival. Environmental commitment and the political support basis of governments vary between governments and with stages in political cycles. Individuals, notably those

who are in leadership positions, can make a significant difference in this respect.¹⁸ Having said that, many of the obstacles facing environmental integration are also structural and require institutional change that is very difficult to achieve for governments of any persuasion. Some of these obstacles have to do with the nature of the political system and dominant policy styles; others may be of a similar or common nature, for instance, related to the more general limitations of liberal democracies.

As argued above, efforts aimed at explaining the environmental integration efforts of states need to be placed in the particular (historical, political-institutional, socio-cultural, political-economic, geographic, and other) context of a country. The comparative (environmental) policy literature has identified a large number of political-institutional factors that (potentially) impinge on environmental performance. Here, I will only briefly mention some of these factors.

The (pre-) existing political-institutional context refers to the structure of organisations and formal and non-formal rules that collectively constitute a political system. It comprises the formal rules (often constitutions) which specify the organisations and positions of government, such as Parliament or Congress, the President, Prime Minister and cabinets, the judiciary, and the roles, responsibilities and powers of these bodies, and rules governing their interrelationships. It also includes the rules applying to sub-national bodies of government (such as states, provinces, and local councils), and possibly many other agencies, for instance, ombudsmen, Royal Commissions, and other ad hoc advisory bodies. It also encompasses what is often referred to as the administrative arm of the government, the public service or bureaucracy, and the (administrative) laws and rules by which it operates. Formally, these organisations and rules provide the framework through which a country's collective decisions and policies are made, but also debated, challenged, and changed.

Closely intertwined with a country's formal political-institutional arrangements is its political culture. Strictly speaking, political culture can be considered to be an inherent element of a country's political-institutional framework, as it consists of mostly non-formal and unwritten rules that underlie the formal political institutions and that may even be their basis or source. On the other hand, formal political institutions themselves may affect or cultivate a political culture, so the relationship between formal political institutions and political culture may be akin to that between the proverbial chicken and egg.¹⁹ However, the relationship between the two is not necessarily causal, for three reasons. First, political culture is broader and vaguer than the specific (formal and informal) rules and may take form in a (possibly wide) range of more specific organisations and rules: countries with a cooperative (or adversarial) political culture may have significantly different political structures (organisations and rules). Second, formal political institutions may and do (at times) change without

¹⁸ One can only speculate what the United States' government's environmental performance would have been had Al Gore rather than George Bush Jr. become President of the United States, or Hillary Clinton instead of Donald Trump, but it seems plausible to think that the difference would have been significant.

¹⁹ Lijphart, Arend (2012), *Patterns of Democracy*. New Haven, United States: Yale University Press, 301-302.

notable changes in political culture, but for other (political, economic, social, or even environmental) reasons. Third, political culture may evolve as a result of, for instance, social and/or economic changes (education; growing affluence; influences from outside a country) and political factors (political dissatisfaction; growing demand for political rights). While, in the past, it was often assumed that political cultures were of an enduring nature, in recent decades, in many countries, even those that traditionally were regarded to be stable political systems, they have entered a state of flux. This has manifested itself, for instance, in a decline of support for democratic values in liberal democracies and a loss of trust in political institutions.

Broadly speaking, the importance of the political-institutional context (including political culture) to environmental integration is twofold. First, it lies in the extent to which it allows or constrains the creation of environmental institutions (rules and organisations) that are well-equipped for the task. This relates to their formal status, mandates, roles, and responsibilities, but also to their (relative) power vis-à-vis non-environmental rules and organisations. Second, it lies in the extent to which political institutions (including political culture) facilitate or obstruct the development, adoption, and implementation of long-term, comprehensive environmental policy (or green planning), at all levels of government, which was identified in Chapter 1 as one of the six key challenges of environmental integration. A political system's capacity for green planning arguably is one of the most important touchstones for its ability to effectively address the environmental challenge.²⁰ It has been argued that a country's political culture or dominant policy style (often presented in dichotomous terms as adversarial or cooperative) is a significant factor in the facilitation or obstruction of the adoption of such an approach.²¹ However, retaining that capacity even in countries which are generally regarded as having a cooperative political system, has been problematic.

Arguably, the large variety (and often unique nature) of the political institutions between countries make it very difficult to draw general conclusions about how they affect environmental integration efforts. Therefore, to discuss and assess the importance of political institutions as obstacles or conducive to environmental integration it seems desirable or even necessary to dig deeper and focus on factors that are at play in all states, despite the enormous political-institutional variety between them. Such factors can be found, I argue, in what is generally referred to in the political studies literature as the role of the state. An analysis of the role and functions of the state can provide insight into the most important political-institutional factors affecting environmental integration. While the political institutions of countries

²⁰ Jänicke, Martin, "The Political System's Capacity for Environmental Policy".

²¹ Crepaz, Markus M.L. (1995), "Explaining National Variations of Air Pollution Levels: Political Institutions and Their Impact on Environmental Policy-Making"; Jahn, Detlef (1998), "Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries"; Jahn, Detlef (1999), "The Mobilisation of Ecological World Views in a Post-Corporatist Order", in M. Wissenburg, et al. (eds.), *European Discourses on Environmental Policy*, 129-155; Scruggs, Lyle, *Sustaining Abundance: Environmental Performance in Western Democracies*; Lijphart, Arend and Markus M. L. Crepaz (1991), "Corporatism and Consensus Democracy in Eighteen Countries: Conceptual and Empirical Linkages".

are enormously diverse, it can be argued that all states (must) fulfil a range of core functions to maintain their legitimacy and viability. It is only relatively recently that environmental protection has been added to the functions of states, but in many countries, it is not (yet) regarded as a core function, in part because this new function can (be seen to) clash with the longstanding and well-entrenched core functions. Therefore, a discussion of these core functions can contribute to an understanding of the political-institutional obstacles to environmental integration at a more fundamental level. This task will be undertaken in Chapter 5.

However, there is one other political-institutional question that deserves to be singled out as potentially (highly) important for environmental integration: the issue of democracy versus authoritarian regimes. Arguably, both types of regimes must fulfil the core functions of the state, although people may disagree about their relative effectiveness in doing so. This disagreement also extends to the ability of both types of regimes to deal more or less effectively with the state's relatively new environmental protection function. On the one hand, some claim that (some types of) democratic regimes are better able to deal with the environmental challenge than less democratic and authoritarian regimes.²² Others point out the limitations and shortcomings of liberal democracies in dealing with environmental issues but believe that democracies can and should be enhanced to improve their environmental performance.²³ By contrast, others argue that liberal democracies cannot cope successfully with the environmental challenge and that authoritarian regimes are better equipped and required to do so.²⁴ This issue will also be revisited in Chapter 5.

The debate about the relative merits of democratic and authoritarian regimes occurs against the background of an even broader discussion about the role and relevance of states in the context of globalisation. Some argue that, with globalisation and the growing interdependence between countries, the institution of the state itself, whether democratic or authoritarian, has become outdated and dysfunctional. States may have played a crucial role in advancing modernisation and the mobilisation and integration of diverse populations in the pursuit of collective (socio-economic) goals, but as states have become more interdependent and the issues they face, including environmental destruction, are of a global nature, it has been argued that states have become dysfunctional and need to be superseded by ceding power and authority to the supra- and/or sub-national levels of governance. In Chapters 5, 12 and 13, I will

²² Jänicke, Martin (1996), "Democracy as a Condition for Environmental Policy Success: The Importance of Non-Institutional Factors", in W. M. Lafferty and J. Meadowcroft (eds.), *Democracy and the Environment - Problems and Prospects*, 71-85; Li, Quan and Rafael Reuveny (2006), "Democracy and Environmental Degradation", *International Studies Quarterly*, Vol.50, No.4, 935-956.

²³ Dryzek, John S. (1992), "Ecology and Discursive Democracy: Beyond Liberal Capitalism and the Administrative State", *Capitalism, nature, socialism*, Vol.3, No.20, 18-42; Eckersley, Robyn (1996), "Greening Liberal Democracy. The Rights Discourse Revisited", in B. Doherty and M. de Geus (eds.), *Democracy and Green Political Thought: Sustainability, Rights, and Citizenship*, 212-236.

²⁴ Shearman, David J. C. and Joseph Wayne Smith (2007), *The Climate Change Challenge and the Failure of Democracy*. Westport, Conn.: Praeger; Ophuls, William (2011, e-book ed.), *Plato's Revenge: Politics in the Age of Ecology*. Cambridge, Mass.: MIT Press.

engage with this discussion arguing that, in my view, states remain crucial (collective) actors in the pursuit of environmental integration as well as meeting other collective needs. While strengthening or creating new global institutions to deal (more) effectively with the environmental challenge is highly desirable or even necessary, global (geo-) political-economic reality makes this unlikely in the short or medium term. In the meantime, humanity cannot afford to wait for this to happen. Societies have the more feasible option of fundamentally transforming and greening their own states to enhance their chances of coping with the intensifying environmental crisis and the possibility or even likelihood of a global political-economic meltdown. At the same time, they can and should cooperate with like-minded states to create, through a bottom-up process, more appropriate and effective international institutions aimed at advancing global sustainability.

Political-economic factors

Political-economic factors relate to the linkages between politics and economics. Although economics has developed into a separate discipline and sphere of decision-making, economic institutions, policies, and decisions are shaped and influenced by political factors, while shaping and influencing politics. The development of economics as a separate (expert-led) discipline and sphere of decision-making was a political project driven by Britain's expanding industry and its need for bigger markets free from government restrictions. To understand political and economic developments, we need to look at the interaction between political and economic factors, both in their day-to-day manifestations (such as resource exploitation, investment decisions, production processes, and levels of unemployment, among many other) and at a systemic level. For instance, economic institutions like the free market are created and maintained by political institutions, including governments and a legal system, while the role of states is circumscribed by systemic (capitalist) economic requirements or imperatives such as economic growth.

Political-economic factors arguably are the most fundamental of all factors when trying to explain the obstacles to more meaningful and effective environmental performance and integration. Yet, compared with the political-institutional and socio-cultural factors mentioned above, they have received relatively little attention within the field of comparative environmental policy. One of the possible reasons for this is ideological: the political-economy perspective is commonly associated with Marxist thinking, and many academics, especially in the United States, shun this school of thought and even appear to be allergic to the "C-word" (capitalism). Ironically, however, with the rise of neoliberalism, governments have provided ample support for the crude Marxist argument that governments are just committees serving capitalist interests. Consequently, in recent years, the importance of political-economic factors is receiving greater attention and even Marxism is undergoing something of a revival.²⁵

²⁵ Eagleton, Terry (2011), *Why Marx Was Right*. New Haven: Yale University Press; Ghosh, Jayati (2017), 150 Years of 'Das Kapital': How Relevant Is Marx Today?, Aljazeera, <https://www.aljazeera.com/opinions/2017/8/22/150-years-of-das-kapital-how-relevant-is-marx-today/>

Arguably, the main theme or question on which much of the debate has focused is whether capitalism is fundamentally (in)compatible with (long-term) environmental protection and environmental integration. Until recently, the prevailing view among those who addressed this question, including the protagonists of ecological modernisation, was that capitalism can be greened and that the economic growth imperative can be met by "green economic growth". However, there have been long-standing critics of this view, and a growing number of analysts have become sceptical about such ideas, not in the least because of the weak evidence that can be generated in support of such a view for the last four or five decades. The answer to this question depends in large measure on one's definition of capitalism and whether a significantly changed and/or heavily regulated capitalist system still can or should be called capitalist. Relevant in this context is also the question of whether particular varieties of capitalism are less incompatible with environmental protection. In Chapter 7, I will give my take on capitalism, discuss its main features, and argue that it is fundamentally incompatible with meaningful, long-term environmental integration.

The global dimension of this issue, and political-economic factors more generally, is widely recognised. We need to understand a country's environmental performance against the background of its position in the global political-economic system, a point of view that has long been emphasised by the advocates of a world system's approach.²⁶ That capitalism is a global or globalised system is hardly contested, notably linked to financial capital and Transnational Corporations (TNCs). However, there is still considerable debate, related to a lack of clarity and insufficient research, about the extent to which global capitalism is a truly unified system ruled by a transnational class, or a system dominated by the United States ("empire"), or a system of multiple but interlocked and interdependent centres. As noted above, the scope for a state to pursue its own course of action in domestic and foreign economic, social, and environmental policies, and its own approach to environmental integration, is conditioned by its (relative) position in the political-economic order.

Although, after the collapse of the Soviet Union in 1989, capitalist liberal democracy has been widely regarded as the only (or best) option when it comes to political-economic regimes ("There is no alternative"), we should not discard the possibility that the hegemonic status of this regime can (or will) come to an end. That other political-economic regimes are, in principle, possible has been shown by the fact that, until the 1980s, a significant number of countries had adopted authoritarian-socialist regimes. Although most of these have come to an end, it is debatable whether socialism as an alternative economic system cannot be revived combined with a democratic form of government (in democratic-socialist regimes). Some would argue

(Accessed: 28 October 2020); BBC (2008), Marx Popular Amid Credit Crunch, <http://news.bbc.co.uk/2/hi/7679758.stm> (Accessed: 28 October 2020).

²⁶ Hornborg, Alf (2007), "Conceptualizing Socioecological Systems", in A. Hornborg and C. L. Crumley (eds.), *The World System and the Earth System: Global Socioenvironmental Change and Sustainability since the Neolithic*, 1-11; Wallerstein, Immanuel (1974), *The Modern World-System*. New York: Academic Books; Wallerstein, I. (1996), "National Development and the World System at the End of the Cold War", in A. Inkeles and M. Sasaki (eds.), *Comparing Nations and Cultures. Readings in a Cross-Disciplinary Perspective*, 484-497.

that the unsustainability and crisis-prone nature of capitalism are likely to lead to its demise. At the same time, as noted above, liberal democracy has come under critique and threat because of its shortcomings and failings, not in the least regarding the environmental challenge. So, raising the question "What will replace capitalist liberal democracy?" is not as outlandish as it may seem. Yet, whether or to what extent the various candidate political-economic regimes will be able to deal with the environmental challenge (more) effectively remains an open question that will be addressed in Chapters 6 to 9.

This brief overview of socio-cultural, political-institutional, and political-economic factors, which will be elaborated upon in the following chapters, may create the impression that the environmental responses of countries and governments have been, and most likely will continue to be, determined by systemic factors that are beyond the control of governments, let alone groups and individuals. While the expression "beyond control" in this context is appropriate, the term "determined" is not. Systems do not determine the course of human history. The risk associated with an exclusive focus on systemic factors is that it overlooks the important role of agency and power.

Agency and power

That human behaviour and action are conditioned, but not completely determined by structures (or systems and institutions), is a commonly held view in the social sciences.²⁷ Similarly, there is no shortage of literature and discussion on the concept of power, and I will not even try to summarise the debate on this concept. Here, I present my take on these strongly interrelated concepts. In the comparative environmental policy literature, and in particular that on environmental performance, the role of agency and power have been given relatively meagre attention. Nonetheless, both are crucially important factors if we want to understand what governments are doing (or not doing), including concerning environmental integration.

While much of what people do is influenced by rules, roles, norms, and expectations, often upheld and enforced by groups and organisations (not in the least organisations where people work), most social scientists believe that people still have a choice in what they are doing, and that human behaviour and action are not predetermined. People continuously make choices, individually and in groups, within the (often considerable) scope for interpreting rules and norms, fulfilling roles and meeting expectations in different ways. Agency is defined here as the *ability of people to make choices*. All people have agency, although people differ in the extent to which they choose to exert that ability and in what matters and situations. In other words, people choose to choose—strictly speaking, not choosing is also a choice. While

²⁷ Callinicos, Alex (2009), *Making History: Agency, Structure, and Change in Social Theory*. Chicago, Ill.: Haymarket Books; Sewell, William H., Jr. (1992), "A Theory of Structure: Duality, Agency, and Transformation", *American Journal of Sociology*, Vol.98, No.1, 1-29; Giddens, Anthony (1979), *Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis*. London: Macmillan.

people may choose to change their choices frequently in some areas, they stick to other choices for a long(er) time.

Agency can be exerted individually and/or collectively. In some situations, collective agency may be a matter of choice of a few individuals (such as between friends, partners, or in a one-to-one commercial transaction). In other situations, however, people are expected or required to make choices in larger groups, almost inevitably so within organisations, including environmental groups, work situations, and governments. This does not mean that all people who are members of such organisations participate in making choices; in fact, the number of members involved in decisions may be very small. Hence, collective agency should not be confused with democratic decision-making, let alone of the fully participatory kind, or with decisions taken single-handedly by dictators. If a dictator or a business executive makes a decision single-handedly, this is not an exercise of collective but of individual agency. Collective agency implies the involvement of multiple people even if that does not imply that those who are involved do so on an equal basis, as I will discuss below.

Apart from the view (or fact) that human agency is the manifestation of the philosophical idea of human freedom or free will, it is also a crucial factor in explaining institutional or structural change. As institutions (including organisations) usually allow some scope for interpretation and choice, the individual and collective choices made under the umbrella of an institution can bring about change, even though such change may be slow, incremental, and cumulative rather than sudden and radical. Hence, the systems and institutions in which people live and work are dynamic (even if mildly so) rather than completely static.²⁸ But at times, people, organisations, and governments make big decisions, for instance, about changing career, having children, making major investments, or radically changing policies, laws, and institutions. While this does not imply that people have control over developments, the fact that they can and do make such choices signifies that they can, or at least try to, give direction to their lives, to economic development, and even to societies.

Power is a necessary complement to agency. Without power, choices have no effect. Although the concept of power can and has been defined in many ways, and it is useful to distinguish between different kinds of power, here I define it as the *ability to give consequence to one's choices*. At the level of an individual, ability may relate to personal qualities (physical abilities, intellectual abilities, talents, communicative abilities, personality, charisma and others), but also the ability to access and use material resources (such as tools, computers, cars, money and property in general), and the ability to mobilise the support of others (such as friends, family, social connections, networks, colleagues, experts), including through positions of leadership and/or access to other people who hold important positions. The greater the ability of an individual to use and call upon a range of resources, the more likely it is that he or she will be able to give consequence to their choice, whatever the choice is, and the more power they have.

This definition of power has the advantage of combining elements that sometimes have led to confusion linked to different notions of power, such as the

²⁸ Sewell, William H., Jr. (1992), "A Theory of Structure: Duality, Agency, and Transformation".

“power to” and “power over”, power as resources, power as a relational concept, and structural power.²⁹ “Giving consequence” clearly implies the “power to” do or undertake things that may result in achieving certain objectives, depending on how much and what kind of power a person has, but it can also mean having “power over” things and people. Giving consequence to one’s choices may imply affecting other people, or using people, for instance, when someone in a leadership position instructs others to do certain things. But the definition also implies that people can exert power on their own, such as when using a tool to make or repair something. The definition does not simply equate power with resources as, to give consequence to one’s choices, one must also have the ability to use, activate or mobilise resources. Having access to resources does not necessarily imply the ability to use or mobilise them. But obviously, the greater the range and pool of resources that a person has access to, the larger the basis that person has for exerting power. Perhaps most important, the definition also comprises the notion of power as a *relational* phenomenon (that in many cases can be observed by studying behaviour) as well as that of *structural power* (inherent to systems by which power resources are allocated and distributed). Structural power is inherent to, for instance, political systems that allocate power to formal positions, and to capitalism, which is based on rules by which ownership of the means of production is defined, among other.

Here, I distinguish between six forms or categories of power: physical, cognitive, personal, social, economic, and institutional power. As noted above, strictly speaking, these are sources of power that can be used or mobilised by individuals or groups to give consequence to their choices. While they do not by themselves constitute power, they are essential components of power as power does not and cannot exist without resources.

Physical power, as the term suggests, resides in physical or material entities or capacities like physical (bodily) strength, control over tools that can be used to move or manipulate objects or people (like automotive power), and weapons, armies, and police forces. The exercise of physical power, which is commonly referred to as coercion,³⁰ might be regarded as the crudest form of power. Getting other people to do or not to do what one wants (chooses) by physical force is blunt and often generates resentment, opposition, hatred, and vengeance. Therefore, coercion is probably the least effective form of power as it fails to get other people to accept and internalise what one wants them to do or not to do. This form of power is likely to lose much of its potency as soon as it stops being exercised. However, the *threat* of using physical power, especially after the willingness to use it has been demonstrated, may

²⁹ Haugaard, Mark (2012), “Rethinking the Four Dimensions of Power: Domination and Empowerment”, *Journal of Political Power*, Vol.5, No.1, 33-54; Lukes, Steven (2007), “Power”, *Contexts*, Vol.6, 3, Summer, 59-61; Dowding, Keith (2012), “Why Should We Care About the Definition of Power?”, *Journal of Political Power*, Vol.5, No.1, 119-135; Partzsch, Lena (2016), “‘Power with’ and ‘Power to’ in Environmental Politics and the Transition to Sustainability”, *Environmental Politics*, 1-19.

³⁰ This applies evidently to its use towards people. When using tools, we do not normally refer to their use as forcing or coercing the objects on which they are used (like wood or metal), but the idea is the same: blunt or subtle force is used to put the object into the shape or place the user wants it.

be more effective over a longer period. But using this threat, and instilling a fear of its implementation, is not a form of physical power but cognitive power.

Cognitive power, as the term suggests, is based on knowledge as a source. Knowledge, understanding, and information enable a person or group to figure out what is needed to give effect to one's choice(s), and what works or is likely to work. This can apply to the physical as well as the human or social world. It can be based on experience, intelligence (in its different meanings), science and research, but also on intuition, an understanding of what makes people tick, of people's emotions, values, needs, (social) relationships, bonds and networks, and any other aspects of the social, cultural, economic, and political world. Cognitive power can enable the holder of that power to get under the skin or penetrate the mind of other people, making it potentially one of the most effective forms of power. Knowledge and understanding can be improved, increasing the potential effectiveness of this resource. But as knowledge will always be incomplete, tentative, and uncertain, there is scope for the unexpected to occur, for errors to be made, and for counterproductive consequences to present themselves. Hence, like all sources of power, it enables the holder to give consequence to his/her choice(s), but it does not necessarily imply *control* or a guarantee that objectives will be achieved. Also, knowledge is just a source of power and is not exercised by itself. It needs to be used or applied by individuals or groups. Whether and how knowledge is applied depends on, among other, personal resources.

Personal power, the power of personal resources, is used here, for lack of a better term, to describe the power of an individual related to their personality, charisma, talents, skills (including social, leadership, and communication skills), and any other personal characteristics or qualities that an individual can use to give consequence to his or her choices. Some of these qualities may be innate or genetic, but many talents and skills can or need to be developed before they can be exercised (effectively). In this respect, big differences exist or emerge between people that have significant implications for the (kind of) power they can exercise, such as in the physical realm (like sports), arts (talents), or politics. While Max Weber identified charisma as one of the main forms of political power, other personal qualities can be equally important in this respect, such as the ability to persuade others, cunning, and talents for organisation, scheming or plotting. Again, these sources of power need to be exercised to have any effect, and to a large extent, their effectiveness depends on the availability of other sources of power. For instance, the power to persuade or plot (effectively) can be enhanced significantly by knowledge (cognitive power), while a very knowledgeable scientist who lacks communication skills may fail to persuade others.

Social power is the ability to mobilise, and "use" other people (and their resources) based on social ties and/or (perceived) common interests or characteristics. Individuals may call on the support of family members ("blood ties") and their partners, something which is still prevalent even in modern societies, as reflected in the phenomenon of nepotism at the highest levels (like ex-US President Trump's use of family ties). Friends, colleagues, or acquaintances may exchange favours based on mutual expectations of reciprocity (*quid pro quo*). On a larger scale, leaders of groups may call on the support of people who are perceived to have a common basis or

interest in their ethnicity, identity, gender, profession or trade, employment positions, class, social status, nationality, or any other common characteristics such as a love for dogs, guns, or nature. This form of power is the “bread and butter” of interest groups. In some political science schools of thought (pluralism and neo-pluralism, but also elitism) the exercise of social power constitutes the core of what politics is about. But, as pluralists point out, an individual may mobilise, or be mobilised, by different groups for different purposes. Again, social ties or group membership do not in themselves constitute power but are a potential source of power that can be mobilised or activated by individuals or groups to (try to) give consequence to their choice(s).

Economic power is based on ownership and/or control over resources. This includes ownership and/or control over natural/physical resources (including land, water, houses and other buildings, tools and means of production). Money constitutes the right or ability to lay claim on resources and hence, even if it is held in electronic form (like bank accounts), is also a source of economic power. Economic power is crucial to human survival as people need access to material goods (food, water, clothes, housing) to meet their basic needs. As most people in modern capitalist societies do not own or control the resources and means (of production) needed for their survival, they depend on selling their labour power, knowledge, and skills to earn money with which to buy the necessities of life. Hence, wealth provides not only control over material resources but, indirectly, also over people who are dependent on those who own and/or control the resources and means of production on which their survival depends. Accumulated economic power also enables the holder(s) to buy other forms of power, including the labour and services of those with physical, cognitive, and personal power, which may be of great help in mobilising social power and influencing and accessing institutional power. Hence, the system through which economic power is allocated and distributed produces a *power structure* that lies at the heart of politics.

Institutional power resides in positions within formal and non-formal organisations that carry with them the right or capacity to make or participate in decisions that set or change rules, and that affect other people and/or the mobilisation, allocation, and use of resources. Thus, institutional power often opens the door to other sources of power and can involve decisions that may have an enormous impact on many people. Political institutions, notably those associated with the state, have traditionally been the focus of the study of this form of power, although from the 1950s attention shifted towards behavioural analyses based on a relational interpretation of power. However, in the 1980s, interest in institutional power, including that associated with the state, has experienced a revival, and its importance is now widely recognised especially in the political-economic sphere. One should be wary, though, of ascribing institutional power to organisations or rules on their own. Again, institutional power should be seen as a source of power that depends on individuals or groups to be exercised or activated, possibly in quite different ways by officeholders.

As the discussion above has already indicated, these sources and forms of power are linked. They flow over into each other and are seldom exercised in isolation. Most if not all people will have some degree of physical, cognitive, and personal power.

Personal and cognitive power may be used in combination to mobilise social and/or economic power, which in turn may help to gain institutional power (for instance, by being elected to a formal position of power). Hence, each form of power can provide a basis for gaining or building other sources of power, which explains the tendency of power resources to accumulate – having significant power leads to acquiring even more power. Although, in liberal democracies, formal institutional powers may be separated, this does not necessarily create barriers against the combined exercise of various sources of power. The accumulation and concentration of economic power, in particular, poses a significant threat to democracies.

The observations above also make clear, I hope, the importance of the link between agency and power. Agency needs power, and power is exercised through agency (choices made by people). To give consequence to their choices (agency), people must activate and use sources of power. Although the allocation and distribution of some sources of power (notably in the economic and political realm) may have been institutionalised and produce a power structure within which individuals and groups operate and make choices and decisions, this does not imply that in that context agency is of no significance. How power resources are being used is to a large extent influenced by the choices made by individuals and groups, also within institutions. The (economic and political) systems by which power is allocated and distributed are human-made and, while not easily, can potentially be changed if advocates of change can mobilise sufficient power for such a cause.

These interpretations of agency and power, and the strong link between them, also offer scope for better recognising the role and importance of individuals in politics and history. While accounts of politics and history based on the doings (and un-doing) of “great men and women” are highly simplistic (reductionist might be a better term), it would be foolish to dismiss the role and importance of individuals, their agency, and their ability to give consequence to their choices, sometimes with implications for millions of people. World War II, arguably, would not have happened without Hitler, notwithstanding the structural (socio-cultural, political-institutional, and political-economic) factors that perhaps conditioned Germany for war. As we cannot change history, but only revisit it (write revisionist accounts), this is nothing but speculation. But it is hard to underestimate, let alone deny, the importance of the role and actions of individuals in the world as it unfolds. It was ex-President Donald Trump, not the Office of the President, who chose to use the powers of the office to weaken environmental protection rules, fuel racial tension, downplay the harm done by COVID-19, and destabilise the international situation. Those who think that individuals make no difference need to think again.

Finally, what actually happens (especially in terms of outcomes) is very much influenced by unforeseeable and unpredictable events, even when (collective) choices and course of actions are well-informed and deliberate. But while the unexpected can never be avoided and fully controlled, people and societies can at least to some extent prepare for disasters and foreseeable risks. Also, what may look unlikely or even impossible at one time, may become possible at a later time. Therefore, while it may seem that the changes required for taking a more meaningful and effective approach to environmental integration presently are very slim, it pays to consider and prepare

for contingencies that may arise and that could be exploited to bring about (fundamental) changes in political institutions, political-economic systems, and the structures of power. I will elaborate on the importance of strategic action in Chapter 13.

Conclusion

The aim of this chapter was to explore explanations for the failure of governments to take a comprehensive and consistent approach to environmental integration.

As a first step, it looked at what the field of comparative environmental politics and policy offers in this respect, as the main rationale for research in that area has been to explain differences and commonalities in the environmental policies of countries, and more recently, in their environmental performance. It was argued that much of the research in this area has been based on three problematic assumptions, notably the autonomy of states, the idea that it is desirable and possible to arrive at generalisable findings, and the view that the environmental performance of states can be improved by a process of learning. Instead, a case was made for qualitative, in-depth studies of the environmental efforts of specific countries, based on their partially unique features while considering their interactions with other countries and their position in the global system. Such an approach will not only generate more realistic knowledge about the factors influencing the environmental efforts and records of states, but also provide a better basis for thinking about how their environmental performance could be improved.

Nonetheless, the findings generated by comparative environmental research can provide a useful basis for identifying a range of factors, notably socio-cultural and political-institutional, that can help explain differences between states in their approaches to environmental integration. However, I have argued, to develop a broader and deeper understanding of the obstacles to environmental integration, and of possible opportunities for overcoming those, we also need to look at two other categories of factors: political-economic factors, and the role of agency and power. Political-economic factors relate to the links and interactions between politics and economics, in particular at the systemic or structural level. On the one hand, economic systems and institutions may circumscribe and constrain the scope for environmental integration within political institutions. On the other hand, economic systems and institutions depend on political institutions, in particular on states, for their functioning.

However, explanations based solely on socio-cultural, political-institutional, and political-economic factors may run the risk of determinism and of accounting inadequately for major change. While these factors may be or seem relatively stable and enduring, they can and do change over time. Although change may be triggered by unforeseen or unforeseeable events and developments (such as accidents, a pandemic, or an economic crisis) that appear to occur beyond the control of any group in society or the state, the role of agency and power deserves much greater recognition than they are often granted. This applies to institutional and systemic changes as well as to the kinds of events and developments mentioned. While acknowledging the role of unforeseeable events and the limits of any group to control

developments and outcomes, agency and power, especially when exercised by the most powerful groups in a society, and the world at large, play a significant role in shaping (and changing) policies and institutions and in steering systems and societies in particular directions. The chapter discussed the importance of agency and power, emphasising the close connections between both concepts, and identified six forms of power. It also pointed out the tendency of power resources to accumulate, enabling the most powerful actors to significantly shape policies, institutions, and systems and to influence or steer developments within and across countries. Rather than looking at such developments as autonomous and uncontrollable, it is essential to reveal and acknowledge the crucial role of agency and power and to mobilise societies to redistribute and contain the concentration of power to enable them to gain democratic control over collective decisions affecting their future. How this may be done is discussed in Chapters 13 and 14.

Chapter 4 – Socio-Cultural Factors and the Environment

Introduction

This chapter discusses a range of socio-cultural factors that are (likely to be) important to explanations of the environmental integration efforts of countries and governments. Here, socio-cultural factors are broadly defined as the (main) belief systems or worldviews that exist in a country or society and their social bases. I use belief systems as a generic concept comprising religions, worldviews, ideologies or other more or less coherent sets of ideas and values regarding society or the world. Belief systems have two components: empirical and normative. The empirical component refers to the interpretation of how the world (or a society or the cosmos) *is* (or works), while the normative element offers views on how a society, or the world *should* be. Some belief systems (like religions) are very encompassing, offering broad views and prescriptions aimed at guiding people through life, while others (like veganism or neoliberalism) may be more confined in their explanations, claims and prescriptions. In the context of this chapter, what matters is how widely supported or dominant belief systems interpret the environment and recognise the need for environmental integration as discussed in Chapter 1. In this respect, belief systems can be environmentally agnostic, compatible, conducive, or obstructive.

In modern societies, we can find a diversity of belief systems supported by different groups, often associated with shared social characteristics. However, belief systems can be more or less coherent in what they preach or teach and leave space for different or even conflicting interpretations apart from a common core. People may also adhere to different belief systems (for instance, religious and secular) that may not be fully or even well-aligned, also concerning their treatment of the environment. However, this does not imply that in such so-called pluralist societies there is a muddle of belief systems and/or that all belief systems are equally influential. In any society, some belief systems will tend to enjoy (much) more support among the population at large, and from governments to the point that a particular set of beliefs can be regarded as dominant or hegemonic. It is these hegemonic belief systems and their social support bases that are of special interest when trying to explain socio-cultural obstacles to environmental integration.

The chapter briefly discusses a range of what may be regarded as prevalent belief systems and assess the extent to which they can be seen as environmentally agnostic, compatible, conducive, or obstructive. Belief systems are not static, and neither are their social support bases. With the rise of environmental concerns and the emergence of what can be called environmental worldviews, dominant belief systems have, to a greater or lesser extent, taken onboard environmental considerations. Whether this “greening” has been meaningful, inadequate, or merely symbolic (amounting to “greenwashing”) is subject to debate. I am interested foremost in how environmental problems have been interpreted in these dominant systems, in particular the extent to which these problems are seen as a manifestation of a broader and deeper societal challenge that may require fundamental change and/or a comprehensive and integrated approach along the lines prescribed in Chapter 1.

The chapter also briefly expands on the social support bases of these belief systems and the kind(s) of power that they draw upon. As discussed in Chapter 3, such factors would need to be explored in the context of a particular country to assess their relative importance, a task that will not be undertaken here. By necessity, the discussion here will be rather broad, exploring whether the rise in support for environmental views, values and the environmental movement heralds a shift to a new paradigm and/or has strengthened the demand for addressing the fundamental causes or sources of the environmental challenge, notably by adopting the kind of comprehensive approach advocated in Chapter 1. Some environmental advocates argue that to save the world from environmental collapse, the adoption of a deeper transformation of belief systems and cultures is required. Others take a more pragmatic view. How a diverse environmental movement can and should contribute to the establishment of a dominant green worldview that recognises the fundamental nature of the environmental challenge remains one of the most difficult and contentious questions.

First, given their ongoing and widespread support bases, I briefly discuss the relevance of some of the main religions as a negative or positive factor for environmental integration. Second, I elaborate on a few dominant secular belief systems and explore the extent to which these have provided obstacles to environmental integration and/or show signs of adaptation to growing environmental demands. Third, the question of to what extent the rise of environmentalism and the environmental movement have contributed to more integrative thinking and approaches to environmental problems will be touched upon. Fourth, I address the question of whether there are signs that the dominant value systems in societies, parallel to or as a result of the rise of environmental issues and the environmental movement, have changed to the point that environmental values have become core values, indicating that a shift towards a new dominant (environmental) worldview or paradigm is underway. The final section discusses some of the drivers of change in worldviews, and the role of agency and power in the battle for the hearts and minds of people, a battle which is central to a transition towards a new paradigm.

Religion and the environment

Although people who have grown up in countries that have been subject to secularisation may be inclined to think that religion has lost its status as a dominant belief system, demographic data reveal that, on a global scale, religions are still very much alive. A comprehensive demographic study by the Pew Research Center found that, in 2015, 84% of the world's population adhere to a religion, of whom 31% self-identify as Christians, 24% as Muslims, 15% as Hindus, and 7% as Buddhists. At the same time, 16% reported having no religious affiliation, most of whom (61%) live in China.¹

Nearly three-quarters of people live in countries in which their religious group makes up a majority of the population, which indicates that in many countries one particular religion can justifiably be labelled the dominant religion or belief system

¹ Pew Research Center (2017), *The Changing Global Religious Landscape* Washington D.C.: Pew Center Research, 8, 10, 18, 22.

among the population. Even in European countries where secularisation has led to significant proportions of unaffiliated people (such as 42% of the population of the Netherlands, 28% in France, 27% in Sweden, and close to 25% in Germany), majorities still identify themselves as Christian. In the United States, more than 78% of people self-identify as Christian, while only 16% are unaffiliated. Overall, it appears, the world is still very much a religious place, except for China, Japan, and a few other countries.²

As modern environmentalism and the demand for greater environmental protection first emerged in Western countries, and perhaps most prominently so in the United States during the 1960s, it is worth exploring to what extent Christianity, the dominant religion in these countries, has been conducive to the rise of environmental awareness. At the very least, one might reasonably argue, the Christian religion has not prevented this rise from occurring, and possibly it has been a positive force in its development.

However, the extent to which the Christian religion has been compatible with, let alone conducive to, the rise of environmental awareness and environmental integration has been severely questioned. Rather, it has been argued that Christian teachings have predominantly encouraged a human-centred, instrumentalist and even exploitative view of the environment. For instance, Lyn White, in a seminal article on Christianity's responsibility for the environmental crisis,³ argued that the Christian religion, predicated on the primacy of humans in the natural order of God's creation, has been responsible for the emergence of the view that nature exists solely for the benefit of humankind. Christianity teaches that God created the world "explicitly for man's benefit and rule: no item in the physical creation had any purpose save to serve man's purposes", making it "the most anthropocentric religion the world has seen".⁴ White also argued that Christianity's acceptance of the flawed idea of perpetual progress based on science and technology became so entrenched in Western culture that even non-Christians internalised it. Although White noted that a different interpretation of the Christian faith was possible, illustrated notably by Saint Francis ("the greatest radical in Christian history since Christ") who showed humility and respect towards other natural creatures, this alternative perspective did not get much traction and orthodox arrogance towards nature continued.⁵

White's view has been fiercely contested, among other on the ground that his supporting arguments, reflecting negative views on technology, agriculture, democracy and anthropocentrism, appear unjustified in the light of evidence that more positive practices are *possible*.⁶ However, whether or not one agrees with White's thesis that Christianity has been responsible for much of the environmental

² Pew Forum on Religion and Public Life (2012), *The Global Religious Landscape. A Report on the Size and Distribution of the World's Major Religious Groups as of 2010* Washington, D.C.: Pew Research Center, 45-50.

³ White, Lynn (1967), "The Historical Roots of Our Ecological Crisis".

⁴ *Ibid.*, 1205.

⁵ *Ibid.*, 1205-1206.

⁶ Minter, Ben A. and Robert E. Manning (2005), "An Appraisal of the Critique of Anthropocentrism and Three Lesser Known Themes in Lynn White's 'the Historical Roots of Our Ecologic Crisis'", *Organization & Environment*, Vol.18, No.2, 163-176.

destruction that has occurred during the past five hundred years or so, there is little if any evidence that it has done much, if anything, to put the brakes on environmentally damaging practices, except for some small religious communities like the Quakers. It is even less evident that Christianity has played a *positive* role in the rise of environmental awareness during the 1960s. If mainstream Christian religions or groups have started to express concern about the environment from the 1960s, this has been more in response to the general rise of environmental awareness than as an expression of an environmental ethic that has been an original part of prevailing Christian beliefs.

As noted above, White argued that it was possible to extract a more positive environmental message from Christian teachings, notably those of Saint Francis. It is perhaps no coincidence that it was Saint Francis who inspired Pope Francis to not only take his name but to adopt and voice a strong stance on the environment, as illustrated in the publication of his encyclical letter *Laudato Si'*.⁷ Arguably, this document is one of the most profound and critical statements on the world produced by a religious leader, including concerning existing inequalities and injustices, the role of human arrogance, the commitment to ongoing economic growth, materialism and consumerism, and the way the environment is treated.⁸ Similarly, it has been argued that, in the United States, a process of greening Christianity gathered momentum from the mid-1990s, especially among church leaders and organisations.⁹ But these developments illustrate that the extraction and propagation of an environmental ethic from Christian teachings by religious leaders have been a fairly recent phenomenon.

It is also not clear whether these reinterpretations imply that environmental values have become (or been confirmed as) core values and have been integrated into Christian religious behaviour and practices, or whether they have been tagged on to dominant Christian teachings. As Clements notes,¹⁰ in the United States, there is scant evidence that the calls by religious leaders to take the environment seriously have been heeded by followers; they seem to have attracted more opposition than support in some circles, notably from more politically conservative leaders. His research findings indicate that self-identified Christians report lower levels of environmental concern than non-Christian and non-religious people.¹¹ In a comparative study involving 22 mainly European countries, Hagevi¹² found that environmental concern tended to be somewhat higher in predominantly Catholic countries than in Protestant countries and that this also applied at the individual level. However, he also found a

⁷ The Holy See (2015), *Encyclical Letter Laudato Si' of the Holy Father Francis on Care for Our Common Home*.

⁸ See also Ghosh for a comparison between the Paris Agreement and *Laudato Si'* in terms of the interpretation of the climate crisis. Ghosh, Amitav (2016), *The Great Derangement. Climate Change and the Unthinkable*. Penguin Books.

⁹ Clements, John M., et al. (2013), "Green Christians? An Empirical Examination of Environmental Concern within the U.S. General Public", *Organization & Environment*, Vol.27, No.1, 85-102, 4.

¹⁰ Ibid., 2.

¹¹ Ibid., 13.

¹² Hagevi, Magnus (2014), "Religion and the Environmental Opinion in 22 Countries: A Comparative Study", *International Review of Sociology*, Vol.24, No.1, 91-109.

lower level of concern in more secular countries, a finding that does not support the view that Christian beliefs have a more negative effect on environmental attitudes than secular beliefs. There is also evidence that Pope Francis's edict *Laudato Si'* has fallen on deaf ears in the United States,¹³ and that, more generally, his progressive stance on many issues has provoked hostile reactions from within the Catholic church.¹⁴

Even from this brief overview, it becomes apparent that it does not seem justified to make general statements about the extent to which the Christian religion is compatible with, supportive of, or obstructive to environmental integration. Rather, Christianity can and has been interpreted in many different ways to provide variable degrees of support for pro-environmental views and attitudes. What (positive or negative) role Christian religions play in environmental integration depends in large part on the interpretations and actions of religious leaders as well as their followers. In other words, this question needs to be answered by looking at religious actors (the agency factor) in the specific context of a community or country.

Although I will not enter into a discussion on the relationship between other religions and environmental views, and/or whether they assign more or less importance to the environment than Christianity, it seems plausible that the general conclusion that was drawn about Christian religions also applies to other religions. For instance, although the core of an environmental ethic can be found in the Koran, it has been argued that in many Islamic countries this ethic had been lost and that it is only relatively recently that Islamic scholars have rekindled Islam's environmental ethic.¹⁵ Islamist groups have taken onboard environmental issues, but for different reasons and with different agendas.¹⁶ At the same time, environmental concerns have taken a back seat among those in power, even if they legitimate their power with Islamic teachings, who give priority to economic development, at great costs to the environment.¹⁷ Among predominantly Islamic countries, where no boundaries exist between religion and the secular domain of the state, there appears to be no consistency in government attitudes towards the environment, suggesting scope for divergent interpretations and approaches.

As the overwhelming majority (94%) of Hindus live in just one country, India,¹⁸ the question of whether and to what extent Hinduism has been a conducive or obstructive factor to environmental integration is strongly tied up with the role and environmental efforts of India's governments. Although it has been argued that an

¹³ Davis, Nicola (2016), "Pope Francis's Edict on Climate Change Has Fallen on Closed Ears, Study Finds", *The Guardian*, 24 October.

¹⁴ Brown, Andrew (2017), "The War against Pope Francis", *The Guardian*, 27 October.

¹⁵ Khalid, Fazlun M. (2002), "Islam and the Environment", in P. Timmerman (ed.) *Encyclopedia of Global Environmental Change*, 332–339.

¹⁶ Karagiannis, Emmanuel (2015), "When the Green Gets Greener: Political Islam's Newly-Found Environmentalism", *Small Wars & Insurgencies*, Vol.26, No.1, 181–201.

¹⁷ Yildirim, A. Kadir (2016), "Between Anti-Westernism and Development: Political Islam and Environmentalism", *Middle Eastern Studies*, Vol.52, No.2, 215–232.

¹⁸ Pew Forum on Religion and Public Life, *The Global Religious Landscape. A Report on the Size and Distribution of the World's Major Religious Groups as of 2010*, 29.

environmental ethic can be plausibly extracted from Hinduism,¹⁹ it appears that environmental concerns and activism in India have been driven mainly by other factors, notably social class, than by Hinduism.²⁰ The principles underlying the government's National Environmental Policy, issued in 2006, do not make any reference to Hinduism.²¹ With development being a priority for governments in India, it is not difficult to find (academic) information sources to support the view that neither religious beliefs, Gandhi's ideas, nor environmental principles have carried much weight in the policies of governments.²²

Of the four world religions, Buddhism is perhaps most often regarded as a belief system that incorporates and propagates an environmental ethic, as reflected by its appeal within environmentalist (notably deep ecology) circles in Western countries. However, Buddhism is far from homogeneous in its teachings, with several streams offering a range of different perspectives.²³ Within Buddhism, there is a diversity of views on what Buddhism offers in terms of environmental guidance. As with the other religions, efforts to read an environmental ethic from this faith began only after the emergence of modern environmentalism, and the idea that such an ethic was already specifically formulated in classical scriptures and teachings is an anachronism. With Buddhism being the dominant religion in just a handful of countries (Thailand, Burma, Sri Lanka, Cambodia, Laos, and Bhutan), its scope for influencing many governments has been rather limited. Around half of the world's 487 million Buddhists live in China,²⁴ but that country's governments can hardly be considered tolerant towards religious minorities, let alone willing to be influenced by their teachings. But even in countries where Buddhists are in the majority, like Burma, it is far from clear that Buddhism has exerted a significant positive influence on the environmental efforts of governments, perhaps with the exception of Bhutan.²⁵

¹⁹ Framarin, Christopher G. (2012), "Hinduism and Environmental Ethics: An Analysis and Defense of a Basic Assumption", *Asian Philosophy*, Vol.22, No.1, 75-91.

²⁰ Chatterjee, Deba Prashad (2008), "Oriental Disadvantage Versus Occidental Exuberance: Appraising Environmental Concern in India — a Case Study in a Local Context", *International Sociology*, Vol.23, No.1, 5-33.

²¹ Government of India M. o. E. a. Forests (2006), National Environment Policy. https://ibkpbdbtindia.gov.in/DBT_Content_Test/CMS/Guidelines/20190411103521431_National%20Environment%20Policy.%202006.pdf (Accessed: 14 July 2016).

²² Shiva, Vandana (1991), *Ecology and the Politics of Survival: Conflicts over Natural Resources in India*. New Delhi: Sage Publications; Guha, Ramachandra (1998), "Mahatma Gandhi and the Environmental Movement in India", in A. Kalland and G. Persoon (eds.), *Environmental Movements in Asia*, 65-82; Münster, Daniel and Ursula Münster (2012), "Consuming the Forest in an Environment of Crisis: Nature Tourism, Forest Conservation and Neoliberal Agriculture in South India", *Development and Change*, Vol.43, No.1, 205-227; Kamdar, Mira (2009), "Time to Honour Gandhi's Vision. India's New Government Faces a Difficult Dilemma", *The Press*, 12 June.

²³ Harris, Ian (1995), "Getting to Grips with Buddhist Environmentalism: A Provisional Typology", *Journal of Buddhist Ethics*, Vol.2, 173-190.

²⁴ Pew Forum on Religion and Public Life, *The Global Religious Landscape. A Report on the Size and Distribution of the World's Major Religious Groups as of 2010*, 32.

²⁵ Brooks, Jeremy S. (2011), "Buddhism, Economics, and Environmental Values: A Multilevel Analysis of Sustainable Development Efforts in Bhutan", *Society & Natural Resources*, Vol.24, No.7,

This brief overview indicates that, even in countries where a particular religion is dominant, it is difficult to establish a direct and clear connection between these dominant beliefs and the environmental (integration) efforts of governments. Few if any governments appear to be guided in their environmental policies by faith-based worldviews, in part because efforts to extract an environmental ethic from these religions have begun only fairly recently and have led to different, ambiguous, or even conflicting interpretations. Moreover, in countries where an official line has been drawn between state and religion (notably in Europe), it would be problematic for a government to be seen to be led in their policies by the views of a particular religious group or church.

This does not mean that religion does not influence environmental policies and integration. When followers of a religion are influenced by the environmental teachings and communications of religious leaders and churches, this may well impact their thinking, behaviour, and practices, and thereby bring about environmental integration within society, bypassing governments. Arguably, it is in this societal realm that most of the environmental efforts of religious leaders and churches are concentrated, more so than in the political realm of lobbying governments, although this side of their agency should also not be ignored. Moreover, by directly influencing adherents, churches and religious leaders may also influence governments indirectly, as followers may change or increase their demands upon the state. So, despite the tenuous relationship between religious doctrines and the environmental integration efforts of governments, we should not dismiss the role and influence of religion. Given the considerable cognitive, social, economic, and institutional power resources that some churches and religious leaders own or control, the (potential) significance of agency and power exerted by these actors (one way or the other) should not be neglected in analyses of the environmental efforts of governments.

However, other, secular, belief systems arguably have been more important in guiding or obstructing environmental integration. The next section will explore some of these.

Secular belief systems and the environment

Although religion may still influence the thinking and behaviour of many people around the world, secular belief systems or worldviews arguably have come to play an even more significant or dominant role. From the 16th century, belief in observation, human reason and science as means of gaining a better understanding of the world around us started to gain currency. Although early scientists, among other Francis Bacon, Johannes Kepler, Rene Descartes and Isaac Newton were all religious men who did not consider that religion and science were incompatible, over two centuries, as Koestler pointed out, science “transformed the mental outlook of *homo sapiens* and transformed the face of his planet”.²⁶ Gradually, the scientific view of a material world,

637-655; Drexler, Madeline, *A Splendid Isolation. Lessons on Happiness from the Kingdom of Bhutan*.

²⁶ Koestler, Arthur (Kindle 2014 ed.), *The Sleepwalkers: A History of Man's Changing Vision of the Universe*. London: Penguin Classics, 498.

combined with a belief in the human capacity to manipulate that world in the service of human ends and progress, became fundamental tenets of a new modern worldview.

Although, as discussed in the preceding section, religious belief systems did not disappear, new or renewed worldviews emerged that aimed to make sense of new discoveries and of the changes occurring in societies and the world that were sought and brought about by individual and collective human agency. Luther and Calvin sought to create a more authentic form of Christianity without the superstition, idolatry, hypocrisy, oppression, and corruption that they observed in the Catholic church. The scientific revolution and the Renaissance, which generated a revival of humanism inspired partly by Ancient Greek philosophers, laid the basis for a human-centred (anthropocentric) world. During the Age of Enlightenment, these ideas were developed further and applied to the realms of philosophy, political thinking, and society. People began to question the political and social order, believing that societies and political systems could and should be changed to the benefit of all rather than the few. Ideologies emerged, including liberalism and socialism, that put forward revolutionary ideas about political and human rights, the fundamental equality of people, and democracy, ideas that inspired, among other, the American, French, and Russian revolutions. The belief in modernity (human reason, progress, science, and technology) became entrenched in Western culture and was internalised by Christians as well as non-Christians, including the adherents of liberalism and socialism.²⁷

While it has been argued that, among the early proponents of liberalism, John Stuart Mill can be regarded as a precursor of an environmental thinker,²⁸ and that it is possible to find clues in Karl Marx's work that reflect environmental awareness,²⁹ it would be fair to say that governments guided or inspired by both liberal and socialist ideologies, including their off-shoots of free-market thinking and social-democracy, paid little if any attention to environmental values and limits until the rise of modern environmentalism. Both capitalist systems, ruled by (neo-) liberal ideology, and socialist or communist systems have left a trail of environmental destruction in their wake. This has led some environmental analysts to argue, in line with the views expressed above, that the main culprit for the environmental crisis lies in the ways of thinking associated with what is variably referred to as modernity or modernisation, industrialism or productivism.³⁰

²⁷ White, Lynn (1967), "The Historical Roots of Our Ecological Crisis", 1206.

²⁸ Stephens, Piers H. G. (2015), "On the Nature of "Nature": The Real Meanings and Significance of John Stuart Mill's Misunderstood Essay", *Environmental Ethics*, Vol.37, No.3, 359-376; Steiguer, J. E. de (1995), "Three Theories from Economics About the Environment", *BioScience*, Vol.45, 552+.

²⁹ O'Connor, James (ed.) (1998), *Natural Causes: Essays in Ecological Marxism*. New York: Guilford Press; Williams, Chris (2010), *Ecology and Socialism: Solutions to the Capitalist Ecological Crisis*. Chicago: Haymarket Books, Chapter 6.

³⁰ Christoff, Peter and Robyn Eckersley (2013, e-book ed.), *Globalization and the Environment*. Lanham, Md.: Rowman & Littlefield, Preface, 39; Andersen, Jorgen Goul (1990), "'Environmentalism', 'New Politics' and Industrialism: Some Theoretical Perspectives", *Scandinavian Political Studies*, Vol.13, No.2, 101-117; Giddens, Anthony (1990), *The Consequences of Modernity*. Stanford, Calif.: Stanford University Press; Sarkar, Saral (1999), *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*. London and New York: Zed

Modernity or the belief in modernisation, broadly speaking, refers to the idea that humans, by using reason, science, and technological innovation, can improve their lot. In the modern worldview, humans stand above nature and manipulate, shape, control and conquer nature to bend it to their will and needs. The idea that humans are part of nature, subject to and dependent on nature, does not figure in this mindset. Hence, from this point of view, the notion of environmental integration, the need for humans to consider their impacts on nature and to adapt their thinking, behaviour, actions, practices, and institutions to minimise these impacts and protect the environment, does not make any sense. At most, human impacts on nature are studied and considered to assess how human control over nature can be increased to maximise human benefit. Therefore, the modernity paradigm is fundamentally at odds with the philosophical view that underlies the idea of (the need for) environmental integration. The former believes in adapting nature to unlimited human ends, while the latter believes that humans need to adapt their ends to the needs of nature, including themselves.

Although industrialism (or productivism) can be defined as a production system based on technologies that enable large-scale (mass) production of more or less uniform products and services, it has also been referred to as a value system characterised by a belief in unlimited economic growth and a continuous rise in material consumption and the standard of living as indicators of progress. Industrialism as a mode of production made possible by the application of science and technology finds a counterpart at the cultural level in what is commonly referred to as materialism or consumerism. In modern, industrial societies, the belief that ever-higher levels of consumption, especially of material goods, hold the key to improving the well-being and happiness of individuals and societies became dominant, and a priority for governments.³¹ Industrialism as a production system thus has a symbiotic relationship with a materialist or consumerist value system, making it possible but also a necessity to meet the expectations and demands of societies.³² Continuous economic growth (“growing the pie”), enabling rising mass consumption, has come to be regarded as the solution to most or all ills in societies, including the perennial challenge of handling the dissatisfaction and tensions caused by inequality. It has been

Books; Kassiola, Joel Jay (1990), *The Death of Industrial Civilization*. Albany: State University of New York Press.

³¹ As Kassiola and others have pointed out, materialism is not just, or even foremost, about satisfying the material needs of people, but has significant social and psychological functions, as it is linked to feelings of success, self-esteem, identity, and social status. But as these values are all *relative to others*, they involve continuous competition for ever higher levels of consumption that never brings about a feeling of fulfilment but rather anxiousness about a loss of (relative) status. Kassiola, Joel Jay, *The Death of Industrial Civilization*; Hirsch, Fred (1976), *Social Limits to Growth*. Cambridge, Mass.: Harvard University Press.

³² It should be noted that meeting these demands and expectations does not necessarily require that industries are located in the country where the products are consumed. It is, therefore, misleading to label high-income countries from which industries have been relocated elsewhere as ‘post-industrial’ societies, as materialism and consumerism continue to dominate those societies, notwithstanding claims of a shift to post-materialist values, as will be discussed below.

argued that one of the biggest challenges of maintaining or creating social harmony in a no-growth society is that greater material equality can only be achieved by redistribution which is likely to raise conflict.³³

Modernity and industrialism are of course highly compatible with capitalism, which is also based on the imperative of continuous growth, a topic that will be further discussed in Chapter 7. But, as noted above, these belief systems were also embraced by countries with socialist economic systems, arguably to the point that the governments of these countries aimed to beat capitalism at its own productivist game, whatever the environmental, social, and political costs. However, the idea that socialism could beat capitalism in this competition came to an end with the collapse of the Soviet Union in 1989. Capitalism was hailed as the most efficient and effective economic system to promote economic growth and satisfy materialist and consumerist demands. Facilitated by liberal-democratic systems and the rising tide of neoliberal ideology proclaiming the virtues of deregulation (or re-regulation) in favour of free markets, free trade, and the free movement of capital, neoliberal capitalism was put forward as the only non-political way to run the economy, as expressed in the TINA ("There is no alternative") acronym. Pushed hard by its advocates, notably in the United States, neoliberalism became a globally hegemonic ideology capturing international and global economic institutions (the IMF, World Bank and the WTO, and the OECD, among others) as well as the political-economic elites of many countries, including China, as well as the EU.³⁴

Although, in economic and government circles, neoliberalism is characterised as grounded in (neo-) classical economic theory that provides the basis for promoting "sound" economic policy, economic growth, and ever-increasing standards of living, it has been argued that it has a weak empirical basis and that it is better regarded as a belief system, religion or a form secular theology.³⁵ It is a belief system that has captured the economic profession, which overwhelmingly subscribes to its normative prescriptions and does not question the flawed and unrealistic assumptions on which it is based.³⁶ These include assumptions that economic growth can continue indefinitely, and that environmental problems can be best resolved by the creation of markets, such as for water, specific forms of pollution, and emissions of greenhouse gasses. As such, neoliberalism, and the neo-classical ideas on which it is based, are

³³ Ophuls, William and A. Stephen Boyan (1992), *Ecology and the Politics of Scarcity Revisited: The Unraveling of the American Dream*. New York: W.H. Freeman, 172.

³⁴ Harvey, David (2005), *A Brief History of Neoliberalism*. Oxford and New York: Oxford University Press; Cerny, Philip G., et al. (2005), "Different Roads to Globalization: Neoliberalism, the Competition State, and Politics in a More Open World", in S. Soederberg, et al. (eds.), *Internalizing Globalization. The Rise of Neoliberalism and the Decline of National Varieties of Capitalism*, 1-30.

³⁵ Harvey, David, *A Brief History of Neoliberalism*, 21-22; Hobsbawm, Eric J. (1995), *Age of Extremes: The Short Twentieth Century, 1914-1991*. London: Abacus, Little, Brown and Company, 548; Keen, Steve (2011), *Debunking Economics. The Naked Emperor Dethroned?* London: Zed Books, Loc 2043-2044.

³⁶ Keen, Steve, *Debunking Economics. The Naked Emperor Dethroned?*, Chapter 8; Raworth, K., *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*; Chang, Ha-Joon (2010), *23 Things They Don't Tell You About Capitalism*. London: Allen Lane.

fundamentally at odds with the view that addressing environmental problems more effectively requires recognition of environmental (including ecological) limits or boundaries. It ignores biophysical and ecological realities, the interconnectedness of the environment, and the interrelated causes and sources of environmental problems. It also denies the need for the collective (green) planning approach that I have argued is required, and that only governments can provide. Such an approach does not fit well with the idea that markets (in practice, businesses) rather than governments know best how to deal with environmental problems, which explains the general retreat from green planning in countries from the time when neoliberal thinking became the dominant ideology.

That (neo-) liberal ideology, based on a belief in the self-regulating market, is antithetical to environmental and social protection became already apparent in the 19th century, in Britain as well as other countries where capitalism and industrialisation were given free rein. Karl Polanyi argued that "the idea of a self-adjusting market implied a stark utopia. Such an institution could not exist for any length of time without annihilating the human and natural substance of society."³⁷ This incompatibility was widely recognised in the wake of the economic crisis of the 1930s and its disastrous consequences - the rise of fascism and World War II. This led to the creation of regulated mixed economies, combining government ownership of key sectors with privately-owned companies, government steering of the economy, and the expansion of welfare states. Liberal ideology was forced to take a backseat until the 1970s, but as noted above made a strong come-back in the 1980s, to the point that (neo-) liberalism became a globally dominant ideology, especially since the disintegration of the Soviet Union.³⁸

It has become apparent that the pursuit of neoliberal policies, which put abstract economic goals or imperatives above any other considerations, has had major negative social and environmental consequences.³⁹ Moreover, it is now increasingly recognised that these policies have failed to deliver what they promised (sustained economic growth and improved standards of living), while they have contributed to financial-economic instability, crises and growing inequality.⁴⁰ But despite the growing criticism of neoliberalism and its perceived responsibility for many problems, it has proved to be remarkably resilient as a hegemonic ideology and continues to keep a

³⁷ Polanyi, Karl (1944, 1957 ed.), *The Great Transformation. The Political and Economic Origins of Our Time*. Boston, Mass.: Beacon Press, 3-4.

³⁸ Harvey, David, *A Brief History of Neoliberalism*; Piketty, Thomas (2014, e-book ed.), *Capital in the Twenty-First Century*. Cambridge, Mass.: Belknap Press.

³⁹ Klein, Naomi, *The Shock Doctrine: The Rise of Disaster Capitalism*; Klein, Naomi (2014), *This Changes Everything: Capitalism Vs. The Climate*. London: Allen Lane, Penguin Books; Structural Adjustment Participatory Review International Network (SAPRIN) (2013, e-book ed.), *Structural Adjustment. The SAPRI Report: The Policy Roots of Economic Crisis, Poverty and Inequality*. London: Zed Books; Chomsky, Noam (1999, Seven Stories Press 1st ed.), *Profit over People: Neoliberalism and Global Order*. New York: Seven Stories Press.

⁴⁰ Ostry, Jonathan D., et al. (2016), "Neoliberalism: Oversold?", *Finance and Development*, June, 38-41; Stiglitz, Joseph E. and Members of a UN Commission of Financial Experts (2010), *The Stiglitz Report. Reforming the International and Monetary Systems in the Wake of the Global Crisis*. New York and London: The New Press.

hold on governments.⁴¹

Achieving (at least) the same standard of living and/or levels of income and wealth enjoyed by the rich in high-income countries became a dominant value and goal for people around the world. Economic growth is widely accepted as instrumental to achieving many of the other, material, and non-material, values of societies and governments. However, as many environmental analysts have pointed out unlimited physical-economic growth is also fundamentally incompatible with environmental systems and processes.⁴² Arguably, it is this plain fact, perceived (correctly) as posing an existential threat to the long-term viability of capitalism and the belief in endless economic growth, that, more than any other environmental concern, has provoked the strongest response from economic and political elites. But, as I will discuss in Chapter 7, all the efforts aimed at denial cannot conceal the reality that has unfolded. Yet, as long as the belief in endless economic growth continues to hold governments in its grip, there is no hope that they will come to terms with the environmental challenge.

Although, in the course of the 20th century and the first two decades of the 21st century, the idea of progress in human affairs may have been dented by the horrors of two world wars, the holocaust, severe economic crises, growing inequality and persistent social misery, the decline of democracy and, last but not least, the undeniable signs of environmental degradation and unravelling, the modernity paradigm is far from dead. Although the adverse environmental, social, and political effects and implications of technological developments have received growing attention in academic and environmental circles,⁴³ scientific and technological innovation continues unabated and at a faster rate than ever. The idea that “you can’t stop progress” still holds popular sway and seems to be validated by the continuous stream of ever more sophisticated products and technologies that are put on the market and used in all areas of public and private life. If anything, support for the view that humans can improve their lot, or at least solve their problems, by enhancing their ability to manipulate and control nature has strengthened rather than weakened. This applies, in particular, to one of the areas at the frontier of science and technological development, biotechnology. Touted as a source of solutions for many of humanity’s problems, from global heating, biodiversity decline, threats to food security, all kinds of diseases, pollution, ageing, and even dying, biotechnology heralds nothing less than the promise of total control over the future of humans and the earth. Furthermore, it is claimed that humans will be greatly assisted in this aim or ideal by the development of artificial intelligence, nanotechnology, and robotics. Although

⁴¹ Cerny, Philip G. (2014), “Globalization and the Resilience of Neoliberalism”, *Critical Policy Studies*, Vol.8, No.3, 359-362.

⁴² Daly, Herman E., “Introduction”; Boulding, Kenneth E., “The Economics of the Coming Spaceship Earth”; Meadows, Donella H., Dennis L. Meadows, Jörgen Randers, William W. Behrens, *The Limits to Growth. A Report for the Club of Rome’s Project on the Predicament of Mankind*; Meadows, Donella H., et al., *Limits to Growth: The 30-Year Update*.

⁴³ To mention just a few influential authors and publications on this front, see Ellul, Jacques (1964), *The Technological Society*. New York: Vintage Books; Toffler, Alvin (1971), *Future Shock*. London: Pan Books; Commoner, Barry, *The Closing Circle*; Beck, Ulrich (1992), *Risk Society. Towards a New Modernity*. London: Sage Publications.

these ideas and developments raise serious concerns,⁴⁴ even some environmental advocates have bought into the argument that nature no longer exists and that relying on science and technology is humanity's only hope for survival.⁴⁵

This phenomenon of runaway science raises questions about the role of science and scientists in the advancement of environmental integration.

Science, scientists, and environmental integration

The role of science in the environmental challenge is Janus-faced. On the one hand, scientists have played and are still playing a major role in raising awareness about environmental problems and in developing knowledge and ideas about how they can be addressed or solved. There is no doubt that many scientists are seriously concerned about environmental degradation and that they have increasingly raised their voices, or even are ringing alarm bells, to get governments and the public to up their acts in addressing the problems. Scientists have taken a leading role in raising awareness about the dangers of climate change and many other environmental issues. As Caldwell has argued, science has generally been an ally of the environmental movement by providing the data, information and knowledge on which environmental concerns have been persuasively based.⁴⁶ On the other hand, it has long been pointed out that science and scientists can be seen as a major source of environmental problems by laying the basis for technological innovations and environmental manipulations.⁴⁷ If anything, the risks and hazards generated by the development of science and technology have increased over time and become all-pervasive and arguably unmanageable.⁴⁸ The Janus-faced nature of science led to an uneasy relationship between science within the environmental movement,⁴⁹ with some environmentalists adopting an attitude of scepticism and distrust towards claims that scientific development contributes to a better world, whilst others are ambivalent and take the view that science *can* be used for such a purpose and is essential for the development of green technologies that set societies on the path towards sustainability. The sceptics can point to the continuous stream of new environmental problems and risks arising as unforeseen effects (or unpleasant surprises) from the fruits of science and technology used in industry, agriculture/food, materials/plastics, household items, among others, while the advocates of green technologies refer to the shift from fossil fuels to renewable energy as a step in combating global heating.

⁴⁴ Bridle, James (2018), "Slave to the Algorithm. Has Technology Evolved Beyond Our Control?", *The Guardian Weekly*, Vol.199, No.3, 26-29; Fukuyama, Francis (2003), *Our Posthuman Future. Consequences of the Biotechnology Revolution*. London: Profile Books; Russell, Stuart (2019, e-book ed.), *Human Compatible: Artificial Intelligence and the Problem of Control*. Viking.

⁴⁵ McKibben, Bill, *The End of Nature*; Lynas, Mark, *The God Species: Saving the Planet in the Age of Humans*.

⁴⁶ Caldwell, Lynton K., *Between Two Worlds: Science, the Environmental Movement, and Policy Choice*, 82-83.

⁴⁷ Commoner, Barry, *The Closing Circle*; Carson, Rachel, *Silent Spring*.

⁴⁸ Beck, Ulrich, *Risk Society. Towards a New Modernity*.

⁴⁹ Rycroft, Robert W. (1991), "Environmentalism and Science: Politics and the Pursuit of Knowledge", *Knowledge: Creation, Diffusion, Utilization*, Vol.13, No.2, 150-169.

We cannot generalise about the role of science and scientists in the environmental challenge. On the one hand, science and scientists have been (co-) responsible for many of the environmental problems that have emerged; on the other hand, scientists have been instrumental in exposing these problems, uncovering their proximate sources or causes, and suggesting measures for addressing or solving them. The question I wish to raise here is not whether there are more “good” than “bad” scientists, but whether or to what extent science and scientists can provide the cognitive and social (support) basis for the kind of comprehensive approach to environmental integration that I have argued to be necessary if the environmental challenge is to be addressed more effectively.

To a large extent, the limitations and shortcomings of science are inherent to the worldview on which science has been predominantly based. The idea that science is not (based on) a belief system or worldview, and that scientists can be objective, is misguided. This misconception is largely based on the idea that science is concerned with analysing and understanding the reality “as it is” rather than with how it should be. In this respect, modern scientists often draw a sharp distinction between science on the one hand and religion and ideology on the other. Science allegedly is focused only on facts (phenomena that can be observed). As such, it faces empirical issues (how to observe and analyse reality), but not normative issues. Science increasingly became “positive” science characterised by the scientific method. This method prescribes that research must focus on observable (empirical) and preferably measurable/quantifiable phenomena, and a series of steps that make the research replicable so that the findings can be verified (confirmed or otherwise). This method enables scientists to develop intersubjective knowledge in the form of theory that is widely shared among scientists, and that offers, for the time being, the most plausible explanation(s) of phenomena.⁵⁰ It is important to note that scientists adhering to this approach will never claim that they have found the “truth” or a definitive explanation. All scientific knowledge (theory) is tentative and can be superseded by new knowledge/theory that provides a more plausible and/or encompassing explanation.⁵¹ In general, most scientists are keen to keep their scientifically based knowledge claims separate from their personal beliefs out of fear of undermining their scientific credibility and compromising their objectivity.

Nonetheless, it is contestable to what extent scientists can keep subjective views, values, and interests out of their research. It has been argued that, at every step in the scientific method, scientists cannot avoid having to make decisions that are influenced by their normative views, from the way a research question is defined, dependent and independent variables are identified and selected, the scale, part of reality (population), and the boundaries of the research, the construction of hypotheses, the

⁵⁰ For a good discussion of positive science and its application to political phenomena, see Brecht, Arnold (1959), *Political Theory: The Foundations of Twentieth-Century Political Thought*. Princeton, NJ: Princeton University Press.

⁵¹ Karl Popper went further and argued that scientific research is about aiming to ‘falsify’ previously held or developed knowledge. A theory is only scientific if it can be falsified. Popper, Karl (1935; 2005), *The Logic of Scientific Discovery*. London and New York: Taylor & Francis e-library.

processing and classification of data, and the interpretation of the findings. At all these stages, choices are influenced by contextual values (values outside science),⁵² which may include cultural views, organisational values, interests, financial considerations and constraints, and personal values, ambitions or preferences. This does not mean that all scientists are biased in the sense that they deliberately distort research to suit their objectives or those of their paymasters, even though the manipulation of science is a practice that is perhaps more common than is often acknowledged.⁵³ The idea that most science is conducted independently has been contested on the ground that, from its very beginnings, scientists have been heavily dependent on funding provided by industries, including the defence industry which has been a major employer of scientists.⁵⁴ This has always strongly influenced the kind of research that has been undertaken and the interests that it has served.

What should also be acknowledged is that the scientific approach to analysing reality is itself based on broad (ontological) assumptions and beliefs about how the world works. From a traditional scientific perspective reality (including nature) is like a machine, the workings of which can be understood by studying the parts and then by putting together the knowledge gained about the parts. As reality is so big and complex, we cannot but focus on small areas and a limited range of variables, and study these in isolation, assuming everything else stays the same (*ceteris paribus*), in the expectation or hope that the (tentative) knowledge gained will fit together with the knowledge gained of other areas into a bigger picture. This reductionist approach sees reality as an assemblage of parts that can be understood by putting together the knowledge gained from studying these parts. This mechanistic view of the world (as a machine) which arose with the rise of modern science in the 16th and 17th centuries (based on the ideas of Francis Bacon, René Descartes, and others), created a duality between nature (matter) and humans (mind) that detached humans from nature and assigned them a position apart from and above nature.⁵⁵

That the view of nature as a machine is simplistic and flawed has been recognised within the world of science itself. From around 1970, the notion of systems theory (thinking and philosophy) was developed to give expression to the idea that

⁵² Longino, Helen (1983), "Beyond 'Bad Science': Skeptical Reflections on the Value-Freedom of Scientific Inquiry", *Science, Technology & Human Values*, Vol.8, No.1, 7-17.

⁵³ Blatant cases of this have been well-documented, for instance, related to research on the effects of smoking, the seriousness of climate change, and other issues. Oreskes, Naomi and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*; Klein, Naomi, *This Changes Everything: Capitalism Vs. The Climate*; Michaels, David (2008), *Doubt Is Their Product: How Industry's Assault on Science Threatens Your Health*. Oxford: Oxford University Press.

⁵⁴ See Pepper, David (1984), *The Roots of Environmentalism*. London & New York: Routledge, Chapter 5. Parenti, Michael (1995), *Against Empire*. San Francisco: City Lights Books, 63-64.

⁵⁵ Capra, Fritjof (1982, 1983 ed.), *The Turning Point. Science, Society, and the Rising Culture*. London: HarperCollins (Flamingo), chapter 2; Capra, Fritjof, *The Web of Life. A New Synthesis of Mind and Matter*.

reality was an interconnected whole.⁵⁶ Systems thinking seemed particularly relevant to efforts aimed at understanding the biophysical/environmental issues that had increasingly come to the fore from the 1960s and provided the basis for the analysis of the *Limits to Growth* scenarios developed by the *Club of Rome*.⁵⁷ But it was also held up as a new development in scientific thinking and understanding, bridging the two worlds of the “hard” and the “soft” (social) sciences, providing the beginning of a new paradigm.⁵⁸ Even the social sciences developed their versions of systems theory aimed at making sense of how social and political systems work.⁵⁹ A systems approach also lent itself particularly well for trying to understand, and model, highly complex phenomena like the weather, climate, ecosystems and the earth system, all involving a high number of interacting variables that had, until then, been studied mainly by separate disciplines.

Scientists played a key role in advancing models for integrated or holistic environmental management under a range of different headings or labels, including ecosystem management,⁶⁰ integrated environmental management,⁶¹ adaptive management,⁶² and holistic resource management.⁶³ These visions or frameworks, apart from making the idea of an integrated approach to environmental issues more specific, have been applied, albeit in an experimental way, at a local or regional level, involving environmental professionals and practitioners, local communities, and

⁵⁶ Laszlo, Ervin (1973), *Introduction to Systems Philosophy: Toward a New Paradigm of Contemporary Thought*. New York: Harper & Row; Bertalanffy, Ludwig von (1969), *General System Theory; Foundations, Development, Applications*. New York: G. Braziller.

⁵⁷ Meadows, Donella H., Dennis L. Meadows, Jörgen Randers, William W. Behrens, *The Limits to Growth. A Report for the Club of Rome's Project on the Predicament of Mankind*; Meadows, Donella H., et al., *Limits to Growth: The 30-Year Update*; Meadows, Donella H., et al., *Beyond the Limits. Confronting Global Collapse, Envisioning a Sustainable Future*; Meadows, Donella H. and Diana Wright (2008), *Thinking in Systems: A Primer*. White River Junction, Vt.: Chelsea Green Pub.

⁵⁸ Capra, Fritjof, *The Turning Point. Science, Society, and the Rising Culture*; Capra, Fritjof, *The Web of Life. A New Synthesis of Mind and Matter*; Capra, Fritjof, *The Hidden Connections. Integrating the Biological, Cognitive, and Social Dimensions of Life into a Science of Sustainability*.

⁵⁹ Parsons, Talcott (1971), *System of Modern Societies*. Englewood Cliffs, N.J.: Prentice Hall; Easton, David (1965), *A Systems Analysis of Political Life*. New York: Wiley.

⁶⁰ Caldwell, Lynton K. (1970), "The Ecosystem as a Criterion for Public Land Policy"; Cortner, H. Hanna and Margaret A. Moote, *The Politics of Ecosystem Management*; Kay, James J. and Eric Schneider (1994), "Embracing Complexity: The Challenge of the Ecosystem Approach", *Alternatives*, Vol.20, No.3, 32-39.

⁶¹ Born, Stephen M. and William C. Sonzogni (1995), "Integrated Environmental Management: Strengthening the Conceptualization", *Environmental Management*, Vol.19, No.2, 167-181; Margerum, Richard D. (1996), *Integrated Environmental Management: A Framework for Practice*. Armidale: Centre for Water Policy Research of the University of New England; Cairns, John and Todd V. Crawford (1991), *Integrated Environmental Management*. Chelsea, Mich.: Lewis Publishers.

⁶² Lee, Kai N. (1993), *Compass and Gyroscope: Integrating Science and Politics for the Environment*. Washington, D.C.: Island Press; Berkes, Fikret and Carl Folke (1998), "Linking Social and Ecological Systems for Resilience and Sustainability", in F. Berkes, et al. (eds.), *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*, 1-25.

⁶³ Savory, Allan (1988), *Holistic Resource Management*. Washington, D.C.: Island Press.

governments. While these frameworks and experiments have been and should be assessed critically, notably regarding their heavy reliance on experts and their sometimes a-political nature,⁶⁴ they did at least constitute steps towards a more integrated approach to environmental issues based not only on scientific knowledge and input but also on a recognition of the role of values and the importance of public participation and input in the decision- and policy-making processes. However, at a national level, such frameworks and integrated approaches have been much less forthcoming and even less successful, especially in the United States.⁶⁵

In some respects, many of these efforts have paid off, as in the area of climate change where the models have become increasingly accurate and offer a sound basis for determining the thresholds beyond which highly destabilising processes are likely to occur, posing a serious threat to the natural basis for human and other life. More broadly, scientists have developed a plausible picture of a range of global (biophysical) processes that are affected by human interventions and that have already exceeded the planetary boundaries that are deemed crucial to keeping the global system within a "safe zone" for humans.⁶⁶ Even the much less sophisticated models on which the *Limits to Growth* scenarios were built proved to be fairly accurate, demonstrating their ongoing relevance to future studies.⁶⁷ In the United States, although the ecosystem concept, and the ecosystem approach, have been questioned on their scientific credentials and gaps, and their presumed (left) political agenda,⁶⁸ the approach seemed to have gained widespread acceptance at the local and regional levels.⁶⁹

⁶⁴ Cortner, H. Hanna and Margaret A. Moote, *The Politics of Ecosystem Management*; Freemuth, John (1996), "The Emergence of Ecosystem Management: Reinterpreting the Gospel?", *Society and Natural Resources*, Vol.9, No.4, 411-417; Scrase, J. Ivan and William R. Sheate (2002), "Integration and Integrated Approaches to Assessment: What Do They Mean for the Environment?", *Journal of Environmental Policy & Planning*, Vol.4, 275-294; Bührs, Ton, *Environmental Integration: Our Common Challenge*, 87-92.

⁶⁵ Caldwell, Lynton K. (1994), "Disharmony in the Great Lakes Basin: Institutional Jurisdictions Frustrate the Ecosystem Approach", *Alternatives*, Vol.20, No.3, 26-31; Funke, Odelia (1993), "Struggling with Integrated Environmental Policy: The EPA Experience", *Policy Studies Review*, Vol.12, No.3/4, 137-161; Guruswamy, Lakshman (1989), "Integrating Thoughtways: Re-Opening of the Environmental Mind?".

⁶⁶ Folke, Carl, "Respecting Planetary Boundaries and Reconnecting to the Biosphere"; Rockström, J. et al., "Planetary Boundaries: Exploring the Safe Operating Space for Humanity"; Steffen, Will, et al. (2015), "Planetary Boundaries: Guiding Human Development on a Changing Planet", *Science*, Vol.347, No.6223, 736+; Steffen, Will, et al., "How Defining Planetary Boundaries Can Transform Our Approach to Growth".

⁶⁷ Randers, Jorgen (2012, e-book ed.), *2052: A Global Forecast for the Next Forty Years*. White River Junction, Vermont: Chelsea House Publishing.

⁶⁸ Fitzsimmons, Allan K. (1996), "Sound Policy or Smoke and Mirrors: Does Ecosystem Management Make Sense?", *Water Resources Bulletin*, Vol.32, No.2, 217-225; Morrissey, Wayne A. (1996), "Science Policy and Federal Ecosystem-Based Management", *Ecological Applications*, Vol.6, No.3, 717-720; Reichman, O. J. and H. Ronald Pulliam (1996), "The Scientific Basis for Ecosystem Management", *Ecological Applications*, Vol.6, No.3, 694-696.

⁶⁹ Pavlikakis, G. E. and V. A. Tsihrintzis (2000), "Ecosystem Management: A Review of a New Concept and Methodology", *Water Resources Management*, Vol.14, No.4, 257-283; Bengston,

Nonetheless, the obstacles to the adoption of a more comprehensive and integrated approach to scientific research based on environmental needs or imperatives remain high, both from within science and beyond. In the United States, moves towards integrated environmental research have been plagued by bureaucratic fragmentation and politics ("turf battles"), and bias and reticence of scientists who are afraid to lose or compromise their professional standing.⁷⁰ Most scientific research (especially in non-environmental areas) continues to be conducted in the reductionist and fragmented mould, including in areas like genetics, biotechnology, and product (materials) development. The idea that nature can be controlled by manipulating individual components still dominates in a wide range of applications of science, such as in agriculture, nanotechnology, and the medical field (medicines, treatments). If anything, the array of specialisations within science has increased with the expansion of knowledge, making it increasingly difficult for any scientist to connect the dots and develop a bigger picture of the reality under study. Not surprisingly, therefore, the idea that scientific endeavour should become more integrated or holistic to create a better understanding of the connections between environmental issues and developments, human actions and interactions, and systems, as a basis for environmental integration, still seems far out of reach. At the same time, the social, political, ethical, and environmental implications of research are giving rise to serious concern, but fail to be properly debated by societies, creating the impression that the development and science and technology are very much out of control.⁷¹

This leads to the second reason why there is not much ground for optimism that science, as it is presently conducted, will help to advance environmental integration and a transition to a more sustainable world: the power and control exercised over science.

From the early stages of capitalism, science and technology have functioned foremost in the service of the economically powerful. As Pepper has pointed out, vested (economic) interests have always exerted a strong influence on the direction of scientific research and technological development.⁷² Although individuals (scientists, innovators, "brilliant minds") have always played a significant role in the development of science and technology, and sometimes have profited from their ideas and work by taking out patents or setting up (small) businesses (that, when proven to be successful and/or to pose a competitive risk, are subsequently bought up by big businesses), much science has been and still is, undertaken under the control of big corporations for profit-generating purposes. This is not just a matter of choice, but a necessity in

David N., *et al.* (2001), "Attitudes toward Ecosystem Management in the United States, 1992-1998", *Society and Natural Resources*, Vol.14, 471-487.

⁷⁰ Rycroft, Robert W. (1991), "Environmentalism and Science: Politics and the Pursuit of Knowledge".

⁷¹ Beck, Ulrich, *Risk Society. Towards a New Modernity*; Beck, Ulrich (1995), *Ecological Politics in an Age of Risk*. Cambridge: Polity Press; Winner, Langdon (1989), *The Whale and the Reactor. A Search for Limits in an Age of High Technology*. Chicago and London: The University of Chicago Press.

⁷² Pepper, David (1996), *Modern Environmentalism: An Introduction*. London and New York: Routledge, Chapter 5.

the competitive struggles in capitalism. Science and technology are recruited to fuel a continuous process of innovation that increases productivity and that can be commercially exploited to produce new materials, products, and services without regard for their (potential) social and environmental consequences and costs.⁷³ In the UK context, Benton notes: "In fact, the subordination of science in key sectors to the competitive priorities of private capital is all but complete."⁷⁴

States (governments) also exert power and control over science and technological development, both in the fulfilment of their security function (military research and development) and in their economic function (managing and/or supporting the functioning of the economy), notably in and for sectors that are considered to be of national significance and/or that have privileged access to the government. The extent to which this happens varies from country to country, linked among other to the existence and importance of a defence industry. The United States is by far the biggest spender in this area.⁷⁵

These observations indicate that science and technology are not out of control – they are controlled by, and serve, mostly state and economic/capitalist imperatives that largely disregard or discount the environment and harmful environmental and social "externalities".⁷⁶ Moreover, to protect themselves against threats from the discovery and manifestation of these risks and harmful effects, economic interests often use ("rent") scientists to produce biased and pseudo-scientific reports that can have undue political influence.⁷⁷ Although some fundamental research may be funded by governments primarily for its own sake, most investment in research and development is undertaken for utilitarian (economic or military) reasons.

⁷³ Foster, John Bellamy (1999, Kindle ed.), *The Vulnerable Planet: A Short Economic History of the Environment*. New York: Monthly Review Press.

⁷⁴ Benton, Ted (1997), "Beyond Left and Right? Ecological Politics, Capitalism and Modernity", in M. Jacobs (ed.) *Greening the Millennium. The New Politics of the Environment*, 34-46, 41.

⁷⁵ Parenti argued that some 70% of federal expenditure on research and development went to the military, and that about one-third of American scientists were involved in military projects. Parenti, Michael, *Against Empire*, 63-64. In 2000, expenditure had dropped to around 55%. OECD Observer (2000), R & D Defence Spending Falls, <https://oecdobserver.org/news/archivestory.php/aid/230/html> (Accessed: 27 November 2020). In 2020, it stood at 43.5%, but this was still four times as much than the rest of OECD countries combined. Congressional Research Service (2020), Government Expenditures on Defense Research and Development by the United States and Other OECD Countries: Fact Sheet, <https://crsreports.congress.gov/product/pdf/R/R45441> (Accessed: 27 November 2020). Moretti, Enrico, et al. (2019), The Intellectual Spoils of War: How Government Spending on Defence Research Benefits the Private Sector, <https://voxeu.org/print/64905> (Accessed: 27 November 2020).

⁷⁶ This point was already made by Caldwell in 1970. Caldwell, Lynton K., *Environment: A Challenge for Modern Society*, 164-170.

⁷⁷ Oreskes, Naomi and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*; Langley, Chris and Stuart Parkinson (2009), *Science and the Corporate Agenda. The Detrimental Effects of Commercial Influence on Science and Technology Policy in the 1980s and Beyond* Folkestone, United Kingdom: Scientists for Global Responsibility (SGR); Michaels, David, *Doubt Is Their Product: How Industry's Assault on Science Threatens Your Health*.

Environmentalism and the environmental movement

Even though environmental problems, and actions aimed at their management, can be said to have existed from the beginnings of human societies,⁷⁸ they only became a focus of public (policy) concern in the 1960s.⁷⁹ The environmental movement, broadly conceived as comprising all those for whom the protection of the environment is a core value, arguably is the main factor that drives environmental integration as a purposeful process. The United States is often regarded to have been a breeding ground for that movement, sparked off by the seminal publication of *Silent Spring*, growing pollution problems and incidents (such as major oil spills), a flourishing of environmental writings, news and initiatives, and the organisation of the first Earth Day in 1970.⁸⁰ It was also the place of origin of several new environmental organisations, such as the Environmental Defense Fund (created in 1967), and Friends of the Earth (established in 1969). However, the new wave of environmental concern was not confined to the United States but also manifested itself in Europe, Australia, New Zealand, and other parts of the world. Further boosted by a raft of publications that foretold a dire future if environmental pressures were not brought under control and people did not fundamentally change their ways,⁸¹ by the time of the first international conference on the human environment (in Stockholm, 1972), and the first oil crisis in 1973, the environmental movement had become an entrenched feature of the political landscape in many countries.

Here, the main purpose is not to offer a comprehensive description or analysis of the environmental movement, but to discuss to what extent this movement has been, and/or can be, a conducive factor in the development and adoption of a widely shared environmentally based worldview. As discussed in Chapter 1, without such a vision or worldview, it is unlikely that environmental integration can occur in coherent and non-conflicting ways, and that environmental problems will be addressed (more) effectively.

For a start, many environmental thinkers have pointed out that the environment is an interconnected whole or system, including humans,⁸² and that this implies that environmental problems cannot be resolved or even diminished by addressing them separately. Rather, many have argued, resolving the environmental challenge requires looking at the environment as a whole (adopting a holistic view), given its interconnected or systemic nature, including the interactions with humans. Human behaviour and practices can have multiple, indirect, delayed, synergistic and cumulative environmental impacts, while solutions aimed at any one problem may

⁷⁸ Ponting, Clive, *A Green History of the World*.

⁷⁹ Caldwell, Lynton K. (1963), "Environment: A New Focus for Public Policy".

⁸⁰ Earth Day Network, *The History of Earth Day*.

⁸¹ Goldsmith, Edward (1972), *Blueprint for Survival*. Boston: Houghton Mifflin; Meadows, Donella H., Dennis L. Meadows, Jörgen Randers, William W. Behrens, *The Limits to Growth. A Report for the Club of Rome's Project on the Predicament of Mankind*.

⁸² Boulding, Kenneth E., "The Economics of the Coming Spaceship Earth"; Capra, Fritjof, *The Turning Point. Science, Society, and the Rising Culture*; Commoner, Barry, *The Closing Circle*; Ward, Barbara and René J. Dubos (1972), *Only One Earth: The Care and Maintenance of a Small Planet*. Harmondsworth: Penguin; Caldwell, Lynton K., *Environment: A Challenge for Modern Society*.

simply shift the problem, make other problems worse, or create new problems.⁸³ To effectively address environmental problems, we need to develop a good knowledge and understanding of how the environment works and incorporate that knowledge and understanding into the social, economic, political, technological and other systems that guide human thinking, behaviour and practices.

Although, as discussed in this book, many of these obstacles to environmental integration lie within the prevailing systems that serve foremost non-environmental interests, in some respects the environmental movement itself has also been part of the problem. While environmental thinkers and advocates have offered many ideas and solutions to specific environmental problems and the environmental challenge as a whole, there has never been anything close to widespread agreement on what the main (systemic) causes are, let alone on the solutions to problems and/or on the course of action that needs to be taken. This lack of agreement exists at all levels, from the local to the global. While, at times and in some places, environmental advocates have been able to forge agreement on particular issues or solutions, such agreement has never extended to the environmental challenge as a whole. Hence, despite the apparent agreement among many environmental thinkers at a very general level regarding the need for a holistic, integrated, or systemic approach, this has never been translated into agreement on an overarching vision of how the environmental challenge needs to be addressed. While all environmentalists may agree that there are (serious) environmental problems, they have never shared a common environmentally based worldview.

From its very beginnings, the environmental movement has been a very diverse phenomenon, with many different views or schools of thought about what the main (systemic) causes are, and what kind(s) of actions and/or solutions are needed to address or resolve environmental problems or the challenge as a whole. It is not my intention to elaborate on the many perspectives that are on offer, apart from noting that analysts have used a range of labels to differentiate between them, such as "deep and shallow" ecologists⁸⁴ radical ecology versus environmentalism,⁸⁵ ecocentric and technocentric environmentalism,⁸⁶ eco-socialism,⁸⁷ eco-anarchism,⁸⁸ eco-feminism,⁸⁹ radical and institutionalised environmentalism,⁹⁰ democratic and authoritarian

⁸³ Bartlett, Robert V., "Comprehensive Environmental Decision Making: Can It Work?"; Guruswamy, Lakshman (1989), "Integrating Thoughtways: Re-Opening of the Environmental Mind?".

⁸⁴ Naess, Arne (1972), "The Shallow and the Deep, Long-Range Ecology Movement. A Summary", *Inquiry*, Vol.16, No.95, 95-100.

⁸⁵ Sutton, Philip W. (2000), *Explaining Environmentalism: In Search of a New Social Movement*. Aldershot, Burlington, Vt.: Ashgate.

⁸⁶ O'Riordan, Timothy, *Environmentalism*.

⁸⁷ Kovel, Joel (2014), "Ecosocialism as a Human Phenomenon", *Capitalism Nature Socialism*, Vol.25, No.1, 10-23; Pepper, David (1993), *Eco-Socialism. From Deep Ecology to Social Justice*. London and New York: Routledge.

⁸⁸ Bookchin, Murray (1986, 3rd ed.), *Post-Scarcity Anarchism*. Edinburgh: AK.

⁸⁹ Mies, Maria and Vandana Shiva (1993), *Ecofeminism*. Melbourne: Spinifex.

⁹⁰ Rootes, Christopher (1999), "Environmental Movements: From the Local to the Global", *Environmental Politics*, Vol.8, No.1, 1-12.

environmental perspectives,⁹¹ and centralism or globalism versus decentralism,⁹² to name just a few. Some analysts argue that it is misleading to speak of “the” environmental movement, given the significant differences in analysis and philosophy, political orientation, problem focus, and adopted strategies, within and between countries, and at the international level.⁹³

Characterising the diversity within the environmental movement, or of environmental movements, as a problem goes against the grain of dominant thinking in the fields of environmental sociology and politics. Diversity is commonly seen as not only inevitable but also as a good thing. Diversity reflects differences in socio-cultural backgrounds, geography, history, and the nature and/or degree of environmental problems facing people. Moreover, philosophical and ideological differences, often linked to differences in social position and interests, are regarded as the inevitable and positive characteristics of a pluralist and democratic society. Questioning the value of diversity also goes against ecological thinking, which values (bio-) diversity highly, and therefore may be considered academically and politically foolish, to say the least.

Yet, while I agree with all these observations, I maintain that this diversity is also a problem when it comes to collectively figuring out how to address the environmental challenge in more than a piecemeal, ineffective manner. With a few exceptions, the environmental movement has approached the environmental challenge in the same reactive, ad hoc, and fragmented way as governments. Much environmental activism focuses on specific issues after they have become (serious) problems, without linking them to a broader strategy. Overwhelmingly, the kinds of solutions that environmental groups have sought are in the nature of stops, bans, mitigation, or reduction—stopping particular sources of pollution, stopping mining proposals or projects, stopping overfishing, stopping developments that have adverse environmental effects, banning plastic bags, banning pesticides, stopping or reducing the logging of forests, saving threatened species, the reduction of CO₂ and other emissions, and so on. There are, of course, also groups undertaking activities that more or less directly protect or improve the environment and human well-being (such as revegetation and ecological restoration, organic growing, permaculture projects, sustainable energy

⁹¹ Radcliffe, James (2000), *Green Politics. Dictatorship or Democracy?* Basingstoke, England: Macmillan Press.

⁹² Schumacher, E. F. (1973), *Small Is Beautiful: A Study of Economics as If People Mattered*. London: Blond and Briggs; O’Riordan, Timothy (2001), *Globalism, Localism, and Identity: Fresh Perspectives on the Transition to Sustainability*. London, UK: Earthscan Publications.

⁹³ Doyle, Timothy and Sherilyn MacGregor (2014), “Through the Green Kaleidoscope: Environmental Movements around the World”, in T. Doyle and S. MacGregor (eds.), *Environmental Movements around the World: Shades of Green in Politics and Culture*, 1-19; O’Neill, Kate (2012), “The Comparative Study of Environmental Movements”, in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 114-141. One might add that this diversity of views has been further complicated by the idea that nature and the environment, and the notion of an environmental crisis, do not exist objectively but are “socially constructed”, an idea deliberately fuelled by anti-environmental interests that portray “radical” environmentalists as alarmists or even terrorists. Buell, Frederick (2003), *From Apocalypse to Way of Life: Environmental Crisis in the American Century*. New York: Routledge.

and building projects), but in most cases, these also fail to make a dent in the overwhelmingly unsustainable thrust of mainstream economic activities and developments. While I do not want to downplay the value and merits of environmental activism – the world would have been a much worse place without it – one has to question the effectiveness of the environmental movement after more than five decades of attempts to halt environmental degradation. In this respect, I agree with Gustav Speth that “all in all, today’s environmentalism has not been succeeding. We have been winning battles, including some critical ones, but losing the war”.⁹⁴

As in the case of religious leaders and churches mentioned above, environmental advocates may have had considerable influence on (segments of) the public and thereby also indirectly on the policies and decisions of governments. However, while it may be possible, on specific issues, to attribute such influence to particular environmental groups and their campaigns, it is more difficult to assess whether or to what extent the environmental movement as a whole has had an influence on the environmental views and attitudes of the public at large, or on what Jamison calls the making of “green knowledge”.⁹⁵ Jamison argues that “Perhaps the main challenge for professional environmentalists - both in the academic and non-government domains - is to help re-establish a sense of coherence in relation to all of the increasingly disparate movements, networks, campaigns, and alliances that they relate to”.⁹⁶ Norton has made a case for creating a common language to bridge the differences between the various branches of the environmental movement as the first step towards a unified theory of environmental management.⁹⁷

It has also been argued that the modest outcomes of environmental action can be attributed to environmentalists themselves, linked to the professionalization and institutionalisation of (part of) the environmental movement. Some environmental groups have become highly professional organisations, dependent on external sources of (state and other) funding and have adopted a more cooperative rather than confrontational approach towards governments and businesses. Behaving like businesses themselves, they tend to advocate technological and “win-win” solutions to problems that, according to some, have turned them into co-pilots of ecological modernisation.⁹⁸ This institutionalisation process has occurred in most countries and has been accompanied by a decline in political activism.⁹⁹ These developments have led to the concern that this part of the environmental movement has lost its sharp edge, or worse, that it has been co-opted and rendered toothless by the dominant

⁹⁴ Speth, James Gustave, *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*, Loc 49-50.

⁹⁵ Jamison, Andrew (2003), “The Making of Green Knowledge: The Contribution from Activism”, *Futures*, Vol.35, No.7, 703-716.

⁹⁶ *Ibid.*, 710.

⁹⁷ Norton, Bryan G. (1991), *Toward Unity among Environmentalists*. New York: Oxford University Press.

⁹⁸ Chartier, D. and J. Deleage (1998), “The International Environmental NGOs: From Revolutionary Alternative to the Pragmatism of Reform”, *Environmental Politics*, Vol.7, No.3, 26-41.

⁹⁹ Dalton, Russell J. (2015), “Waxing or Waning? The Changing Patterns of Environmental Activism”, *Environmental Politics*, Vol.24, No.4, 530-552.

powers. The de-radicalisation and de-politicisation of a major part of the environmental movement have led to calls for a re-activation of the movement and have been reason to emphasise the importance of (at least part of) the movement to maintain its independence as part of a strong civil society.¹⁰⁰

It can be argued that there is one arm of the environmental movement that does attempt to overcome this fragmented and reactive approach, does try to overcome the ideological divisions within the green movement, that does offer a coherent vision and programme for a sustainable future, and that is engaged in a political-strategic approach towards bringing about a fundamental change in the dominant paradigm as well as in the prevailing political and economic systems: green parties. Although this characterisation of green parties is contestable, as we will see below, they are the most promising branch of the environmental movement with respect to the aim of bringing about more coherent, comprehensive, and meaningful environmental integration, notably at the national level. Arguably, green parties are the most important collective agents for politically advancing environmental integration based on a coherent vision, through policy, institutional and systemic change.

Green parties first emerged in the 1970s in Tasmania (Australia), New Zealand and the United Kingdom, and it is instructive how the first national-level green party established in New Zealand in 1972 was called the *Values Party*, making explicit its focus on changing the dominant values that were perceived to underlie environmental, social, economic, spiritual and all kinds of other problems affecting societies.¹⁰¹ Although there are programmatic differences between green parties, related among other to differences in social, political and economic contexts, most green parties share at least six fundamental principles: ecological wisdom, social justice, participatory democracy, nonviolence, sustainability and respect for diversity.¹⁰² While including a strong commitment to the protection of nature, or, in Goodin's terms, a "green theory of value",¹⁰³ this set of broad principles forms the basis for advancing comprehensive and coherent programmes of environmental

¹⁰⁰ Dryzek, John S., et al. (2003), *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany, and Norway*. New York: Oxford University Press; Garman, Joss (2009), "It's All About Us", *The Ecologist*, Vol.39, No.4, 83; Boggs, Carl (2012), *Ecology and Revolution. Global Crisis and Political Challenge*. New York: Palgrave Macmillan.

¹⁰¹ Dann, Christine (1999), *From Earth's Last Islands. The Global Origins of Green Politics. A Thesis Submitted in Partial Fulfilment for the Degree of Doctor of Philosophy*. Canterbury, New Zealand: Lincoln University.

¹⁰² The German Green Party, which was established in 1980 and became a source of inspiration for many other green parties created since, adopted the first four principles. Over time, these principles or values have been added to, and the Global Greens, the umbrella organisation of green parties, set forth the six principles or values mentioned. However, the US Green Party formulated ten principles. Green Party US (2017), Ten Key Values, http://www.gp.org/ten_key_values_2016 (Accessed: 21 November 2017). The Swedish Green Party has adopted fourteen principles. Wikipedia (2016), Green Party (Sweden), [https://en.wikipedia.org/wiki/Green_Party_\(Sweden\)](https://en.wikipedia.org/wiki/Green_Party_(Sweden)) (Accessed: 19 October 2016). While most of these additional principles may not seem controversial, the fact that they are not all officially shared suggests that green parties differ at least to some extent on what they consider to be the most important principles.

¹⁰³ Goodin, Robert E. (1992), *Green Political Theory*. Cambridge: Polity Press, chapter 2.

integration while at the same time aiming to bring about significant socio-cultural, political, and economic change.

In the late 1970s and 1980s, green parties were set up in several other European countries.¹⁰⁴ Over time, they have been established in many countries, and as of 2016, worldwide, some 91 green parties were in existence. Although little is known about most of them, 31 have been able to gain parliamentary representation (commonly with just a few members), while only seven have been junior partners in a government coalition.¹⁰⁵ They have also formed an international network of the "Global Greens".¹⁰⁶ Although the growth in environmental awareness and commitment can be seen as a basis for their emergence, Rootes¹⁰⁷ rightly notes that this is not a sufficient condition. Whether green parties get off the ground depends largely on the political and institutional conditions prevalent in a country, including the electoral system, political competition for the green vote and the ability of other parties to attract green voters.¹⁰⁸

Although green parties share (most of) the principles mentioned above, this does not mean that they are ideologically cohesive. While it has been argued that green parties are "neither left nor right, but out in front",¹⁰⁹ it has also been found that most members are left-leaning¹¹⁰ and that, where green parties have participated in government, they have done so almost exclusively with parties on the left.¹¹¹ Social justice and the redistribution of wealth, issues traditionally associated with the left, are also important planks in the political programme of most green parties.¹¹² Political-ideological differences between "watermelon" and "cucumber" ("pure green") factions, often referred to as "Realos" and "Fundis" following the German labels,¹¹³ have plagued most green parties from the beginning, raising conflict also about their internal organisation and the extent to which they must continue to practise "grassroots" democracy also when participating in government.

Internal conflict is also fuelled by the extent of compromise on programmatic issues that inevitably comes with participating in government. It has been found that

¹⁰⁴ Parkin, Sara (1989), *Green Parties: An International Guide*. London: Heretic Books.

¹⁰⁵ Wikipedia (2016), Global Greens, https://en.wikipedia.org/wiki/Global_Greens (Accessed: 13 October 2016).

¹⁰⁶ *Ibid.*

¹⁰⁷ Rootes, Chris (1995), "Environmental Consciousness, Institutional Structures and Political Competition in the Formation and Development of Green Parties", in D. Richardson and C. Rootes (eds.), *The Green Challenge: The Development of Green Parties in Europe*, 232-252.

¹⁰⁸ Richardson, Dick (1995), "The Green Challenge: Philosophical, Programmatic and Electoral Considerations", in D. Richardson and C. Rootes (eds.), *The Green Challenge. The Development of Green Parties in Europe*, 4-22.

¹⁰⁹ Parkin, Sara, *Green Parties: An International Guide*, 17.

¹¹⁰ Rootes, Chris, "Environmental Consciousness, Institutional Structures and Political Competition in the Formation and Development of Green Parties", 247-248.

¹¹¹ Rihoux, Benoît and Wolfgang Rüdig (2006), "Analyzing Greens in Power: Setting the Agenda", *European Journal of Political Research*, Vol.45, No.1, 1-33.

¹¹² Parkin, Sara, *Green Parties: An International Guide*, 17, 23.

¹¹³ O'Neill, Michael (2012), "Political Parties and the "Meaning of Greening" in European Politics", in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 171-194.

the participation of the Greens in government decision-making, including at the EU level, has had a de-radicalising effect on those involved, as it required them to compromise and become more reformist in their outlook, creating or adding to tensions with rank and file members.¹¹⁴ Whether de-radicalisation, which has affected the environmental movement in general, and which may lead to just sticking plasters on environmental problems, is an unavoidable by-product of participating in government decision-making, is an important question. How green parties can remain true to their core values and objective of bringing about fundamental political, economic, and social change, while supporting governments as a junior partner in exchange for very modest gains, and retain, or rather expand, their support basis, remains an ongoing challenge for all green parties.¹¹⁵

Moreover, most gains achieved by green parties have been confined to particular issues or portfolios for which they have been granted responsibility. As yet, green parties have seldom been given or obtained control over core policy areas like economic, energy, and transport policy, while the assignment of the environment portfolio to green ministers (which seems logical) has often been problematic because of the potential conflicts with affected interests as well as the green constituency.¹¹⁶ Overall, the gains obtained by green parties are a long way from the comprehensive environmental integration and transformation that are aspired to in their programmes. As yet, green parties have not been able to bring about a "green revolution" or a paradigmatic change.

This is not surprising, of course. Nowhere have the Greens been in a position to impose their programme on a government. In countries where the Greens are (or have been) represented in the national Parliament, their share of the vote has been rather modest most of the time (less than five percent in most cases, not much higher than around ten percent in some cases).¹¹⁷ Whether political support for the Greens is likely

¹¹⁴ Rihoux, Benoît and Wolfgang Rüdig (2006), "Analyzing Greens in Power: Setting the Agenda"; Bomberg, Elizabeth and Neil Carter (2006), "The Greens in Brussels: Shaping or Shaped?", *European Journal of Political Research*, Vol.45, No.1, 99-125.

¹¹⁵ Muller-Rommel, Ferdinand (2002), "The Lifespan and the Political Performance of Green Parties in Western Europe", *Environmental Politics*, Vol.11, No.1, 1-16; Poguntke, Thomas (2002), "Green Parties in National Governments: From Protest to Acquiescence?", *Environmental Politics*, Vol.11, No.1, 133-145; Rihoux, Benoît and Wolfgang Rüdig (2006), "Analyzing Greens in Power: Setting the Agenda".

¹¹⁶ Poguntke, Thomas (2002), "Green Parties in National Governments: From Protest to Acquiescence?", 143.

¹¹⁷ Muller-Rommel, Ferdinand (2002), "The Lifespan and the Political Performance of Green Parties in Western Europe". The German Greens obtained an average of 7% in the federal elections between 1980 and 2013, with the highest result being 10.7% in 2009 Wikipedia (2016), Alliance '90/the Greens, https://en.wikipedia.org/wiki/Alliance_%2790/The_Greens (Accessed: 19 October 2016). In Sweden, the Green party score averaged 4.6% between 1982 and 2014, with the highest result of 7.3% obtained in 2014. Wikipedia, Green Party (Sweden). The highest score by the Swiss Greens was 9.6% in 2007. Wikipedia (2016), Green Party of Switzerland, https://en.wikipedia.org/wiki/Green_Party_of_Switzerland (Accessed: 19 October 2016). The Finnish Greens scored 8.53 (in 2015). Wikipedia (2016), Green League, https://en.wikipedia.org/wiki/Green_League (Accessed: 19 October 2016). And the Dutch Groen Links 7.3% (in 1998). Wikipedia (2016), Groenlinks, <https://en.wikipedia.org/wiki/GroenLinks> (Accessed:

to increase significantly remains an open question.¹¹⁸ Even though in many countries, the support for social-democratic (or labour) parties and other major parties has declined in the wake of the fall of (“really existing”) socialism in Eastern Europe and the rise of neoliberalism, green parties are not, as Rootes notes, “inevitable beneficiaries of the decay of traditional party alignments”.¹¹⁹ In recent years, the truth of Rootes’ observation has clearly been illustrated by the fact that in many countries, despite the electoral collapse of the traditional main parties, far-right and populist parties and politicians received a greater increase in political support than (most) green parties. Green parties have not (yet) become the political force for change that many Greens had hoped. Nonetheless, while the electoral fortunes of green parties ebb and flow, few have died, and it appears that the Greens are a political force that is here to stay.¹²⁰

Towards a dominant environmental paradigm?

Although, after some fifty-odd years, it is hard to determine what the environmental movement has achieved, one may look at its significance in a different way. Some analysts have regarded the environmental movement as a possible vanguard in a process of societal change towards a new dominant value system in which environmental values become part of the core.¹²¹ In the literature, this process of change has been referred to as a shift towards “post-materialism” or a New Environmental Paradigm. So, arguably, the environmental movement should not just be looked at as a form of social action or mobilisation in response to the emergence of environmental problems, but as spearheading a process of value change that may be driven by other factors.

19 October 2016). The Austrian Greens were probably the consistently highest scoring party with an average of 7.6% between 1983 and 2013, with the highest result of 12.4% obtained in 2013. Wikipedia (2016), The Greens - the Green Alternative, https://en.wikipedia.org/wiki/The_Greens_%E2%80%93_The_Green_Alternative (Accessed: 19 October 2016). The New Zealand Green Party also scored an average of 7.6% over seven elections between 1990 and 2014 and obtained the highest result of 11.1 in 2011. Wikipedia (2016), Green Party of Aotearoa New Zealand, https://en.wikipedia.org/wiki/Green_Party_of_Aotearoa_New_Zealand (Accessed: 19 October 2016). It should be noted that for most green parties the best scores were achieved in recent years.

¹¹⁸ In Germany, in the 2021 elections, the Green Party vote jumped to 14.8%, which provided the basis for their participation in a coalition government with the SPD and the FDP. The Federal Returning Officer (2021), Bundestag Election 2021 Results. <https://www.bundeswahlleiter.de/en/bundestagswahlen/2021/ergebnisse/bund-99.html> (Accessed: 21 December 2021). Despite this best-ever result, it still does not make the Greens the *leading* government party, does not alter the need for compromise on many key issues, and still makes systemic (including economic) reforms unlikely.

¹¹⁹ Rootes, Chris, “Environmental Consciousness, Institutional Structures and Political Competition in the Formation and Development of Green Parties”, 248.

¹²⁰ O’Neill, Michael, “Political Parties and the “Meaning of Greening” in European Politics”; Rüdiger, Wolfgang (2015), “The Greens in the 2014 European Elections”, *Environmental Politics*, Vol.24, No.1, 156-162.

¹²¹ Milbrath, Lester (1984), *Environmentalists. Vanguard for a New Society*. Albany, N.Y.: State University of New York Press.

Over several decades, much research has been done aimed at detecting whether such a change has occurred. Ronald Inglehart and his followers argue, based on surveys held in many countries, that a shift from material to post-material values is indeed underway.¹²² Inglehart's research has been framed by two main arguments or hypotheses: first, the scarcity hypothesis, which claims that, under conditions of prosperity, people are more likely to emphasise non-material values like belonging, esteem, and aesthetic and intellectual satisfaction; second, the socialisation hypothesis, which claims that the values that people adopt during their formative (pre-adult) years are likely to be enduring, leading to intergenerational value change when, gradually, younger generations with post-material values replace older generations with predominantly material values. This theory builds on the idea, advanced by Abraham Maslow, of the existence of a hierarchy in basic human needs,¹²³ which in turn was influenced by the principle of diminishing marginal utility in economic theory. As noted, the theory is also based on the assumption that the values that people acquire during their youth are likely to stay with them for the rest of their lives and change little.¹²⁴ In his later work, Inglehart argued that there is a broader cultural shift from survival and traditional values to secular-rational and self-expression values,¹²⁵ affecting attitudes towards, among other, authority, religion, abortion, homosexuality, child-rearing, and the role of women.

As noted above, Inglehart saw the rise in economic prosperity as the main driver of value change. This idea concurs with a widely held view that it is mainly well-off people who can afford to assign importance, let alone give priority to, environmental values and concerns, explaining why support for environmental protection in high-income countries is thought to be higher than in so-called developing countries. This view was also expressed by some on the left who argued that members of the movement are predominantly middle class and concerned foremost about the protection and advancement of values and interests that reflect their privileged status in society, such as a preoccupation with "hygiene and cleanliness" and the protection of their neighbourhoods from undesirable developments (commonly referred to as the "Not-In-My-Back Yard" or NIMBY phenomenon).¹²⁶ The argument is also integral

¹²² Inglehart, Ronald (1977), *The Silent Revolution*. Princeton, N.J.: Princeton University Press; Inglehart, Ronald (2002), "Special Issue - Green Parties in National Governments - Foreword", *Environmental Politics*, Vol.11, No.1, VII-VIII; Inglehart, Ronald (2008), "Changing Values among Western Publics from 1970 to 2006", *West European Politics*, Vol.31, No.1-2, 130-146.

¹²³ Maslow, Abraham H. (1970, 2d ed.), *Motivation and Personality*. New York: Harper & Row.

¹²⁴ Rokeach, Milton (1968), *Beliefs, Attitudes, and Values: A Theory of Organization and Change*. San Francisco: Jossey-Bass; Inglehart, Ronald (1990), *Culture Shift in Advanced Industrial Society*. Princeton, New Jersey: Princeton University Press, 68-70.

¹²⁵ Inglehart, Ronald (2008), "Changing Values among Western Publics from 1970 to 2006", 138-140.

¹²⁶ Enzensberger, Hans Magnus (1974), "A Critique of Political Ecology", *New Left Review*, Vol.84, 3-31; Horowitz, Irving Louis (1972), "The Environmental Cleavage: Social Ecology Versus Political Economy", *Social Theory and Practice*, Vol.2, No.1, 125-134; Beresford, Melanie (1977), "Doomsayers and Eco-Nuts: A Critique of the Ecology Movement", *Politics*, Vol.12, No.1, 98-106.

to the claim widely accepted in economic circles that, although levels of emissions or pollution initially increase with economic growth, at some point, public demand for environmental protection increases, leading governments to adopt measures that bring about declining rates of emissions and/or pollution after they have first increased, a claim or theory referred to as the Environmental Kuznets Curve.¹²⁷

At face value, these arguments seem plausible. Environmentalists in the North generally have a higher socioeconomic status (albeit more so in education than in income), and a large proportion is employed in the public sector (including universities).¹²⁸ Other studies have found that a majority of the members of environmental organisations, along with members of other social movements, and green parties, do indeed adhere to a post-material profile, more so than the wider population.¹²⁹ But they are also mostly young, more knowledgeable about environmental issues and, given their university training and relative independence from the production sector, in a better position than many other people to formulate their concerns, act upon their beliefs, and pursue change aimed at resolving environmental issues.¹³⁰ Hence, there is merit in characterising the environmental movement as a vanguard both in the level of environmental awareness and the ability to act upon its concerns.

However, whether or to what extent environmental activism is driven by self-interest is highly questionable. Given the broad and public-interest nature of many environmental issues, explanations of environmentalism based on self-interest are logically weak, as individuals investing time and energy in environmental action stand to gain little if anything personally, as the logic of collective action implies.¹³¹ Also, the costs associated with environmental activism can be very high, given the often violent and repressive reactions of authorities and vested interests, as reflected in the growing number of activists who pay with their lives for their protection efforts.¹³² Rather than dismissing environmentalists as a self-serving bunch, in line with dominant economic theory which assumes that people only act based on self-interest, it makes more sense

¹²⁷ Bo, Sun (2011), "A Literature Survey on Environmental Kuznets Curve", *Energy Procedia*, Vol.5, 1322-1325.

¹²⁸ Morrison, Denton and Riley Dunlap (1986), "Environmentalism and Elitism: A Conceptual and Empirical Analysis", *Environmental Management*, Vol.10, No.5, 581-589; Beaudonnet, Laurie and Pavlos Vasilopoulos (2014), "Green Parties in Hard Times: The Case of EELV in the 2012 French Presidential Election", *Party Politics*, Vol.20, No.2, 275-285; Rootes, Chris, "Environmental Consciousness, Institutional Structures and Political Competition in the Formation and Development of Green Parties"; Eckersley, Robyn (1989), "Green Politics and the New Class: Selfishness or Virtue?", *Political Studies*, Vol.37, 205-233.

¹²⁹ Muller-Rommel, Ferdinand (1985), "New Social Movements and Smaller Parties: A Comparative Perspective", *West European Politics*, Vol.8, 41-54; Uekötter, Frank (2014, e-book ed.), *The Greenest Nation? A New History of German Environmentalism*. The MIT Press, 169.

¹³⁰ Eckersley, Robyn (1989), "Green Politics and the New Class: Selfishness or Virtue?".

¹³¹ Olson, Mancur (1965), *The Logic of Collective Action. Public Goods and the Theory of Groups*. Cambridge, Massachusetts: Harvard University Press.

¹³² The Guardian (2017), The Defenders, <https://www.theguardian.com/environment/ng-interactive/2017/jul/13/the-defenders-tracker> (Accessed: 3 October 2017).

to look at these people as genuinely driven by concern about issues that pose real threats to societies or the world as a whole.

Moreover, the argument that people only develop environmental concerns after they have reached a comfortable level of income has also been contested. Research on environmental activism in low-income countries has shown that environmental advocacy is not confined to countries in the North, but is prevalent also in the South.¹³³ Based on Gallup surveys, it has been argued that people in low-income countries are at least as concerned about the environment as people in high-income countries.¹³⁴ Other researchers have found that the statistical evidence on which the environmental Kuznets curve is based is not robust, and may at most apply to only some pollutants.¹³⁵ These findings contradict the claim that environmental values are only important to the rich or the middle class.

But the specific concerns of people in low-income countries differ to a large extent from those in the North, a reflection of both the kind of environmental issues people face and their direct dependence on local resources for their livelihood. Environmental action in low-income countries is often triggered by developments that pose an immediate threat to survival rather than by global or long-term concerns.¹³⁶ Given their low income and poor living conditions, it is not surprising that people in low-income countries give priority to local rather than global environmental problems, and are less willing to pay for environmental protection.¹³⁷ Notwithstanding this, Dunlap found that people in rich and poor countries do not seem to differ much in their assessment of the causes of environmental problems (notably pointing at business and industry practices) and that they agree that stronger laws and action are

¹³³ Esteva, Gustavo and Mdhuri Prakash (1988), *Grassroots Post-Modernism. Remaking the Soil of Cultures*. London: Zed Books; Haynes, Jeff (1999), "Power, Politics and Environmental Movements in the Third World", *Environmental Politics*, Vol.8, No.1, 222-242; Taylor, Bron, Hadsell, Heidi, Lorentzen, Lois, Scarce, Rik (1993), "Grass-Roots Resistance: The Emergence of Popular Environmental Movements in Less Affluent Countries", in S. Kamieniecki (ed.) *Environmental Politics in the International Arena*, 69-89.

¹³⁴ Dunlap, Riley E. (1997), "International Opinion at the Century's End: Public Attitudes toward Environmental Issues", in L. K. Caldwell and R. V. Bartlett (eds.), *Environmental Policy. Transnational Issues and National Trends*, 201-224; Dunlap, Riley E. and Richard York (2012), "The Globalisation of Environmental Concern", in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 89-111.

¹³⁵ Stern, David I. (2004), "The Rise and Fall of the Environmental Kuznets Curve", *World Development*, Vol.32, No.8, 1419-1439.

¹³⁶ Haynes, Jeff (1999), "Power, Politics and Environmental Movements in the Third World"; Esteva, Gustavo and Mdhuri Prakash, *Grassroots Post-Modernism. Remaking the Soil of Cultures*; Taylor, Bron, Hadsell, Heidi, Lorentzen, Lois, Scarce, Rik, "Grass-Roots Resistance: The Emergence of Popular Environmental Movements in Less Affluent Countries"; Martinez-Alier, Joan (2002), *The Environmentalism of the Poor. A Study of Ecological Conflicts and Valuation*. Cheltenham, UK: Edward Elgar.

¹³⁷ Dalton, Russell and Robert Rohrschneider (2015), "Environmental Concerns During a Time of Duress: An Introduction", *Environmental Politics*, Vol.24, No.4, 523-529.

needed to address these, also at the international level.¹³⁸ Research on “key decision-makers” in seven countries of the Global South finds that environmentalism has become a “truly international” issue, and that also in these countries there is a growing awareness among elites and populations of the international and global dimensions of environmental problems, transcending local issues.¹³⁹

Although the claim that concern about the environment is confined to the rich or middle class is contestable, research based on Inglehart’s theory confirms that in advanced industrial societies, over three to four decades, a significant shift has occurred towards post-material values. In the early 1970s, in six Western European countries, materialists were four times as numerous as post-materialists, but by 2006, post-materialists slightly outnumbered materialists. In the United States, materialists were three times as numerous in the early 1970s, but post-materialists were twice as numerous as materialists by 2006.¹⁴⁰ Also, research indicates that value change is not confined to the Western world; it is also occurring in many so-called less developed countries, albeit at different rates, while cultural differences remain significant.¹⁴¹

However, what these changes mean for people’s thinking about the environment is unclear. Although a shift towards post-materialist values may suggest that people attach greater importance to the environment, the broader cultural shift that has been observed may also imply that people now assign priority to their self-development and personal happiness (self-expression values) and that they “no longer feel committed to the public case”.¹⁴² On their own, these surveys do not provide much information about the views that people hold on the environment, or about the relative importance of environmental values in their worldviews and the possible changes therein.

Riley Dunlop’s work on the notion of a New Environmental (or Ecological) Paradigm (NEP) addresses these questions more directly. The NEP scale that he developed (three versions over time), aims to gauge explicitly whether and to what extent people’s support for environmental values can be seen to constitute a new way of looking at the environment, including a recognition of its complexity and vulnerability and of environmental limits, and a rejection of an anthropocentric world

¹³⁸ Dunlap, Riley E., “International Opinion at the Century’s End: Public Attitudes toward Environmental Issues”; Dunlap, Riley E. (2008), “The New Environmental Paradigm Scale: From Marginality to Worldwide Use”, *The Journal of Environmental Education*, Vol.40, No.1, 3-18.

¹³⁹ Peritore, N. Patrick (1999), *Third World Environmentalism. Case Studies from the Global South*. Gainesville: University Press of Florida, 30-36; Dunlap, Riley E. and Richard York, “The Globalisation of Environmental Concern”.

¹⁴⁰ Inglehart, Ronald (2008), “Changing Values among Western Publics from 1970 to 2006”, 136-137.

¹⁴¹ Halman, Loek, *et al.* (2008), *Changing Values and Beliefs in 85 Countries: Trends from the Values Surveys from 1981 to 2004*. Leiden; Boston: Brill. ; Li, Liman Man Wai and Michael Harris Bond (2010), “Value Change: Analyzing National Change in Citizen Secularism across Four Time Periods in the World Values Survey”, *The Social Science Journal*, Vol.47, No.2, 294-306.

¹⁴² Halman, Loek, *et al.*, *Changing Values and Beliefs in 85 Countries: Trends from the Values Surveys from 1981 to 2004*, 5.

view.¹⁴³ Based on the view that the dominant way of thinking, referred to as the Dominant Social Paradigm (DSP), is unsustainable, a stance held by a range of environmental thinkers,¹⁴⁴ and that there is growing support in societies for that view, the NEP scale has been used in research to assess whether such a change is underway.¹⁴⁵

The findings from this research are not clear-cut. In a preliminary study, Dunlap and Van Liere¹⁴⁶ found a “surprising” level of support among respondents in Washington State (USA), with majorities supporting eight out of the twelve NEP indicators. A meta-analysis of 69 studies using different versions of the NEP scale in 36 countries, some two-thirds of which in North America and Europe, indicated variable results depending on the scale and questions used.¹⁴⁷ Although studies provide evidence that support for the NEP has grown, the level of support varies significantly between countries and groups.¹⁴⁸ However, as different versions of the NEP framework have been developed and used, and the responses to the different dimensions or facets of the NEP have been mixed and inconsistent, and results have been influenced by differences in (cultural) contexts, analysts have cautioned against seeing the NEP framework as a unidimensional scale for measuring a shift towards an environmental worldview.¹⁴⁹

¹⁴³ Dunlap, Riley E. and Kent D. Van Liere (1978), “The ‘New Environmental Paradigm’”, *Journal of Environmental Education*, Vol.9, No.4, 10-19; Dunlap, Riley E., et al. (2000), “New Trends in Measuring Environmental Attitudes: Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale”, *Journal of Social Issues*, Vol.56, No.3, 425-442.

¹⁴⁴ Pirages, Dennis and Paul R. Ehrlich (1973), *Ark II: Social Response to Environmental Imperatives*. San Francisco: W. H. Freeman; Catton, William R. (1980), *Overshoot, the Ecological Basis of Revolutionary Change*. Urbana: University of Illinois Press; Cotgrove, Stephen and Andrew Duff (1981), “Environmentalism, Values and Social Change”, *British Journal of Sociology*, Vol.32, No.1, 92-110.

¹⁴⁵ Dunlap, Riley E. (2008), “The New Environmental Paradigm Scale: From Marginality to Worldwide Use”; Dunlap, Riley E. and Richard York, “The Globalisation of Environmental Concern”; Hawcroft, Lucy J. and Taciano L. Milfont (2010), “The Use (and Abuse) of the New Environmental Paradigm Scale over the Last 30 Years: A Meta-Analysis”, *Journal of Environmental Psychology*, Vol.30, No.2, 143-158.

¹⁴⁶ Dunlap, Riley E. and Kent D. Van Liere (1978), “The ‘New Environmental Paradigm’”.

¹⁴⁷ Hawcroft, Lucy J. and Taciano L. Milfont (2010), “The Use (and Abuse) of the New Environmental Paradigm Scale over the Last 30 Years: A Meta-Analysis”.

¹⁴⁸ Erdogan, Nazmiye (2009), “Testing the New Ecological Paradigm Scale: Turkish Case”, *African Journal of Agricultural Research* Vol.4, No.10, 1023-1031; Nistor, Laura (2012), “The New Environmental Paradigm (NEP) in Romania. Some Empirical Findings”, *Sociologie Romaneasca*, Vol.10, No.4, 75-98.

¹⁴⁹ Erdogan, Nazmiye (2009), “Testing the New Ecological Paradigm Scale: Turkish Case”; Hawcroft, Lucy J. and Taciano L. Milfont (2010), “The Use (and Abuse) of the New Environmental Paradigm Scale over the Last 30 Years: A Meta-Analysis”; Hodis, D. Denis and N. Pereira Luis (2014), “Measuring the Level of Endorsement of the New Environmental Paradigm: A Transnational Study”, *Dos Algarves: A Multidisciplinary e-Journal*, No.23, 4-26; Pienaar, Elizabeth F., et al. (2013), “Are Environmental Attitudes Influenced by Survey Context? An Investigation of the Context Dependency of the New Ecological Paradigm (NEP) Scale”, *Social Science Research*, Vol.42, No.6, 1542-1554.

Hence, we are not in a position to draw firm conclusions about the extent to which a new environmental paradigm has replaced the Dominant Social Paradigm, even in so-called developed countries.¹⁵⁰ The mixed responses to the various facets of the NEP scale seem to indicate that most people do not have the kind of coherent worldview that the NEP depicts. Although this is seen by some as a weakness of the NEP framework, indicating the need for a framework that is capable of capturing more coherent and inclusive worldviews,¹⁵¹ it seems plausible that inconsistency in worldviews is a common or even inevitable fact of life. Many if not all people hold values that may not be (fully) compatible and that can get into conflict with each other, especially in particular contexts and circumstances. This is particularly likely when people are starting to assign (greater) importance to new values, such as with growing environmental awareness. The question is therefore not so much whether (most) people in societies and governments have embraced a new environmentally coherent worldview, but what relative weight or importance they assign to the environmental values that they hold vis-à-vis other values, and in what circumstances. In that context, it makes sense to classify people's environmental views in categories like "pro-ecological, mid-ecological and anti-ecological".¹⁵²

Although the NEP studies do not provide conclusive evidence that people across the world have fully embraced the New Environmental (or Ecological) Paradigm, they do support three conclusions: first, that support for the NEP is generally higher among students (the well-educated) and white-collar workers, and lower among blue-collar workers;¹⁵³ second, in the United States, the NEP seems far from having replaced the Dominant Social Paradigm, even though support for the former has been growing,¹⁵⁴ a finding that may seem contradictory to the value shift in that country observed by Inglehart, noted above; third, that concern about the environment is not confined to high-income countries but is also prevalent (if not stronger) in low-income countries, a finding which also contradicts Inglehart's post-materialist theory.¹⁵⁵

The latter point is worth elaborating upon. From its beginnings, the modern environmental movement has recognised the importance of combining local action with an awareness of the global nature of the challenge, as expressed in the slogan "Think globally, act locally". Environmental thinking around the world has been

¹⁵⁰ Hawcroft, Lucy J. and Taciano L. Milfont (2010), "The Use (and Abuse) of the New Environmental Paradigm Scale over the Last 30 Years: A Meta-Analysis"; Hodis, D. Denis and N. Pereira Luis (2014), "Measuring the Level of Endorsement of the New Environmental Paradigm: A Transnational Study".

¹⁵¹ Hedlund-de Witt, Annick (2012), "Exploring Worldviews and Their Relationships to Sustainable Lifestyles: Towards a New Conceptual and Methodological Approach", *Ecological Economics*, Vol.84, 74-83.

¹⁵² Thomson, J. (2013), *New Ecological Paradigm Survey 2008: Analysis of NEP Results* Hamilton: Waikato Regional Council.

¹⁵³ Dunlap, Riley E. and Kent D. Van Liere (1978), "The 'New Environmental Paradigm'"; Hawcroft, Lucy J. and Taciano L. Milfont (2010), "The Use (and Abuse) of the New Environmental Paradigm Scale over the Last 30 Years: A Meta-Analysis".

¹⁵⁴ Dunlap, Riley E. (2008), "The New Environmental Paradigm Scale: From Marginality to Worldwide Use", 13-14.

¹⁵⁵ Dunlap, Riley E. and Richard York, "The Globalisation of Environmental Concern".

inspired and influenced by a shared literature and informed by a global exchange of ideas, views, and experiences. Environmental activism at the global level, supported by a growing number of supporters drawn from many countries,¹⁵⁶ arguably is a cornerstone in the development of a global civil society¹⁵⁷ and a source and sign of an emergent global environmental ethic. As the global nature of environmental problems and destruction becomes increasingly apparent, people from around the world are expressing similar views about the need for humans to respect the environment, whatever other belief systems, religious or non-religious, they adhere to.¹⁵⁸ This phenomenon, which already provides the basis for widespread condemnation of countries and governments that openly flout their environmental responsibilities, offers hope for more meaningful environmental integration in the coming decades. While we should not be starry-eyed about the emergence of a global civil society, which is neither a unified cosmopolitan actor nor exempt from the influence of dominant political-economic forces,¹⁵⁹ it constitutes an increasingly important source of global agency for environmental protection.

While this brief discussion supports the view that environmental values have gained public support around the world, and that many people have incorporated such values into their worldviews, as yet there is little evidence that these values have gained priority status for most people, let alone for governments. This begs the question of what factors stand in the way of the greening of dominant worldviews or ideologies.

The battle for the hearts and minds – the role of agency and power

Why certain worldviews or ideologies are, become or remain dominant is a question that cannot simply be answered based on tradition or on what sociologists call a process of socialisation, the passing on of values, norms, and beliefs from one generation to the next. While this might have been a satisfactory explanation for the continuity of culture in relatively stable, traditional, or indigenous societies, we must not ignore the role and importance of agency and power. Social structures, including mental schemas like worldviews and ideologies, always provide some scope for

¹⁵⁶ For instance, apart from Greenpeace, Friends of the Earth and other environmental groups that operate a global network, AVAAZ is an internet-petition-based organisation with more than 45 million supporters world-wide that wages major global campaigns on (sometimes local) environmental and social justice issues, often successfully. AVAAZ - The world in action (2017), <https://secure.avaaz.org/page/en/> (Accessed: 3 October 2017).

¹⁵⁷ Lipschutz, R. (1996), "Governing Nature: Global Change, Social Complexity and Environmental Management", in R. Lipschutz (ed.) *Global Civil Society and Global Environmental Governance. The Politics of Nature from Place to Planet*, 19-77.

¹⁵⁸ The papal encyclical letter *Laudato Si'* is just one example of the extent to which an environmental ethic has infused a dominant belief system. See The Holy See, *Encyclical Letter Laudato Si' of the Holy Father Francis on Care for Our Common Home*.

¹⁵⁹ Pasha, M. K. and D. L. Blaney (1998), "Elusive Paradise: The Promise and Peril of Global Civil Society", *Alternatives-Social Transformation and Humane Governance*, Vol.23, No.4, 417-450.

interpretation by individuals (agents or actors) that, dependent on the social position and power resources of the actor(s) involved, can lead to change.¹⁶⁰

While, throughout history, social change in societies may have been slow, and dominant worldviews remained relatively stable for hundreds of years, in Europe, it sped up in the late Middle Ages with the development of science and technology, a process in which individual agency played a significant role.¹⁶¹ The pace of change increased further with the process of modernisation and industrialisation during the last few centuries. In the past fifty years, rather than showing signs of abatement, technological and social change has become so fast, and is happening on such a scale that, as Toffler argued, it threatens to overwhelm people and societies.¹⁶² On a similar note, Ulrich Beck argued in the *Risk Society*¹⁶³ that science and technology now develop largely out of control, producing changes and risks that force individuals to continuously and reflexively adapt and find their way through life, as traditional social ties, values and norms are no longer able to provide guidance. The processes of individualisation and disintegration (of social structures) create severe pressures on societies, which are at risk of losing their cohesiveness.

It is in this context of the erosion of dominant traditional worldviews, rapid social change, and social differentiation that new worldviews and ideologies have emerged, as discussed earlier in this chapter, and began to compete with the traditionally dominant worldview as well as with each other. In the early 1500s, the dominance of the Catholic Church was challenged by newly established Christian (protestant) churches, leading to the European religious wars of the 16th and 17th centuries. The rise of liberal philosophy and ideology, linked with the emerging commercial class, posed a challenge to monarchs and the ideology of the divine right of kings which legitimised their rule. Industrialisation and the creation of the working class provided the basis for the development and rise of socialism and communism. Within these competing worldviews and ideologies, different streams or branches developed, such as anarchism, social democracy, and corporatism (the latter developed within Catholicism largely in response to the threat posed by the attraction of socialism to catholic workers). These worldviews and ideologies, supported by different but partially overlapping social bases, fiercely competed for political power and influence, and largely defined the lines on the political battlefield in many countries until the 1980s.

Neoliberalism, already on the rise from the 1970s and gaining momentum during the 1980s, as reflected in the conversion of political leaders in the United States, the United Kingdom, and New Zealand, became a globally dominant belief system during the 1990s, significantly assisted by the collapse of the Soviet Union in 1989 and the declared failure of socialism and communism as alternative ideologies. Political

¹⁶⁰ Sewell, William H., Jr. (1992), "A Theory of Structure: Duality, Agency, and Transformation".

¹⁶¹ Koestler, Arthur, *The Sleepwalkers: A History of Man's Changing Vision of the Universe*.

¹⁶² Toffler, Alvin, *Future Shock*; Toffler, Alvin (1981), *The Third Wave*. London: Pan in association with Collins; Toffler, Alvin (1990), *Powershift: Knowledge, Wealth, and Violence at the Edge of the 21st Century*. New York: Bantam Books.

¹⁶³ Beck, Ulrich, *Risk Society. Towards a New Modernity*.

leaders and leading academics proclaimed the end of ideology, as capitalism and liberal democracy were argued to have proven their superiority and attractiveness: there were no (better) alternatives. This declared worldwide victory of neoliberalism, then, arguably marked the end of the battle for the hearts and minds of people and societies. However, nothing can be further from the truth.

As discussed in the preceding section, neoliberalism has increasingly come under critique for its unrealistic assumptions and distorted view of the world, its economic failings, and its negative social and environmental consequences. Yet, despite its proclaimed death after the financial-economic crisis of 2008, it has continued to hold most governments around the world in its grip. This may seem surprising, but it is not when looked at from a political-economic perspective and when the role of agency and power is being considered. Neoliberal ideology did not become dominant based on the strengths of its ideas, although these were vigorously pushed by some academics,¹⁶⁴ but foremost because of the (notably economic) power of those whose interests it served, and still serves.¹⁶⁵ That power, concentrated in large corporations and a rapidly expanding class of billionaires, and firmly entrenched in political-economic institutions and the media, is not readily broken up by relatively much less powerful dissenting voices. This is even less likely if those voices do not sing from the same script or do not even have an alternative script that can capture the hearts and minds of people. Developing an alternative belief system (or “story”) that has credibility and widespread appeal is a crucial condition for replacing a dominant paradigm.¹⁶⁶

However, it is not enough. Changing a hegemonic worldview or ideology requires more than putting forward a credible alternative. Fundamentally, which worldview dominates (guides governments) is a matter of agency and power. Cognitive power, as discussed in Chapter 3, involves knowledge, understanding and information that enables a person or group to figure out what is needed to give effect to one’s choice(s), and what works or is likely to work. It includes the ability to get under the skin of people or to penetrate their minds. But the degree of cognitive power is interdependent with the other forms of power that actors have at their disposal, in particular, economic power, social power, and institutional power. But individual power (associated with, for instance, charismatic leaders), and physical power (the use of force to, for instance, strike down mass protests and incarcerate opposition leaders), can also play an important role in changing or upholding a dominant belief system, especially if this system is strongly connected with the interests of the ruling political-economic regimes.

¹⁶⁴ MacLean, Nancy (2017, e-book ed.), *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America*. Scribe Publications.

¹⁶⁵ Mayer, Jane (2016), *Dark Money: The Hidden History of the Billionaires Behind the Rise of the Radical Right*. New York: Doubleday; Klein, Naomi, *The Shock Doctrine: The Rise of Disaster Capitalism*.

¹⁶⁶ Klein, Naomi (2017), *No Is Not Enough: Defeating the New Shock Politics*. Great Britain: Allen Lane; Monbiot, George (2017), *Out of the Wreckage. A New Politics for an Age of Crisis*. London and New York: Verso.

In this context, it is important to distinguish between dominant and hegemonic belief systems. When a belief system is dominant, this does not necessarily imply that it is supported by a majority of the people, and hence enjoys legitimacy. Dominance means that it is and remains the main ideology that guides governments in their policy and decision-making, even if a majority of the people do not support it. Contesting the legitimacy of a dominant belief system and building a broad political coalition and support basis (a "historical block") for an alternative hegemonic ideology was seen by Gramsci as a crucial step towards changing a political-economic regime.¹⁶⁷ But, as a Marxist, Gramsci did not ignore the importance of economic power, notably that of the owners of the means of production in a capitalist system, which enables them to make decisions that directly affect the lives of many people.

The dependence, in capitalist systems, of most people on wage labour to provide for their needs makes that they are held captive by the system, materially as well as psychologically. As a consequence, many people have bought into the argument that a well-functioning economy, measured in terms of economic growth, is also in their individual interest. So, although the rise to prominence of neoliberal ideology has been foremost a top-down process, imposed by governments and international institutions often against the opposition of workers and trade unions, its hegemony has been buttressed by the view that neoliberal reforms and policies were essential to safeguard the economy and the future economic well-being of citizens.

Moreover, in many Western countries, the "glorious 30 years" following WWII had led to steadily increasing incomes, prosperity, consumerism and materialism. Continuously promoted by ubiquitous advertising, consumerism propagates a hedonistic ideology that seeks the pursuit of pleasure, especially through the consumption of an ever-changing flow of goods and entertainment services, as the main purpose of life. Although producing ephemeral states of happiness or, more accurately, superficial lifestyles and shaky social identities, consumerism holds masses of people in its grip.¹⁶⁸ Pushed by business interests, materialist and consumerist ideology is, of course, the counterpart of productivism and/or industrialism, complementing the growth imperative that is inherent to capitalism. Commonly depicted as carrying co- or even the main responsibility for the ever-increasing demand on resources and environmental destruction,¹⁶⁹ consumerism serves the purpose of diverting attention away from the systemic imperative of economic growth that is inherent to capitalism.

The power of business interests to influence public opinion and government thinking on issues has been exerted also by other means, including setting up and sponsoring citizens' groups to seed or spread public dissent, and by using the public

¹⁶⁷ Jones, Steve (2006), *Antonio Gramsci*. London and New York: Routledge, Chapter 3; Gill, Stephen (1991), "Historical Materialism, Gramsci, and International Political Economy", in C. N. Murphy and R. Tooze (eds.), *The New International Political Economy*, 51-75.

¹⁶⁸ Hamilton, Clive (2003), *Growth Fetish*. Crows Nest, NSW (Australia): Allen & Unwin.

¹⁶⁹ Dauvergne, Peter (2008), *The Shadows of Consumption: Consequences for the Global Environment*. Cambridge, Mass.: MIT Press.

relations industry.¹⁷⁰ Perhaps most effectively, businesses influence the public, media and governments not by explicitly taking an anti-environmental stance, but by promoting themselves as environmentally responsible and committed “corporate citizens” that do their best to address environmental problems and promote sustainability. While some of the efforts they undertake to demonstrate their green credentials, including the greening of production processes and products, may make some difference in terms of mitigating emissions/pollution, energy use, and waste generation, overall, there are good reasons for being sceptical about these commitments and their results. For instance, the growing acceptance of corporate social responsibility (CSR) by businesses in many countries is better regarded as a form of “privatisation of environmental governance” and self-regulation aimed at forestalling the adoption of more stringent regulation by governments, while also enhancing their public environmental image and possibly gaining a competitive advantage, increasingly on a global scale.¹⁷¹

The media arguably play the most central role in the battle for the hearts and minds of people, also over the interpretation of the environmental challenge. In this respect, there is no doubt that the attention given to environmental issues in the media has been significantly increased to the point that such issues (notably climate change) have been firmly put on the public agenda. In part, this can be attributed to the efforts of the environmental movement. Environmental advocates have control over some media resources (their own publications, websites) and have been quite skilful in using a wide range of media strategically to get their messages across (Greenpeace has often been referred to as exemplary in this respect). They have been assisted in this by environmental incidents, accidents and seriously deteriorating environmental conditions and situations that lend themselves to being graphically depicted and sensationalised, appealing as much if not more to the hearts (emotions) of people as to their minds. Thus, access to the media has been one of the main sources of power that, arguably, has been used effectively by environmentalists.

However, one can question the effectiveness of this form of cognitive power in advancing a more holistic and deeper understanding of the environmental challenge among the wider public, for several reasons. First, the media campaigns of environmental groups, and by far most environmental reporting in the media, are issue focused. This is perhaps understandable or even necessary from a political perspective, as mobilising public support and demand for government action on environmental issues may only be possible by focusing on specific (and arguably emotive) issues. Rare is the newspaper article that goes beyond that and that describes the broad

¹⁷⁰ Beder, Sharon (1997; 2000), *Global Spin. The Corporate Assault on Environmentalism*. Melbourne: Scribe Publications; Hager, Nicky and Bob Burton (1999), *Secrets and Lies. The Anatomy of an Anti-Environmental PR Campaign*. Nelson (N.Z.): Craig Potton Publishing.

¹⁷¹ Gallagher, Deborah Rigling and Erika Weinthal (2012), “Business-State Relations and the Environment: The Evolving Role of Corporate Social Responsibility”, in P. F. Steinberg and S. D. VanDeveer (eds.), *Comparative Environmental Politics. Theory, Practice and Prospects*, 143-169; Clapp, Jennifer (2005), “The Privatization of Global Governance: ISO 14000 and the Developing World”, in D. L. Levy and P. J. Newell (eds.), *The Business of Global Environmental Governance*, 223-248.

nature of the challenge, let alone that delves into the underlying causes or drivers. It is even more difficult to identify a mainstream newspaper, radio station or tv channel that systematically assigns priority to environmental reporting and that links events and developments to an overarching framework of environmental imperatives. Thus, although growing media attention to environmental issues may have contributed to a general rise in public awareness that the environment is under threat, it has done little in the way of impressing upon governments the need for the broad and integrated approach that I have discussed in Chapter 1.

Second, although reporting on environmental issues may have increased across the media, there is no sign that it has displaced, or is displacing, the economy as a priority. This is reflected in the daily or continuous attention given by the mainstream media to the state of the economy, such as movements in the share, commodity and capital markets, and statistics on economic growth, exports, unemployment, and fluctuations in the level of confidence or optimism about the economy held by consumers, businesses, and investors. Reporting on this front indicates that the existing (capitalist) economic system and paradigm continue to be taken for granted and go virtually unchallenged in the media. To the extent that links are being made between environmental issues and economic developments or activities, these are portrayed, at most, as new opportunities for “green economic growth” by switching investments towards “green” technologies.

Third, this portrayal (re-interpretation) of the environmental challenge by the media is perhaps not surprising, as most media are owned and run as private businesses that are themselves dependent on expansion and economic growth in the competitive media market. Advertising revenue is the lifeblood of most media, and their survival depends heavily on their ability to attract advertisers by offering content that attracts potential consumers. Although some of the media may still be government-owned, this does not automatically mean that these are free from advertising and unaffected by the ratings wars, or that they are more inclined to raise questions about capitalism, economic growth, materialism and consumerism as the sources or roots of the environmental challenge. Publicly owned media are not by definition objective and independent and can be subject to the political power and influence of governments as well as economic elites, a concern that can be raised about the media in “developed” as well as “developing” countries.¹⁷² Hence, what is reported by the media, and how, is influenced by political-economic factors or filters. As Chomsky has argued, this means that media reporting is generally confined to issues and views that are considered to be “safe” and that pose no threat to the establishment. He argues that the belief that the mainstream media play an important role in a functioning democracy, rather than in spreading propaganda, is a “necessary illusion” to keep the public passive and to maintain control by the elites.¹⁷³ Chomsky’s

¹⁷² For data on media ownership and some of the concerns raised by the ongoing concentration of that ownership see Noam, Eli M. and the International Media Concentration Collaboration (2016), *Who Owns the World's Media? Media Concentration and Ownership around the World*. Oxford: Oxford University Press, especially Chapter 38.

¹⁷³ Chomsky, Noam (1989), *Necessary Illusions: Thought Control in Democratic Societies*. Boston, MA: South End Press.

take on the role of the media may sound extreme but has been increasingly supported by developments, notably the concentration of media ownership and control, the decline in journalistic standards, investigative journalism and quality of reporting, and the emphasis on sensationalism and entertainment value (ratings) to maintain or increase market share, advertising and profitability.¹⁷⁴

The rise of the internet and, more recently, social media (Facebook, Twitter and others) was initially touted as positive for democracy by providing alternative sources of information and direct forms of interaction and debate between people, even on a global scale.¹⁷⁵ But developments in this area have also given rise to concern. Media giants like Google/Alphabet, Facebook/Meta and Microsoft use algorithms and a raft of sophisticated tools to collect detailed data at the level of individuals (allegedly to provide customers with better “personalised services”), which allows them to accurately predict their behaviour and sell that information for commercial and political purposes.¹⁷⁶ The provision of these personalised services also leads to targeted messaging and search results that are in line with an individual’s interests, creating “echo chambers” or “net bubbles”¹⁷⁷ that limit people’s exposure to information and views that they are not familiar with and that might challenge their established opinions. This may also involve controlled access to websites with alternative and critical (including socialist) worldviews.¹⁷⁸ Similarly, “net neutrality”, which requires internet providers to not discriminate against certain content or websites, is under threat from commercial interests that want to maximise their financial returns by offering packages that split access to the internet.¹⁷⁹ Authoritarian governments control (and deny) access to internet content that they deem undesirable.¹⁸⁰ Perhaps even more so than the traditional media (newspapers, radio

¹⁷⁴ Postman, Neil (1985), *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*. New York: Viking; McChesney, Robert W. (2014), *Blowing the Roof Off the Twenty-First Century: Media, Politics, and the Struggle for Post-Capitalist Democracy*. New York: Monthly Review Press; McChesney, Robert W. (1999), *Rich Media, Poor Democracy: Communication Politics in Dubious Times*. Urbana: University of Illinois Press; Edwards, David and David Cromwell (2018), *Propaganda Blitz. How the Corporate Media Distort Reality*. London: Pluto Press.

¹⁷⁵ Benson, Rodney (2017), “US Media: The Bottom Line”, *Le Monde Diplomatique (English edition)*, September.

¹⁷⁶ Zuboff, Shoshana (2019), *The Age of Surveillance Capitalism*. London: Profile Books Ltd.

¹⁷⁷ Clark, Jessica and Tracy Van Slyke (2010), *Beyond the Echo Chamber Reshaping Politics through Networked Progressive Media*. New York: New Press.

¹⁷⁸ Popularresistance.org (2017), Google’s New Search Protocol Restricting Access to Leading Leftist Web Sites, <https://popularresistance.org/googles-new-search-protocol-is-restricting-access-to-13-leading-leftist-web-sites/> (Accessed: 29 November 2017).

¹⁷⁹ Bell, Emily (2017), “Why We Should Be Wary of Ending Net Neutrality”, *The Guardian*, 26 November.

¹⁸⁰ Haas, Benjamin (2017), “China Moves to Block Internet VPNs from 2018”, *The Guardian*, 11 July; Browne, Ryan (2017), Russia Follows China in Tightening Internet Restrictions, Raising Fresh Censorship Concerns, CNBC, <https://www.cnbc.com/2017/07/31/russia-follows-china-in-vpn-clampdown-raising-censorship-concerns.html> (Accessed: 28 November 2017); Ellis-Petersen, Hannah (2020), “Indian Move to Regulate Digital Media Raises Censorship Fears”, *The Guardian*, 11 November. It must be noted that the practice of suppressing websites has also been used by liberal-democratic governments, for instance, as a measure to combat “misinformation”

and television), the new media are effective means of distracting and manipulating people, eroding their ability to concentrate on important issues, and hence weakening democracy.¹⁸¹ The internet and social media appear, even more so than the mainstream media, prone to the spread of "fake news", the deliberate spread of false news used by groups and governments to sow confusion and spread political cynicism.¹⁸²

On the positive side, the internet, including the social media, does provide unprecedented opportunities for gathering information, networking, and political mobilisation. It has played and still plays, a significant role in mobilising political protests and actions in countries around the world, including in the Arab world (the "Arab Spring"), Hong Kong, and Belarus, and thus provides a crucial means for challenging established political orders, enhancing democracy, as well as for strengthening environmental activism. But it is exactly that potential that has provoked vested political-economic interests to develop and use tools to exercise increasingly comprehensive and intrusive forms of surveillance, to manipulate and distract people, sow division, and control access as well as content. Thus, the internet is a double-edged sword that can be used to enhance democracy, but also for non-democratic and potentially totalitarian purposes, as illustrated by developments and practices in the United States as well as China.¹⁸³ It is important to keep in mind that ownership and control of the mainstream media lie with businesses and governments, so the cognitive power of environmental advocates in this realm is circumscribed by those who wield economic and political-institutional power.

Similarly, the role of science and scientists in influencing or shaping public interpretations and views on environmental issues is subject to power and agency. The power of business interests in the realm of science has been revealed by various researchers, for instance, Oreskes and Conway¹⁸⁴ who have demonstrated how big corporations and other vested economic interests have used scientists and so-called think tanks to sow doubt among the public and governments about the damaging effects of their products and practices on people as well as the environment. By paying scientists to produce quasi-scientific reports (often on topics on which they are not experts), abusing the notion of scientific uncertainty,¹⁸⁵ combined with strategies to

about COVID-19. Control over the internet has become the terrain of a major battle, and possibly a decisive one, in the war over the hearts and minds of people.

¹⁸¹ Carr, Nicholas (2010), *The Shallows. What the Internet Is Doing to Our Brains*. New York, London: W.W. Norton; Lewis, Paul (2017), "Everyone Is Distracted. All of the Time", *Guardian Weekly*, Vol.197, No.21, 26-31.

¹⁸² Wikipedia (2017), Fake News Website, https://en.wikipedia.org/wiki/Fake_news_website (Accessed: 28 November 2017).

¹⁸³ Liang, Fan, *et al.* (2018), "Constructing a Data-Driven Society: China's Social Credit System as a State Surveillance Infrastructure", *Policy & Internet*, Vol.10, No.4, 415-453; Haas, Benjamin, "China Moves to Block Internet VPNs from 2018"; Zuboff, Shoshana, *The Age of Surveillance Capitalism.*, notably Chapter 12 and 13.

¹⁸⁴ Oreskes, Naomi and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*.

¹⁸⁵ Oreskes, Naomi (2004), "Science and Public Policy: What's Proof Got to Do with It?", *Environmental Science & Policy*, Vol.7, No.5, 369-383.

disseminate their views among the media and politicians, these interests have been able to get governments to postpone introducing (stricter) regulation, with the result that they have been able to continue their harmful practices for many more years. While the tobacco industry was an early leader in this respect, other industries, notably the fossil fuel industry, have also very effectively used this strategy to prevent governments (notably in the United States) from taking meaningful action on climate change.¹⁸⁶ For many years, business interests have been funding climate denial groups, sowing public confusion about the extent to which scientists agree on the issue and spreading misinformation about the costs of taking effective action.¹⁸⁷

At the same time, businesses often try to discredit environmental positions or solutions that may have the potential to affect their profits ("bottom line") as irresponsible, thus marginalising environmental advocates that seek more radical and effective measures. By contrast, perhaps the most effective and influential way businesses advance their interests is by promoting the idea that environmental problems can be solved by technological means. This view, a central tenet also of notions like ecological modernisation¹⁸⁸ and *Natural Capitalism*,¹⁸⁹ appears to have become the default position of more environmentally committed governments but has also gained widespread acceptance among the public and the environmental movement. The popularity of this belief is not surprising as it depoliticises environmental issues, turning them into new opportunities for development, investment and profits while soothing the public with the idea that there is no need for sacrificing high-consumption lifestyles: a real "win-win-win" solution for governments, businesses and the public at large.¹⁹⁰ But while it is plausible that science and technology need to play an important role in a transformation towards sustainable production and consumption, this role must be circumscribed by ecological, socio-cultural, ethical, and political (democratic) considerations, not based on narrow and naïve technocratic optimism.¹⁹¹

These observations illustrate the limitations of the cognitive power of environmental advocates vis-à-vis that of governments and businesses, linked also to differences in economic and political-institutional power, issues that will be discussed in the following two chapters. Arguably, this leaves social power, defined as the ability to mobilise people (and their resources) based on social ties and/or perceived

¹⁸⁶ Klein, Naomi, *This Changes Everything: Capitalism Vs. The Climate*.

¹⁸⁷ Jacques, Peter J., et al. (2008), "The Organisation of Denial: Conservative Think Tanks and Environmental Scepticism", *Environmental Politics*, Vol.17, No.3, 349-385; Frumhoff, Peter C. and Naomi Oreskes (2015), "Fossil Fuel Firms Are Still Bankrolling Climate Denial Lobby Groups", *The Guardian*, 25 March; Goldenberg, Suzanne, "Secret Funding Helped Build Vast Network of Climate Denial Thinktanks".

¹⁸⁸ Milanez, Bruno and Ton Bührs (2007), "Marrying Strands of Ecological Modernisation: A Proposed Framework", *Environmental Politics*, Vol.16, No.4, 565-583.

¹⁸⁹ Hawken, Paul, et al., *Natural Capitalism: Creating the Next Industrial Revolution*.

¹⁹⁰ Revell, Andrea (2005), "Ecological Modernization in the UK: Rhetoric or Reality?", *European Environment*, Vol.15, No.6, 344-361; Smith, Richard A. (2015), *Green Capitalism: The God That Failed*. World Economics Association, 21,31,57, 59-60.

¹⁹¹ White, D. F. (2002), "A Green Industrial Revolution? - Sustainable Technological Innovation in a Global Age", *Environmental Politics*, Vol.11, No.2, 1-26.

common interests, as the most important source of power of the environmental movement. As discussed above, public support for environmental values has increased in many countries, and the environmental movement, in all its diversity, is a measure of the extent to which people assign importance or priority to such values. The ability of environmental advocates to tap into that growing support base, comprising many millions of people, constitutes a major source of social power, illustrated, among other, by large demonstrations, (consumer) boycotts, and petitions and campaigns organised at local, national, and global levels. This social base also forms a foundation for building economic power (from fund-raising and other forms of financial support) even though this is unlikely to match that of business. But as environmental pressures and problems are growing rather than diminishing, and many people around the world are (beginning to be) affected by such issues in their daily lives, the social power base of environmental advocates is likely to become stronger. Whether and how that growing social power base will be mobilised and used by environmental advocates to tilt their relative power vis-à-vis anti-environmental forces in their favour, remains to be seen.

As noted above, a significant hurdle in this respect is that environmental advocates rarely, if ever, form a united front on any issue. While they may share the same or similar concerns, coordinated action among environmental organisations is often hampered by disagreement over strategies, specific means and ends. For instance, despite virtually unanimous concern about climate change, common strategic action is marred by different views about targets, the use of policy instruments (emissions trading, carbon tax, other forms of regulation), the use of confrontational or cooperative strategies, and the extent to which climate change policy and action must fit in, or lead to, a process of more or less radical political, economic, social, and cultural change. Thus, the ability of environmental advocates to use their growing social power base to also increase their cognitive power depends in large measure on whether they can overcome their internal divisions. Calls have been made for concerted action by a broad coalition of environmental advocates but getting this off the ground in the form of an agreed set of priorities and a course of strategic action aimed at achieving these, remains a big challenge.¹⁹² A crucial question in that context is whether such broad coalitions can and should focus on bringing about meaningful changes in political-institutional and economic power. While I agree that fighting against proposals and developments is not enough, and that there is a need for putting forward positive, values-based, alternative views and programmes that can substitute for the prevailing neoliberal worldview and ideology, fundamental or systemic change can only be brought about if the balance of power linked to all forms and sources of power is tilted in favour of environmental advocates rather than economic actors. I will elaborate on this issue in Chapter 13.

Conclusion

This chapter has surveyed a range of socio-cultural factors that affect how the environmental challenge has been interpreted in societies and by governments. In

¹⁹² Klein, Naomi, *No Is Not Enough: Defeating the New Shock Politics*; Monbiot, George, *Out of the Wreckage. A New Politics for an Age of Crisis*.

particular, it has explored obstacles and conducive factors to interpretations of the environment that go beyond regarding it as a range of more or less disparate issues but as a deeper or bigger challenge that involves looking at the connections between environmental problems and their underlying drivers and causes. This is important because, as I have argued in Chapter 1, addressing environmental problems more effectively than has been the case thus far requires governments to take a comprehensive approach towards the integration of environmental considerations or imperatives in all the cognitive frameworks, policies, and institutions that significantly impact on the environment. This does not necessarily imply achieving societal consensus on what needs to be integrated and how, which is a highly unrealistic aim or expectation, given the existence of fundamental differences in values and interests in societies and the world. Rather, it means the adoption, by governments, of a cognitive framework or frameworks (worldview, ideology, economic and environmental management frameworks) that assign high importance or priority to environmental values.

Looking at religions that, in many countries, still enjoy support from a majority of people, we have found that, although most religions have begun to take on board the importance of environmental protection, these belief systems do not, by themselves, constitute major obstacles or conducive factors to cognitive environmental integration. All religions allow some scope for interpretation in their ontological perspectives for assigning importance to the environment relative to humans. Whether religions advance or obstruct environmental integration depends foremost on the views of, and choices made (agency) by their leaders and their followers. Although, in recent decades, a growing number of religious leaders and followers appear to have integrated environmental concerns, it is not clear that this has resulted in the greening of the main religions and churches, as such efforts have also provoked opposition from conservative corners. It is even less clear that the (possible) greening of religions and churches has had a significant effect on the environmental integration efforts of governments.

While religion may still be important to many people, secular belief systems arguably have gained a greater influence on the thinking, behaviour and practices of most people and governments. In particular, modernist beliefs in science and technology as forces of progress, combined with aspirations to (ever) higher living standards and levels of consumption, are key elements of a popular materialist ideology that serves and legitimises a dominant political-economic ideology that gives priority to economic growth. Although this materialism has provoked strong reactions from some radicalised religious groups, notably fundamentalist Islamists who associate it with decadent Western culture and lifestyles, people and governments in non-Western countries, including those with socialist governments, have not been immune to the idea that growing production and consumption equate to progress and greater happiness. Rather, it has become a core element of a global consumer culture cultivated by advertising and branding efforts of transnational corporations.

It has fallen to the environmental movement, including critical scientists, to point out the unsustainable nature of this dominant culture and worldview. From the 1960s, environmental thinkers and advocates have emphasised the need for adopting a

holistic and deeper view of the environment and the environmental challenge, questioning fundamental values and the dominant political and economic systems. Indications that, in many countries, a shift from materialist to non-materialist values, and growing support for a new environmental paradigm, is underway, have boosted optimism that the social support basis for fundamental change is growing. However, the efforts of the environmental vanguard, including green parties, to address environmental problems have been hampered by differences and disagreements over what is required to (effectively) meet the environmental challenge, and by insufficient power. And contrary to the view that the environmental challenge needs to be addressed holistically and at a deeper level, environmental activism has remained focused on separate issues, addressing them reactively and often from a narrow technological and managerial perspective justified by political and economic rationality. Not surprisingly, as a result, the environmental movement has failed to stem the tide of environmental pressures and problems that now threaten to unravel the ecological system on which life on earth is based.

Changing the prevailing materialist worldview and dominant political-economic ideology that form the key intertwined ideological obstacles to addressing the environmental challenge more effectively can be seen as a battle for the hearts and minds. The ongoing process of modernisation, associated with increasingly rapid developments in science and technology, has eroded traditional belief systems, values, norms, and social cohesion, creating degrees of alienation, individualism and atomism that threaten to tear societies apart. The dominant materialistic culture has little if anything to offer in terms of providing social bonds and meaningful purposes to individuals and societies. However, while many environmental advocates and critics of the prevailing worldview and ideology try hard to persuade people of the need to change their beliefs and ways, they are hampered in this by their limited cognitive power vis-à-vis that of the vested political-economic interests. These increasingly concentrated interests, armed with unparalleled sophisticated and powerful technologies, keep on seducing, distracting and manipulating people with an ongoing stream of must-have new goods and services, by overloading and distracting them with entertainment, by disseminating false and trivial news, and by cultivating social divisions and tensions. Meanwhile, they depoliticise problems with reassurances that these will be solved by experts, science, and technology. The upshot is that it is very difficult for environmental advocates and critics of the prevailing worldview and dominant ideology to make headway in this battle for the hearts and minds.

Yet, despite the continuing hegemony of the materialist worldview and the belief in the desirability or necessity of economic growth, the future of these ideologies is far from ensured. Neoliberalism, although it was touted as the (only) solution to the economic problems (inflation and stagnation, referred to as stagflation) that affected developed economies from the late 1970s, has proved to be the ideological Achilles' heel of the dominant political-economic system. Although neoliberal policies have indeed brought inflation under control, this has come at a high price, notably large increases in inequality, social deprivation and misery, unemployment, and increased financial-economic instability, while they failed to deliver on the promise to restore high levels of economic growth. As a result, neoliberalism has come under heavy

attack, especially in the wake of the financial-economic crisis of 2008, even to the point where some institutions that were among its main protagonists began to admit its shortcomings.¹⁹³ However, these admissions of failure do not seem to have led to major departures from the neoliberal policies pursued by governments and international institutions. Neoliberalism proves to be very resilient and continues to hold governments in its institutional grip while alternative ideologies fail to get political traction.

To better understand that resilience, and the difficulty of bringing about change in the dominant worldviews and ideologies that stand in the way of environmental integration, we need to look more closely at how political-institutional and political-economic factors constrain the power and agency of environmental advocates, tilting the playing field against them. This will be the focus of the next two chapters.

¹⁹³ Ostry, Jonathan D., *et al.*, "Neoliberalism: Oversold?"; Tudor, Owen (2012), World Bank Edges Away from Neoliberalism on Jobless Growth, Deregulation, TUC/Touchstone, <http://touchstoneblog.org.uk/2012/10/world-bank-edges-away-from-neoliberalism-on-jobless-growth-deregulation/> (Accessed: 30 November 2017).

Chapter 5 – Political Institutions and the Environment

Introduction

The aim of this chapter is to discuss the importance of political institutions and their role in facilitating and/or obstructing environmental integration. Chapter 1 revisited the environmental challenge and argued that to address this challenge more effectively, governments (and the world as a whole) must adopt a comprehensive and integrated approach to this challenge. It also presented a framework comprising six interrelated components that identify more specific sets of tasks (or sub-challenges) that, in many countries, have already been pursued by various means. Chapter 2 assessed the environmental integration efforts of several countries that have often been regarded as forerunners or leaders in their approach to the environmental challenge. However, although these efforts demonstrate that addressing the six sub-challenges is practically possible and politically feasible in particular contexts and conditions, none of these countries has, over the last four to five decades consistently followed the concerted approach that is required. Chapter 3 introduced a range of factors that may help explain the failure of countries and governments to adopt and consistently pursue such an approach, including socio-cultural factors, political-institutional factors, political-economic factors, and issues related to power and agency.

Chapter 4 elaborated on some of the main socio-cultural factors that can help explain why, in general terms, there has been weak demand and support for taking a concerted approach to the environmental challenge. While a more integrated approach to the environmental challenge has been deemed desirable or even necessary in some circles of environmental thinkers, advocates and professionals, support in societies has been insufficient to induce governments to adopt such an approach and/or to stick with it over the longer term. This failure raises fundamental questions about the role of political institutions in addressing the environmental challenge.

The aim here is to discuss the role and importance of political institutions for the environmental integration challenge in general terms. While political institutions differ from country to country, there is a significant body of literature and research that can be used to identify a range of factors and issues that, in different ways and degrees, have influenced and still influence the environmental integration efforts of countries and governments. In this chapter, the focus is foremost on the role of states as the cornerstone political institutions of the present world. While pointing out the crucial importance of states in steering the collective courses of action of countries, the discussion will also shed (more) light on why, generally speaking, states have failed the environmental integration challenge. Notably, environmental protection has not been a core function of the states but has been added to their portfolios only fairly recently and continues to be assigned a lower level of priority than the four traditional core functions.

In this context, one political-institutional question that has provoked much debate, and that arguably is becoming increasingly significant in the global geopolitical context, is whether (liberal-) democratic systems are capable of

addressing the environmental challenge and/or whether authoritarian regimes are better able, or even necessary, to do so. As discussed in Chapter 3, in the comparative environmental policy literature, systems that are considered to be *more* democratic were found to be superior environmental performers to systems that are *less* democratic. But arguably *all* existing (liberal-) democratic systems may be incapable of adopting the comprehensive and integrated approach that I have argued to be necessary to meet the environmental challenge more effectively, while claims have been made that only authoritarian political systems can take such an approach. Hence, this is a crucial issue for my argument, and possibly for the world at large.

As a first step, the next section will briefly clarify and discuss my take on political institutions, given the array of different interpretations of what these are and why they are important. Subsequently, I focus on states and what can be regarded as their main roles or functions: the security function, the protection and promotion of economic interests, the management of demands and conflicts, and social integration. Although all states undertake these functions, they can be interpreted differently and have received varying degrees of emphasis. The question whether, fundamentally, democratic systems are (in-) capable of addressing the environmental challenge effectively and/or that only authoritarian systems are (better) able to do so, will be discussed in the section on demand and conflict management.

Some reflections on political institutions

The aim of this section is to clarify some of the conceptual issues associated with the terms institutions and political institutions and to point out their importance. Like most concepts in social science, the term institution is defined and interpreted in different ways. Not surprisingly, this is also the case with what is referred to as political institutions. Part of the confusion about the term institutions can be explained by the fact that the concept is used in different disciplines, including sociology, anthropology, political studies, and economics. Institutions have become the subject of research based on different interests, goals, interpretations, assumptions and methodologies, leading to a range of approaches or schools, such as historical institutionalism, normative institutionalism, structural institutionalism and rational choice approaches.¹ In part, also, the confusion can be attributed to the lack of definitional sharpness in some publications that have nonetheless been influential.²

Largely in line with Hodgson's attempt to promote greater conceptual clarity, I define institutions simply as rules. As a common and often-used term, this word hardly needs further definition or clarification, and doing so may only trigger a need for an infinite process of further definitions. I will only add that rules can be of different kinds: prescriptive ("one must"), prohibitive ("one is not allowed"), encouraging ("one should"), discouraging ("one had better not"), and enabling ("one is allowed to"), among other. A common element of rules is that they aim to influence, guide or channel people's behaviour and practices. Rules vary enormously concerning the

¹ Peters, B. Guy (1996), "Political Institutions, Old and New", in R. E. Goodin and H.-D. Klingemann (eds.), *A New Handbook of Political Science*, 205-220.

² Hodgson, Geoffrey M. (2006), "What Are Institutions", *Journal of Economic Issues*, Vol. XL, No.1, 1-25.

number of people that accept them or to whom they apply. Rules can be created by and for an individual, a family or any other group, or take the form of a formal law that applies to all citizens of a country.

Contrary to North's view that organisations should be distinguished from institutions,³ but in line with Hodgson's argument,⁴ I consider organisations to be particular kinds of institutions. Organisations are bundles of rules created for particular aims or purposes and are commonly constituted to mobilise a group of people for those aims or purposes. They comprise, among other, constitutive rules specifying the goals, objectives, or functions of the organisation, determining membership, establishing formal positions, allocating powers and responsibilities, and prescribing or guiding the interactions between members of the organisation as well as with the outside world. However, not *all* rules are constitutive elements of an organisation. There are rules (formal and informal) that do not lay the foundations of organisations but that nonetheless guide or influence human behaviour and practices such as traffic rules, pollution standards, social etiquette, customs, and dress codes, among many others. They may be policed or enforced by organisations, but also by social pressure. Hence, all organisations are institutions (rules), but not all institutions (rules) are organisations.

Although organisations are often referred to as actors, it is important to recognise that the decisions and actions of organisations are made by "real people". Organisations, being bundles of rules, are social constructs, not humans. Strictly speaking, they only exist in the minds of people who do as if they are part of the physical reality.⁵ Organisations may become visible through the paperwork by which they have been created, their logos, the buildings where they are located, and their websites, but all of these do not act or make decisions. As discussed in Chapter 3, agency is exercised by individuals or groups of individuals ("real people"), and this applies also to organisations. Distinguishing between organisations and agency is not just nit-picking, but crucial if we want to explain the decisions and actions of organisations. Treating organisations as (unitary) actors runs the risk of ignoring the important role and influence of individuals as well as the differences in views, interests, and power between people within an organisation. Thus, while it is probably inevitable, given common parlance, to avoid referring to organisations (for instance, a corporation or a government) as actors, we need to be watchful not to treat them as individuals, or unitary entities, let alone rational actors. The decisions and actions of organisations are shaped by individuals and groups who may have different and even conflicting values, views, and interests, but who make choices within the framework of the rules of an organisation. Only to the extent that those decisions and actions are the results of the involvement of more than one individual should we refer to them as *collective agency*.

³ North, Douglass C. (1991), "Institutions", *The Journal of Economic Perspectives*, Vol.5, No.1, 97-112.

⁴ Hodgson, Geoffrey M. (2006), "What Are Institutions".

⁵ Harari gives the example of Peugeot to illustrate this point. Harari, Yuval N. (2011, e-book ed.), *Sapiens: A Brief History of Humankind*. London: Vintage, 31-33.

Logically flowing from this definition of institutions, political institutions are formal and non-formal rules, including organisations, that regulate, guide or channel political behaviour, practices, and processes or, in general terms, politics. Distinguishing political institutions from other institutions requires clarification of what is politics. Again, we are spoilt for choice for definitions of politics in the literature. Lasswell's definition, in my view, is still a good start: politics involves processes that affect "who gets what, when and how".⁶ It must be emphasised that the "what" in this definition does not refer only to material goods (including income and wealth), but to potentially anything, including rights, authority (legitimate power), opportunities to participate in collective decisions, access to information, the freedom of expression, a fair trial when accused of something, protection against oppression, abuse and torture, education and opportunities for self-development, a safe, clean (unpolluted) and pleasant environment, and freedom from exploitation, poverty, and hunger. This wide-ranging nature of what political institutions can and do allocate makes clear their crucial importance to individuals and societies. Political institutions may not be the only determinants of what everybody gets, but they (potentially) create or influence the ways and processes by which many if not most allocations are made.

Political institutions also comprise rules (including organisations) that regulate how formal power is allocated and how these institutions can be changed. These can be referred to as *constitutive* political institutions. They comprise written and unwritten political constitutions, conventions, administrative laws, and jurisprudence. They allocate power and regularise its exercise by attaching it to formal and informal rules, positions and/or organisations (political bodies). They may formally grant power to kings, dictators, governments, parliaments, courts, and any other bodies to play a role in deciding who gets, what, when and how. They also encompass rules by which constitutions themselves can be changed.

Like all institutions, political institutions are socially constructed. Some, like absolute monarchies, may have been based on divine rights, or derive their legitimacy from the fact that they have been in existence for a long time, but they are always created or amended by people. However, that does not mean, as social contract theory may suggest, that they are the product of democratic deliberation between all members of groups or societies. A more plausible explanation for how political institutions have been (and still are) created and changed is that they are forged by the most powerful in groups or societies. Historically, democracy is a rare phenomenon, in particular when it comes to setting the fundamental rules that affect who gets what, when, and how. In most cases, those who already have (accumulated) a lot of power, especially power of various kinds, are also the ones who define the political rules.

The power attached to institutions makes them also crucially important for those who want to change human behaviour and practices, for instance, to protect the environment. This applies all the more so to constitutive political institutions, as these assign the power to issue and change rules that are binding on all people of a society (including by legislation). Occupying the seats of institutional power can hold the key

⁶ Lasswell, Harold D. (1936), *Politics; Who Gets What, When, How*. New York, London: Whittlesey house McGraw-Hill book company.

to changing constitutive political institutions and thereby to reassigning the power associated with institutions. Not surprisingly, given the crucial importance of political institutions, proposals for constitutive political-institutional change often provoke fierce battles and resistance involving those who stand to gain or lose most from these changes, making such change (very) difficult.

These observations should suffice to make clear the importance of political institutions to all people. They have direct implications for who gets, what, when and how, and thus for the extent to which people can meet their needs and those of their families, live in poverty or relative abundance. They can make the difference between life and death for individuals as well as for masses of people. Given our interest in the role of governments in advancing environmental integration, the chapter focuses on political institutions associated with national-level political systems (or states) and discuss how these can be conducive to or obstruct environmental integration.

What are states?

States are the cornerstone political institutions of the modern world. Politically, the world consists of a global state system that recognises states as the principal units through which formal and legitimate decisions about who gets, what, when and how are made. This applies to decisions within states (by their governments) and well as to decisions between states (by representatives of states through international decisions and institutions). The state system is based on three fundamental principles: internationally recognised territorial boundaries, sovereignty, and a monopoly over the legitimate use of force.

States are territorially defined entities, which means that their legitimate power (authority) to make binding decisions applies (only) to all people within a geographically defined area. The government of a state cannot legitimately make decisions that are binding upon people who do not officially reside within that state's territorial boundaries. Although the territorial boundaries of most states are clear and internationally recognised, that does not mean that there are no disputes between states over particular areas or borders. Indeed, there are still many such disputes, some of which have led to violent conflicts, which demonstrates that the territorial boundaries of states are still taken very seriously, for several reasons, not in the least the natural resources that may be located in a disputed area.

The second principle on which the state system is based is sovereignty. Although there are different interpretations of the term, here, I adopt the Oxford English Dictionary's definition of sovereignty as "supreme power or authority".⁷ Obviously, the term derives from the concept of "sovereign", which means, according to the same source, "supreme ruler, especially a monarch". The idea that modern states have supreme power is commonly traced to the Treaty of Westphalia of 1648, which is also credited with having created the international state system. The principle of sovereignty was given an internal and an external dimension: within the recognised borders of a state, supreme power and authority resided with the monarch (internal dimension), while all states (monarchs) accepted each other's sovereignty and the principle of non-interference in the domestic affairs of other states (external

⁷ Oxford English Dictionary, (2018) *Sovereignty*.

dimension). Although originally sovereignty was associated with monarchs (as reflected in Louis XIV's expression "L'État, c'est moi" – "I am the State"), the idea that sovereignty lies with the people as a whole (popular sovereignty) became widely accepted after the French revolution.

A third principle commonly associated with states is their monopoly over the legitimate exercise of (physical) force. This implies that only states can legitimately use physical force or threaten with such force. This principle has also internal and external dimensions: the internal dimension relates to the threat or use of physical force against the residents of the state (to maintain law and order, security or for any other reason), while the external dimension refers to the threat or use of such force against non-residents or other states. While this is commonly regarded as a core function of states, strictly speaking, labelling it as a separate constitutive principle of states is redundant as it is implied in the principle of sovereignty (supreme power). But as non-interference with physical force into the affairs of other states was a principal rationale for the creation of the state system, a case can be made for identifying this as a separate principle underlying that system.

Although, defined by these principles, the international state system has been created only in the mid-17th century AD, territorially based political institutions within which the claim to supreme power was exercised by rulers (individually or collectively) have been around for thousands of years. City-states date back to the earliest period of (Sumerian) civilisation more than 3000 BC and were also the dominant political institutions of classical Greek society. Kings and emperors have laid claims to supreme power within particular territories throughout history. States, therefore, are as old as history or civilisation. What is relatively recent is the acceptance of states as the political building blocks of an internationally recognised order. Beginning in Europe, the state system gradually spread to other parts of the world. The number of states that have been formally established and recognised as members of that system increased rapidly after WWII, especially as a result of the process of decolonisation, leading to the present global system of around 200 states.

The role and functions of states

States have been around for a while, but there is still much debate about what they do and/or should be doing. With their creation, ideas were developed about their role if only to justify the rule of Kings based on the notion of their Divine right. However, ancient philosophers sought to do more than justify the rule of Kings and developed ideas about the essential purpose and functions of state and government, and they often offered advice on how to rule wisely. Some, like Plato, developed what could be considered utopian ideas about what constitutes an ideal state, even though he did not expect these ideas to be fully adopted and realised.⁸ Others, like Aristotle, took a more realistic approach, but nonetheless saw the main role of the state as one of promoting the "good life" for the whole of society.⁹ Many Chinese philosophers were preoccupied with the challenge of creating and maintaining political order and

⁸ Plato (1849), *De Republiek*. Amsterdam: P. N. van Kampen, 366-367.

⁹ Aristotle (Translated by William Ellis) (2004), *Politics: A Treatise on Government*, J. M. Dent & Sons.

harmony, emphasising the importance of ethical considerations (virtue) and of rulers setting a good example.¹⁰

Although concern about the ethical dimension of states and governments remained a central element in the field of political theory and philosophy throughout the ages,¹¹ it was largely overtaken in the second half of the twentieth century by a shift in emphasis towards the empirical study of political institutions, power, and political behaviour. In mainstream political science, interest in the state receded to the point where the term state was even hardly used anymore,¹² making place for the notion of political system. However, the state continued to be a core concept in the study of international relations and a subject of debate in Marxist circles.¹³ During the 1980s, interest in the state underwent a revival in mainstream political science, in part in recognition of the importance of the state as a political actor in its own right.¹⁴

Here, it is not my intention to provide an overview of, let alone to discuss, the large range of state theories or ideologies.¹⁵ My aim is to explain why states have generally fallen short of adopting and implementing the kind of approach to the environmental challenge that I deem to be necessary, as described in Chapter 1. Rather than elaborating on different views of the state, I will focus on what has been commonly referred to as the core functions or imperatives of the state. The rationale for this is that it helps to explain what most or even all states actually have been doing, and thus also why they have failed to embrace the environmental challenge as a priority. While most or even all states have added environmental concerns to their list of issues to address, these concerns have thus far been treated as subsidiary to the goals associated with what are still widely regarded as the core functions of the state.

The four core functions or imperatives that have commonly been identified in the literature and that will be discussed here are: the security function; the economic function; demand and conflict management; and social integration. Although there are different ways to label and classify the core functions of the state, a discussion of these functions also captures some of the theoretical differences in the literature about the role of the state. These functions or imperatives can, and have been, interpreted

¹⁰ Angle, Stephen C. (2017), *Social and Political Thought in Chinese Philosophy*, Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/archives/spr2017/entries/chinese-social-political> (Accessed: 2 November 2018).

¹¹ Sabine, George H. (1963, Third edition ed.), *A History of Political Theory*. London: George G. Harrap & Co.

¹² Krasner, Stephen D. (1984), "Approaches to the State: Alternative Conceptions and Historical Dynamics", *Comparative Politics*, Vol.16, No.2, 223-246.

¹³ Miliband, Ralph (1969, 1973 ed.), *The State in Capitalist Society*. London: Weidenfeld & Nicolson; Poulantzas, Nicolas (1978, 2000 ed.), *Political Power and Social Classes*. London: Verso.

¹⁴ Nordlinger, E. (1988), "The Return to the State: Critiques", *American Political Science Review*, Vol.82, No.3, 875-885; Nordlinger, E. (1981), *On the Autonomy of the Democratic State*. Cambridge: Harvard University Press; Evans, Peter B., et al. (eds.) (1985), *Bringing the State Back In*. Cambridge and New York: Cambridge University Press.

¹⁵ For an overview and discussion state theories, see Carnoy, Martin (1984), *The State and Political Theory*. Princeton, N.J.: Princeton University Press; Head, Brian (1984), "Recent Theories of the State", *Politics*, Vol.19, No.1, 36-45; Jessop, Bob (2009), "State Theory", in R. Kitchin and N. Thrift (eds.), *International Encyclopedia of Human Geography*, 416-421.

in different and even conflicting ways, thus lending support to competing theories and ideologies. The differences between states in how these functions are fulfilled (or not), and in the relative emphasis that they receive, also suggest that these functions or imperatives are better regarded as challenges that can and have been interpreted and addressed in different ways. Only at a very general or fundamental level can these functions be called imperatives that must be met somehow by all states, whether they are democratic or authoritarian.

The security function: protecting the security of state and society

The protection of state and society from internal and external threats is often regarded as the most fundamental function of the state. Failing this challenge, a state is at risk of disintegration or incorporation into another state, as illustrated by many examples throughout history, from the oldest states in Mesopotamia, the Greek city-states, the Roman empire and, more recently, the countries that were conquered by Hitler Germany, and the disintegration of, among other, Yugoslavia, Somalia, Iraq, Syria, and Yemen.

However, these examples are at the extreme end of the threat to the security of states. What is perceived as a threat to a state, both within and outside the state, is open to the interpretation of situations and developments but also depends on the interpretation of security. Defined narrowly, security is often described as the absence of, or protection against, threats of a physical nature involving the use of force and violence. Given the state's traditional monopoly over the legitimate use of force, this imperative sanctioned the creation of state institutions like police forces, courts, and armies. However, the concept of security is often interpreted more broadly to include such things as the maintenance of law and order, the protection of private property, and the protection of the national interest. It hardly needs to be spelt out that the inclusion of such concerns can easily be used or abused by authorities. One example of the political manipulation of security threats can be found in the introduction in many countries of legislation and measures to combat terrorism. While there is no denying the violent attacks that have occurred in many countries on civilian targets by radicalised individuals and groups, these events have been used as a justification for increasing the powers of state executives, among other to arrest and lock up people without laying charges, to restrict civil liberties, to expand the surveillance of all citizens, and to declare a state of emergency under which rights and freedoms are suspended. In such legislation, terrorism is commonly defined so broadly and vaguely that it can be used to suppress legitimate protests, including against environmentally damaging activities. In many liberal democracies, a growing emphasis on the security function of the state has contributed to the erosion of democracy.¹⁶

¹⁶ Amnesty International (2017), *Dangerously Disproportionate - the Ever-Expanding National Security State in Europe* London: Amnesty International Ltd; Bührs, Ton (2016), "The Erosion of Democracy in New Zealand – Implications for the Environment: A Broad Survey", Paper presented at *The New Zealand Political Science Conference*, Hamilton, The University of Waikato, 28-30 November; Vanderheiden, Steve (2008), "Radical Environmentalism in an Age of Antiterrorism", *Environmental Politics*, Vol.17, No.2, 299 - 318; Lapham, Lewis H. (2004), *Gag Rule: On the Suppression of Dissent and the Stifling of Democracy*. New York: Penguin Press.

As in the case of internal threats, the interpretation of external threats has gone beyond threats of a physical or violent nature, like the threat from terrorism referred to above. For instance, the protection of the national interest has often been invoked by the United States as a rationale for foreign intervention,¹⁷ and it has not been the only power to do so. Colonialism and imperialism have always been inextricably connected to the political economy of powerful states and a major cause of the subjugation of other peoples, great power rivalry, conflicts and war. Advancing and protecting the cultural values and identity of nation-states against foreign influences has been another recurrent theme in security discourses, as reflected in political debates about immigration and the theme of "clashing civilisations".¹⁸ Cyber security and the growing vulnerability of communication and information systems to foreign hackers (government-sponsored and private) has become another plank in the security role and operations of states.

In this context, it is worth reiterating that the development of general theories about the role and efforts of states to meet their security imperative (and most other things) is of little value, as it only serves to obfuscate the enormous differences between states and governments in terms of their interpretation of this imperative and the objectives, activities, and capabilities that they assign to it. In particular, no understanding of the security of states in the post-WWII era could be obtained without looking at the United States as by far the biggest military power in the world, matched only by the determination of its governments to maintain its global dominance or hegemony.¹⁹ The dominance of the US is reflected in military expenditure: in 2017, the US spent more on its military (\$618 billion) than the seven next biggest spenders (including China, Saudi Arabia, Russia, and India) together (\$551 billion), accounting for 35% of global military expenditure.²⁰ As noted in Chapter 4, in the United States, a large proportion (up to half or more) of resources allocated to the development of

¹⁷ Chomsky, Noam (2000), *Rogue States: The Rule of Force in World Affairs*. London: Pluto Press; Duffy Toft, Monica (2017), "Why Is America Addicted to Foreign Interventions?", *The National Interest*. <https://nationalinterest.org/feature/why-america-addicted-foreign-interventions-23582>; Nye Jr, Joseph S. (1999), "Redefining the National Interest", *Foreign Affairs*. No. July/August, <https://www.foreignaffairs.com/articles/united-states/1999-07-01/redefining-national-interest>.

¹⁸ Huntington, Samuel P. (1996, 1998 ed.), *The Clash of Civilizations and the Remaking of World Order*. London: Simon & Schuster: Touchstone Books.

¹⁹ Krippendorf, Ekkehart (1970), *Die Amerikanische Strategie. Entscheidungsprozess Und Instrumentarium Der Amerikanische Aussenpolitik*. Frankfurt am Main: Suhrkamp; Parenti, Michael, *Against Empire*.

²⁰ Tian, Nan, et al. (2018), *Trends in World Military Expenditure SIPRI Fact Sheet*. Solna Sweden: Stockholm International Peace Research Institute. The latest SIPRI Fact Sheet available at the time of finishing this book (December 2021) confirms the overwhelming position of the US in defence spending. In 2020, although China's spending had increased, US spending increased even more (as a percentage, and far more in absolute terms), with the result that in 2020 the US's world share rose to 39%. Lopes Da Silva, Diego, et al. (2021), *Trends in World Military Expenditure, 2020 SIPRI Fact Sheet*. Solna Sweden: Stockholm International Peace Research Institute.

science and technology is allocated to the military.²¹ Arguing, as the Realist school of thought in the study of international relations does, that *all* states are primarily motivated to protect their vital interests²² is neither very informative nor useful. We are likely to learn more about the security of states by looking at the actions of, and interactions between, specific states and the effects thereof.

Thus, the security imperative means quite different things depending on which country we are talking about and its political-economic and geopolitical position in the world. Whatever the real external threats are to the security of countries, and the world as a whole, the environmental costs of the efforts to secure nations are tremendous. With global military expenditures in 2020 estimated at US\$1,981 billion,²³ the military is responsible for the exploitation, use and consumption of massive amounts of resources, from land and water to oil and steel and numerous minerals, many of which are considered strategic.²⁴ The US military is the largest single user of oil, domestically and probably globally, the largest generator of hazardous wastes, and a major contributor to greenhouse gas emissions.²⁵ Putting precise figures on the military's ecological footprint, resource consumption and environmental destruction is not easy given the secrecy that surrounds anything to do with the military, which is also often exempted from environmental legislation, regulations and procedures. While environmental policy analysts commonly refer to agriculture, energy, transport and urban development as the main sectors or sources of environmental problems, the role of the military-industrial complex as a major driver of environmental pressure and degradation is hardly ever mentioned.

Similarly, quantifying the human suffering and environmental damage caused by war, directly and indirectly, is problematic if at all possible given the scarcity of research efforts undertaken in these matters, the difficulty of gathering information in (ex-) war zones and the lack of base-line data, the long-term effects, and the unquantifiable nature of much of the suffering and destruction of societies. While there have been some attempts to assess the nature and scale of the direct effects of

²¹ Moretti, Enrico, *et al.*, *The Intellectual Spoils of War: How Government Spending on Defence Research Benefits the Private Sector*; Parenti, Michael, *Against Empire*, 63-64. See also Langley, Chris and Stuart Parkinson, *Science and the Corporate Agenda. The Detrimental Effects of Commercial Influence on Science and Technology Policy in the 1980s and Beyond*; Langley, Chris, *et al.* (2008), *Behind Closed Doors. Military Influence, Commercial Pressures and the Compromised University* Folkestone, United Kingdom: Scientists for Global Responsibility (SGR).

²² Korab-Karpowicz, W. Julian (2018), *Political Realism in International Relations*, The Stanford Encyclopedia of Philosophy (Summer 2018 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/sum2018/entries/realism-intl-relations> (Accessed: 2 September 2021).

²³ Lopes Da Silva, Diego, *et al.*, *Trends in World Military Expenditure, 2020*.

²⁴ Dickinson, Dave (2015), *5 Military Technologies Reliant on Rare Earth Elements*, Listosaur.com, <https://listosaur.com/science-a-technology/5-military-technologies-reliant-on-rare-earth-elements/> (Accessed: 2 July 2018); Magdoff, Harry (1969), *The Age of Imperialism. The Economics of U.S. Foreign Policy*. New York and London: Monthly Review Press, 50-54.

²⁵ Dickinson, Dave, *5 Military Technologies Reliant on Rare Earth Elements*; Magdoff, Harry, *The Age of Imperialism. The Economics of U.S. Foreign Policy*, 50-54.

war, including from the use of nuclear weapons,²⁶ these cannot do justice to the scale of human suffering, the unravelling of societies, social and material infrastructures, the increase in human insecurity, and the long-term damage to the environment and resource-basis on which people depend. While preparing for and waging war to protect states (in practice, foremost, the interests of rulers and elites rather than societies) has always had a questionable rationale, it is increasingly self-defeating and irrational as a means of enhancing security for individual states as well as for the world as a whole.

But even apart from the human and environmental costs associated with the pursuit of security by states, there are good reasons for arguing that states are not able to achieve this goal by themselves. In part, this is because modern weapons have made state borders quite porous: even with very high levels of defence spending states cannot (fully) protect their citizens from an attack by other states or by terrorists. This applies also to the increased threats and use of cyberwarfare, which has the potential to cripple crucial infrastructure and cause much economic damage. But perhaps the most important reason is the age-old truth that the security of any state, even defined narrowly, depends on other states. Unilateral efforts to strengthen security provoke similar efforts by other states and give rise to the well-known arms-race phenomenon that leads only to less security for all states. The United States, China and other major (let alone smaller) powers cannot achieve security on their own. Ultimately, the security of states can only be achieved by creating an effective system of collective security at the global level.

As the security function of the state is open to interpretation and can be defined differently, it can be argued that there is scope for redefining it in a way or ways that emphasise the protection of humans, human societies, and the environment against threats to their ability to provide for their needs. Concepts that have been used in that context are human security, resource security, and environmental security.²⁷ However, given that the security function of the state has been, and still is, predominantly defined in terms of (military) threats to the territorial integrity of the state, some have argued that extending the notion of security to include environmental security might be a good strategy to enhance the political status attached to environmental concerns. To some degree, this has already been happening, for instance, in the United States, where the Pentagon has included climate change as a potential source of threats to the national security of the country.²⁸ Similarly, growing resource scarcity, notably of oil, has often been touted as a source of increased competition, conflict and (proxy)

²⁶ Westing, Arthur H. (1986), *Global Resources and International Conflict: Environmental Factors in Strategic Policy and Action*. Oxford: Oxford University Press; Westing, Arthur H. (1990), *Environmental Hazards of War: Releasing Dangerous Forces in an Industrialized World*. London: SAGE Publications; Hupy, Joseph (2008), "The Environmental Footprint of War", *Environment and History*, Vol.14, No.3, 405-421.

²⁷ Barnett, Jon (2001), *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*. New York: Zed Books.

²⁸ Schwartz, Peter and Doug Randall (2003), *An Abrupt Climate Change Scenario and Its Implications for United States National Security* California: Defense Technical Information Center; Renner, Michael (2005), "Security Redefined", in M. Renner, et al. (eds.), *State of the World 2005. Redefining Global Security*, 3-19.

wars between states.²⁹ Competition for scarce resources is deemed to be an important factor behind increased conflict, civil war and political destabilisation within countries, notably in Africa, especially when linked with ethnic and political divisions.³⁰ Even if it is true that the growing scarcity of resources and environmental change does not necessarily lead to (more) conflict or war, it is not unlikely that, given the many other sources of conflict that already exist within and between nations, environmental degradation will add to and/or amplify these tensions.

However, incorporating the (potential) threats arising from environmental change into the security function of states does not imply that environmental problems and their sources will be addressed more effectively. As critical analysts have pointed out, the risk of letting environmental concerns hitch a ride on the back of the traditional security function of the state is that, instead of greening the existing notion of security, environmental issues get securitised.³¹ This would amount to what I have referred to as reverse environmental integration – the adaptation or re-definition of environmental problems or needs in line with non-environmental imperatives. Such (re-) interpretations not only misinterpret or ignore the nature and causes of environmental problems but strengthen the interests and capacity of the military-industrial complex which, by their very nature, are unsuitable and antithetic to the protection of environmental security defined in ecological and social terms. This pursuit also risks consolidating the kind of us and them thinking entrenched in the security forces which does nothing to enhance the cooperative approach that is needed to address the environmental challenge globally.³² This way of thinking also diverts attention from the fact that most of the sources and drivers of environmental problems are domestic (“the enemy is us”), linked to the practices and behaviour of actors in various sectors, including industry, agriculture, energy, and transport, rather than of an external nature. Addressing these problems requires foremost

²⁹ Klare, Michael T. (2001), *Resource Wars: The New Landscape of Global Conflict*. New York: Henry Holt and Company; Klare, Michael T. (2008), *Rising Powers, Shrinking Planet: The New Geopolitics of Energy*. New York: Henry Holt and Company; Tanzer, Michael (1980), *The Race for Resources: Continuing Struggles over Minerals and Fuels*. New York: Monthly Review Press; Stern, Andy (2005), *Who Won the Oil Wars? Why Governments Wage War for Oil Rights*. London: Collins and Brown.

³⁰ Kaplan, Robert D. (1994), “The Coming Anarchy”, *The Atlantic Monthly*, Vol.273, No.2, 44-74. Ross, Michael (2006), “A Closer Look at Oil, Diamonds, and Civil War”, *Annual Review of Political Science*, Vol.9, No.1, 265-300; Homer-Dixon, Thomas F. (1991), “On the Threshold: Environmental Changes as Causes of Acute Conflict”, *International Security*, Vol.16, No.2, 76-116; Homer-Dixon, Thomas F. (1999), *Environment, Scarcity, and Violence*. Princeton, N.J.: Princeton University Press.

³¹ Brock, L. (1997), “The Environment and Security: Conceptual and Theoretical Issues”, in Gleditsch, N. *et al* (ed.) *Conflict and the Environment*, 17-34; Deudney, Daniel (1990), “The Case against Linking Environmental Degradation and National Security”, *Journal of International Studies*, Vol.19, No.3, 461-476; Swatuk, Larry A. (2006), “Environmental Security”, in M. M. Betsill, *et al.* (eds.), *Palgrave Advances in International Environmental Politics*, 203-236.

³² Duffield, Mark (2001, 2007), “The New Development-Security Terrain”, in J. T. Roberts and A. B. Hite (eds.), *The Globalization and Development Reader: Perspectives on Development and Global Change*, 335-348.

transformative changes in these sectors, and international cooperation to the extent that other countries also contribute to these problems.

Although, in principle, there is much merit in redefining security more broadly, for instance, in terms of common, comprehensive, or human security,³³ indications are that these efforts are losing out to the appropriation of the concept of environmental security by the established military (defence) interests, and thus end up boosting military capabilities. But boosting military capabilities implies increasing the consumption of already enormous amounts of resources and of emissions, pollution, ecological deterioration and destruction arising from the standard operations of the military, as discussed above.³⁴ It is perhaps not surprising that the notion of environmental security saw a steep rise on the public and government agendas in the 1990s following the collapse of the Soviet Union and a decline in US government expenditure on defence, which was heralded as a "peace dividend".³⁵

To summarise, the security function of the state has traditionally been and continues to be interpreted in ways that are antithetical to environmental protection and integration. Although, in principle, the notion of security can and should be redefined to make it commensurate with other interpretations, including human, common, and environmental security, doing so stumbles upon strong vested interests of the military-industrial complex that dominate the security discourse.

The economic function: the protection and promotion of economic interests

States have always had an economic function as well as a security function. Here, the economic function is defined very broadly as the protection and promotion of the economic (material) interests of the state and its citizens. But this leaves open whose and what these interests are. Arguably, for much of history, the function of states has been to protect foremost the economic interests of the politically powerful. As wealth and power are closely intertwined, the protection of wealth has always been a main concern of states. As Winters³⁶ argues, oligarchy – rule by the very rich – has been a predominant form of government around the world throughout history, and arguably still today, including in liberal democracies. The main priority of the very rich is to protect their wealth. How they do that differs depending on the political context: oligarchs may be more or less directly involved in government and shaping institutions and policies, depending on the threats that they experience or perceive, including from competing oligarchs. As the very rich are not necessarily a harmonious bunch, their aim has often been to gain the power of the state (enabling them to use physical

³³ Käkönen, Jyrki (1992), "The Concept of Security-from Limited to Comprehensive", in J. Käkönen (ed.) *Perspectives on Environmental Conflict and International Relations*, 146-155; Barnett, Jon, *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*.

³⁴ Webb, Whitney (2017), U.S. Military Is World's Biggest Polluter, <https://www.ecowatch.com/military-largest-polluter-2408760609.html> (Accessed: 2 July 2018).

³⁵ Renner, Michael, "Security Redefined"; Swatuk, Larry A., "Environmental Security".

³⁶ Winters, Jeffrey A. (2011), *Oligarchy*. Cambridge: Cambridge University Press.

power legitimately) to protect their wealth from predators, not in the least competing oligarchs.

Yet, although the protection and promotion of their wealth is the main concern of oligarchs, this does not mean that they can simply ignore the material needs and interests of all other people ("subjects") in the societies they rule. All people have material needs and interests, and while throughout history most people laboured (notably through farming) to provide for themselves, and did not expect rulers to provide for them, there were limits to how much suffering and exploitation they could endure. Rulers always had to respect a fine line between how much they could exploit the people (including via taxes) and giving the impression that they cared about them, especially in times of food shortages. While enriching themselves, they also made gestures to keep the people happy, among other by providing them with the proverbial "bread and circuses". Nonetheless, it is surprising how rulers, throughout history, have been able to get away with in terms of inflicting suffering on people, something that arguably can be attributed to the fact that the poorest and the weakest are also the least able to stage successful rebellions or revolutions. It appears that, as Gurr has argued, *relative deprivation*, the discrepancy between what people believe they are rightfully entitled to on the one hand, and what they are capable of obtaining on the other, has been the key factor in many instances of violent political upheaval.³⁷

A limitation of defining the economic imperative of states solely or even mainly in terms of the protection of the wealth of oligarchs is that this does not sufficiently account for systemic factors. How wealth is, and can be, generated, largely determines who gets rich and how that wealth (and the sources of it) are protected by the state. As production systems evolved, from hunting and gathering to agriculture, and from agriculture to industrialisation, the opportunities for generating and accumulating wealth also changed and gave rise to changes in political-economic systems. Of particular significance to our present situation in this respect is the evolution of industrial capitalism, which became the motor for the unprecedented growth of production and accumulation of wealth. Modern oligarchs operate within a broader economic system (markets, capitalism, numerous interactions between interdependent but competing actors) that are not fully, if at all, under their control, even though they may know well how to extract profit and wealth from that system. States and governments have played, and still play, a significant role in nurturing economic, now predominantly capitalist, systems on which the economic well-being of citizens and the wealth of oligarchs depend. This broader interpretation of the economic imperative of the state was, of course, central to Marx's view of the state as the guardian of the interests of the capitalist *class* rather than the interests of individual capitalists. Marx linked the role of the state to the functional needs of capitalism as a competitive economic system based on the private ownership of the means of production, which was (is) in continuous need of generating profits, capital accumulation, economic growth, the existence of material, legal and social infrastructures, technological innovation, and expanding or new markets.

³⁷ Gurr, Ted Robert (1970), *Why Men Rebel*. Princeton, New Jersey: Princeton University Press.

However, although the protection and promotion of capitalist interests became a core function of states in countries with capitalist economic systems, there is still scope for interpreting these interests in different ways, linked to historical and contextual (political, economic, socio-cultural) factors, as history has shown. What is considered to be economically imperative at a systemic level is subject to interpretation and the play of politics and power. Different political-economic ideas, theories, or ideologies, including those linked with laissez faire (neo-) liberalism, Keynesianism, socialism, and social democracy have had varying degrees of influence over time and in different contexts. Before the rise to prominence of neoliberalism in the 1980s, Keynesianism and social-democratic views on the economic functions or imperatives of the state prevailed for more than three decades in much of the capitalist world. The policy and institutional changes introduced during this period were foremost the result of the growing power of the labour movement and the appeal of socialism and socialist parties in the second half of the 19th century, culminating in the Russian revolution of 1917 and leading to widespread fears among the elites in many countries for similar uprisings. Furthermore, with the discreditation of capitalism and economic liberalism as a result of the disastrous social, economic, and political effects of the great depression in the 1930s, and the material and moral devastation associated with WWII, the post-war political climate shifted the balance of power in the direction of the advocates of social democracy and the welfare state. As a result, for the first time in history, public expectations of the role of the state came to include the protection and active advancement of the well-being of all citizens, not just performing a minimum of core functions for capitalism. States came to be regarded as crucial institutions for collective decision-making and actions aimed at serving the interests of the whole of society and for creating better societies. Rather than looking at the state as an instrument in the hands of the capitalist class, people came to consider it as a benevolent collective agent promoting the common interest. Although countries and governments have assigned different meanings to the notion of social welfare and welfare states,³⁸ not meeting the vital social and economic needs of a large proportion of the population came to be widely regarded as a case of state failure that undermines a state's legitimacy.³⁹

Yet, also during the three decades in which social democracy put its stamp on the economic functions of the state, economic growth, an imperative of capitalism, remained a priority. It was the high rate of economic growth achieved during this period that made the expansion of social welfare states possible. If anything, Keynesianism provided the theoretical foundation of economic policies aimed at guaranteeing continuous economic growth and preventing deep economic crises. Arguably, it enabled social democracy to become the manager par excellence of capitalism, smoothening out its inherent contradictions between capital and labour and the alternation between economic booms and busts. It was during the 1970s when economic growth stagnated and inflation increased (referred to as stagflation), that a

³⁸ Quadagno, Jill (1987), "Theories of the Welfare State", *Annual Review of Sociology*, Vol.13, 109-128.

³⁹ Offe, Claus and John Keane (1984), *Contradictions of the Welfare State*. London: Hutchinson.

different interpretation of the economic (core) function of the state, neoliberalism, held up as the necessary and only way to restore economic growth, was able to make political headway. The economic function of the state was (again) redefined in line with the free-market ideology that prevailed in the 19th and early 20th centuries. This implied, among other, deregulation and re-regulation in support of the free market, promoting privatisation, shifting responsibility for monetary policy to independent Central Banks, the weakening of trade unions, shrinking the social welfare state, and promoting the free movement of goods and capital globally.⁴⁰ Generally speaking, the economic function of the state reverted to serving a purer and harsher version of capitalism. Then again, following the financial-economic crisis of 2008, many economic analysts and commentators have criticised the neoliberal paradigm or even proclaimed its death, putting forward other (including neo-Keynesian) interpretations of what is economically imperative, albeit mostly without questioning capitalism per se.⁴¹

With respect to the environmental integration challenge, the main point of establishing that the promotion of continuous economic growth has been (and still is) a core function of states with capitalist economic systems is that this makes environmental protection highly problematic. This is not only because, in such states, economic growth trumps environmental protection, but also because continuous material economic growth, as pointed out already before (notably in Chapter 1), is unsustainable within a given biophysical environment. Whether capitalism can be (made) compatible with the environmental integration imperative, rather than the other way around (whether environmental integration can occur in a way compatible with capitalist imperatives) is a question that hinges on the issue of economic growth. If economic growth is just an addiction, as many people seem to think, then arguably kicking that addiction could make capitalism sustainable. But if economic growth is an inherent imperative of capitalism that cannot be met in non-material ways, then abolishing capitalism is a necessary condition for moving towards sustainability. This question will be discussed further in Chapter 7.

Although, after the fall of the Soviet Union and the introduction of capitalism in China, countries/states with a predominantly socialist economic system have become rarities, it is important to discuss and assess whether, or to what extent, socialism is (potentially) compatible with environmental integration. There is no doubt that

⁴⁰ Soederberg, Susanne, et al. (2005), *Internalizing Globalization: The Rise of Neoliberalism and the Decline of National Varieties of Capitalism*. Basingstoke, UK: Palgrave Macmillan; Harvey, David, *A Brief History of Neoliberalism*; Fourcade-Gourinchas, M. and S. L. Babb (2002), "The Rebirth of the Liberal Creed: Paths to Neoliberalism in Four Countries", *American Journal of Sociology*, Vol.108, No.3, 533-579.

⁴¹ Stiglitz, Joseph E. and Members of a UN Commission of Financial Experts, *The Stiglitz Report. Reforming the International and Monetary Systems in the Wake of the Global Crisis*; Krugman, Paul R. (2009, 1st ed.), *The Return of Depression Economics and the Crisis of 2008*. New York: W.W. Norton & Company; Chakraborty, Aditya (2016), "The Death of Neoliberalism Has Been Announced Many Times Before. It Is Not the Malcontents but the Insiders Who Have Now Lost Faith in the System", *The Guardian Weekly*, Vol.195, No.1, 48; Grugel, Jean and Pia Riggiozzi (2012), "Post-Neoliberalism in Latin America: Rebuilding and Reclaiming the State after Crisis", *Development and Change*, Vol.43, No.1, 1-21.

economic growth has been a priority of socialist states, as it was considered the key to improving the living standards of citizens. The Soviet Union aspired to beat the capitalist West in its own game of accumulating capital and achieving high economic growth rates to prove that socialism was the superior system. And for a while, starting from a low base, it delivered impressive economic growth rates, which led some to expect that the USSR would catch up with the United States sometime in the late 1970s.⁴² But this came at terrible environmental costs, in terms of pollution, environmental destruction, and the running down of natural resources which, in turn, led to high economic costs and economic stagnation.⁴³

Although the environmental performance of countries with socialist political-economic systems has generally not been any better (but even worse) than that of capitalist countries,⁴⁴ many socialists would argue that they do not deem environmental destruction an inevitable result of socialist systems. Nonetheless, although, in theory, socialist economic systems could function without the necessity for economic growth, in practice, socialist countries have combined socialism with a commitment to economic growth based foremost on the development of industrialist production systems (also in agriculture). Socialist countries have, by and large, also embraced the industrial mode of production, which has its inherent growth imperative. One would be hard-pressed to identify a socialist state in which economic growth has not been a priority. Hence, the argument that socialism can be green is largely a theoretical one that has not been proven in reality. The fact that, thus far, no countries with socialist economic systems have been grounded on environmental imperatives and/or have had a demonstrably sustainable record, does not help the advocates of green socialism. I will revisit this issue in Chapter 8.

This very brief account indicates that how the economic function of the state is interpreted, and which interpretation prevails, is subject to change. Although changes in economic conditions play a role in this process, these do not by themselves explain why or how particular interpretations of economic problems and developments surface or prevail, including views on how the state should handle these. How the economic functions of the state are defined depends foremost on the interests, ideologies, and relative power of the main political actors, and is the subject of an ongoing struggle that takes place in society but also within the state. Rather than looking at the state as a unitary or homogeneous institution, it is better regarded as a battlefield on which competing interests fight for supremacy over the definition of the government's functions.⁴⁵ While some groups (capitalists, elites, the wealthy, upper classes, vested interests) tend to have the advantage in these battles, not in the least

⁴² Sweezy, Paul M. (1968), "Marxian Socialism", in L. Huberman and P. M. Sweezy (eds.), *Introduction to Socialism*, 83-94, 90.

⁴³ Sarkar, Saral, *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*, Chapter 2; Peterson, D. J. (1993), *Troubled Lands: The Legacy of Soviet Environmental Destruction*. Boulder: Westview Press.

⁴⁴ Smith, Richard A. (2015), "China's Communist-Capitalist Ecological Apocalypse", *real-world economics review*, No.71, 19-63; Peterson, D. J., *Troubled Lands: The Legacy of Soviet Environmental Destruction*.

⁴⁵ Poulantzas, Nicolas, *Political Power and Social Classes*.

because they already occupy leading positions in the institutions of the state and/or can bring to bear their extensive sources of non-institutional power, sometimes the balance of power may shift towards competing groups and interests with the result that the (core) functions of the state are redefined, amended or extended.

Demand and conflict management

Conflict is an inherent and unavoidable phenomenon in all societies, even more so in so-called modern and pluralist societies, and lies at the heart of politics.⁴⁶ Conflict may be linked to material and non-material matters and differences that people or groups find important, such as rights and entitlements, the impacts of the behaviour, actions and practices of others, and differences between economic interests, ideologies, cultures, and religious beliefs, and many other things. All societies need and have developed mechanisms to regulate and deal with conflict, and states play a key role in this area, not just via the courts, but foremost through the political processes and institutions by which often conflicting views, interests and demands are accommodated and/or aggregated, influencing who gets what, when and how. Although authoritarian or totalitarian political systems, almost by definition, tend to suppress conflict and claim the existence of consensus or harmony between citizens, they cannot completely suppress demands and eradicate conflict. The art of governing is foremost about dealing with (often) conflicting demands in ways that are deemed legitimate, acceptable, or satisfactory by those affected. Any ruler or government that seriously fails in this respect loses legitimacy and is unlikely to survive in the longer term. Relying on brutal force to suppress demands, conflict, and discontent and/or to stay in power only makes matters worse.

Economic problems like unemployment, inequality, and poverty can be important sources of discontent, demands and conflict. Dealing with economic demands and conflicts takes up a big part of this role of states. However, governments are not just confronted with material demands and interests but also with a broad range of other (values-based) issues and demands. Some of the main categories of demands that, in many countries, have come to be regarded as core functions of the state are meeting the health needs of citizens, the creation of opportunities for educational advancement, the cultivation of arts and culture, the protection of the rights of citizens related to, for instance, discrimination, political freedoms and public participation, abortion, sexuality, gender, euthanasia, freedom of religion, ethnic identity, and last but not least, environmental issues. In many Western countries, with the rise of the social movements in the 1960s, many established social norms and practices were questioned and became the subject of political demands, often creating new controversies and conflict. In the same period, environmental issues also became the subject of public concern and conflict, providing a new focus for public policy.⁴⁷

How states or political systems fulfil this core function is strongly influenced by their political-institutional history, including political culture and features that are

⁴⁶ Dahrendorf, Ralf (1968), *Pfade Aus Utopia. Arbeiten Zur Theorie Und Methode Der Soziologie*. Munchen: R. Piper & Co. Verlag, Chapter 10; Miller, J. D. B. (1962), *The Nature of Politics*. Harmondsworth, Middlesex, England: Penguin Books, 14.

⁴⁷ Caldwell, Lynton K. (1963), "Environment: A New Focus for Public Policy".

often referred to as policy styles. Comparing policy development (and effectiveness) in different countries based on such political-institutional differences has been the mainstay of the field of comparative politics and policy, with comparative environmental politics and policy being a largely separate branch, as explained in Chapter 2. The aim here is not to review the large literature in these areas or to discuss which countries have been more or less effective in accommodating the many and often conflicting demands on governments. As discussed in Chapter 3, explaining the environmental (or any other) policy performance of particular states requires a specific and in-depth analysis of those states, given the large diversity and variety of institutions between countries, even to the point that, in combination, the political system (state) of each country is unique. Arguably, the main conclusion that can be drawn from this literature is that "institutions matter".⁴⁸ But generalisations on this front can only point towards factors that, in many cases, are likely to be relevant rather than building blocks for the development of a general theory about states.

Here, I will dwell upon one of the most common and important findings in much of the literature, namely that democracy matters. Democracy matters not just in a normative sense, as many people assign intrinsic value to democratic forms of government, but also in respect of a political system's ability to accommodate a wide range of often conflicting demands in ways that the decisions and policies adopted tend to be more effective the more democratic a system is. Although democratic institutions have varied widely between systems, the main idea underlying democracy has been that "humans could decide for themselves as equals how they were to be governed"⁴⁹ or, in Robert Dahl's words, that people have "the inalienable right" to govern themselves.⁵⁰ As Lummis argues,⁵¹ the idea or ideal of democracy should not be confused with specific political systems and institutions that are commonly labelled democracies, as these are often a poor translation, or even a travesty, of the idea. But this does not mean, as Lummis seems to suggest, that it is not possible to institutionalise the idea of democracy in stronger and more meaningful forms.

More democracy is commonly associated with political institutions that offer a wider range of opportunities for public input and participation in decision- and policymaking.⁵² Among these are opportunities for citizens to make submissions to governments on proposed policies or legislation, and relatively low thresholds for individuals or groups to be elected to representative bodies, such as in countries with systems of proportional electoral representation compared to majoritarian (or "first-past-the-post") systems. The former significantly enhance the chances of green parties

⁴⁸ Scharpf, Fritz W. (1986), "Policy Failure and Institutional Reform: Why Should Form Follow Function?", *International Social Science Journal*, Vol.33, No.2, 179-189; McBeath, Jerry and Jonathan Rosenberg (2006), *Comparative Environmental Politics*. Dordrecht: Springer; Lundqvist, Lennart J. (1974), "Do Political Structures Matter in Environmental Politics? The Case of Air Pollution Control in Canada, Sweden, and the United States".

⁴⁹ Keane, John (2009), *The Life and Death of Democracy*. London: Simon & Schuster.

⁵⁰ Dahl, Robert A. (1985), *A Preface to Economic Democracy*. Berkeley: University of California Press, 57.

⁵¹ Lummis, C. Douglas (1996), *Radical Democracy*. Ithaca: Cornell University Press.

⁵² Kitschelt, Herbert (1986), "Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies.", *British Journal of Political Science*, Vol.16, 57-85.

to be represented in parliaments and even to take part in government. Also, rules that prescribe openness and transparency in decision-making, public accountability and reporting, and that provide for public access to official documents and information, are important to environmental advocates who, for that reason, have pushed for the adoption of legislation enshrining public access to official information in many countries. In general, Lijphart argues, "consensus democracies", characterised by "inclusiveness, bargaining, and compromise" and "broad participation and broad agreement on the policies that the government should pursue" have a superior record in effective policymaking than majoritarian democracies which concentrate power "in the hands of a bare majority" [in parliament, but often not representing a majority of the electorate] that is "exclusive, competitive and adversarial". This also applies to environmental performance as measured by the Environmental Performance Index, discussed in Chapter 3.⁵³ Even among liberal democracies, it has been argued, more democracy is conducive to, or even a requirement for, environmental protection.⁵⁴

However, while these arguments are plausible, it also seems that liberal-democratic systems are only able to achieve a limited degree of environmental protection. While they may have reduced some forms of pollution, many others have not and new forms (for instance, of fine particles such as P_{2.5}, and microplastics) have become manifest. As discussed in Chapters 1 and 2, in most countries, environmental pressures and problems continue to increase. At the same time, the demands on governments for more effective action to combat these problems (including climate change and the decline of biodiversity) have become stronger.

The apparent inability of the governments of liberal-democratic systems to deal more effectively with these environmental demands has been blamed on several shortcomings of these systems. First, liberal democracies are based on a political philosophy that assigns primacy to the (protection of the) rights of individuals, notably property rights. This means that collective (including environmental) interests tend to lose out when they (threaten to) impinge on private property rights. Regulations regarding the use of privately-owned land, for instance, to protect biodiversity, water quality and/or productive soils, often provoke fierce resistance from farmers and development interests. Second, related to the previous point, political representation in liberal-democratic systems tends to favour the most powerful interest groups in society (including "private" corporations and financial institutions) that have the resources to influence voters, political candidates, the policy-making process, the shape of institutions, and governments. By contrast, groups advocating for public interests tend to have relatively fewer resources at their disposal to get political representation and influence political outcomes. Third, the short-term political horizon linked to the electoral cycle (mostly between 3 and 5 years) of liberal democracies induces governments to give priority to often tangible political demands that can be met (even if partially so) before the next election, while long-term, anticipatory or preventative policies the benefits of which are less immediate and evident, but incur

⁵³ Lijphart, Arend, *Patterns of Democracy*, 2.

⁵⁴ Doherty, Brian and Marius de Geus (eds.) (1996), *Democracy and Green Political Thought: Sustainability, Rights, and Citizenship*. London: Routledge; Jänicke, Martin, "Democracy as a Condition for Environmental Policy Success: The Importance of Non-Institutional Factors".

costs in the short-term, tend to draw much less public and government support.⁵⁵ Combined, these limitations make it not surprising that, with some variations over time and place, the protection of collective environmental interests by governments in liberal democracies has been at most half-hearted: aimed at accommodating environmental concerns but without alienating powerful interest groups or risking the chances of re-election.

These limitations imply that while, in theory, in liberal democracies, environmental groups and advocates have unrestrained opportunities to raise environmental issues, organise and campaign for environmental issues, policies and solutions, and to mobilise public awareness, demands and support, their influence and power is severely restricted by the built-in bias of political institutions. This bias extends to the institutional frameworks by which policies are developed, including the relative power and resources of government organisations (government departments, advisory bodies) and the rules governing transparency/secretcy, accountability, and opportunities for public input. Government agencies advocating for industrial, agricultural, transport, and energy (business) interests are often well-entrenched and more powerful and better resourced compared to environmental agencies. Crucial from the perspective of advancing environmental integration, but absent from the political-institutional framework of all liberal democracies, is an agency that has responsibility and adequate power and resources for long-term integrated planning and for overseeing environmental integration across policy sectors and institutions. As a result, environmental advocates are forced to focus on specific environmental issues that have already caused serious concern and that offer the potential for mobilising considerable public and political support, leading to mostly reactive policy responses to single issues.

These shortcomings and limitations of liberal-democratic systems have led some analysts and environmental advocates to conclude that, to address the environmental challenge more effectively, more constraints need to be put on individual freedoms, which is often portrayed as an argument in favour of more authoritarian government. However, it should be acknowledged that those who have often been referred to as advocates of authoritarian rule to save the environment or humanity, like Garrett Hardin, Robert Heilbroner and William Ophuls, were at most "reluctant authoritarians".⁵⁶ They would rather like to believe that the environmental challenge can be resolved by democratic means, but for the reasons already mentioned above they do not think that this is possible. Moreover, although they are not very clear on how a regime of ecological guardians or rules would gain supreme power, they seem to keep open the possibility that people will grant them such power freely, as suggested by Hardin's phrase that such a social arrangement would involve "mutual

⁵⁵ Dryzek, John S. (1992), "Ecology and Discursive Democracy: Beyond Liberal Capitalism and the Administrative State"; Eckersley, Robyn (1998), "Environment Rights and Democracy", in R. Keil, et al. (eds.), *Political Ecology: Global and Local*, 353-376, 353-355.

⁵⁶ Humphrey, Mathew (2007), *Ecological Politics and Democratic Theory: The Challenge to the Deliberative Ideal*. London: Routledge.

coercion, mutually agreed upon".⁵⁷ Hence, it is neither fair nor correct to refer to these authors as if they *like* authoritarian regimes.

Other authors, like Westra, seem to be more ambiguous on this point. Westra assigns a primary and moral status to "environmental integrity" and argues that we should take a hard look at democracy "as it stands" and whether "it is right to have uneducated voters ultimately decide questions that might affect all life on earth?" and as "the majority of people will often prefer short-term gain over long-term safety."⁵⁸ Democratic rights, she argues, "may better be viewed as means towards justice or other goods, rather than as ends in themselves."⁵⁹ Similarly, Beeson argues that democracy is not an uppermost value in the East Asian region, where it lacks a strong tradition and where authoritarian rule has been commonplace and accepted, also because it is seen as more capable of responding to complex political and environmental pressures than some democracies.⁶⁰ He also argues that "there is no compelling evidence that democracy of any sort will necessarily promote good environmental outcomes"⁶¹ and that some "good authoritarianism" might emerge "in which environmentally unsustainable forms of behaviour are simply forbidden" and that are "essential for the survival of humanity in anything approaching a civilised form."⁶²

Shearman and Smith are even less ambiguous. They depict liberal democracy as a failed system dominated by elites and predict that "like communism, [democracy] will be but a moment in human history". They believe that, historically and evolutionary, authoritarianism has been the norm and the "natural state", and that "Humanity uses dominance and submission to organize society."⁶³ They argue that the concept of democracy is incoherent "in some of its versions at least",⁶⁴ and that "for us freedom is not the most fundamental value and is merely one value among others. Survival strikes us as a much more basic value."⁶⁵

The view that democracy is just one value among many others, and perhaps not the most important one at that, gets increasing currency. Internationally, actual liberal democracies are often depicted as conflict-ridden, ineffectual, hypocritical, and sometimes simply laughable. Brexit and the Trump presidency, both seen as symptoms of deeply divided nations, provided ample fodder for this view. There is no doubt that liberal democracy has come under threat, not only for environmental reasons but also because of developments in what could be regarded as the heartlands of democracy,

⁵⁷ Hardin, Garrett James (1968), "The Tragedy of the Commons", *Science*, Vol.162, No.3859, 1243-1248, 1247.

⁵⁸ Westra, Laura (1993), "The Ethics of Environmental Holism and the Democratic State: Are They in Conflict?", *Environmental Values*, Vol.2, No.1, 135-136, 30-31.

⁵⁹ *Ibid.*, 125.

⁶⁰ Beeson, Mark (2010), "The Coming of Environmental Authoritarianism", *Environmental Politics*, Vol.19, No.2, 276-294, 276.

⁶¹ *Ibid.*, 282.

⁶² *Ibid.*, 289.

⁶³ Shearman, David J. C. and Joseph Wayne Smith, *The Climate Change Challenge and the Failure of Democracy*, 15, 101-102.

⁶⁴ *Ibid.*, 4.

⁶⁵ *Ibid.*, 133.

including the United Kingdom and the United States. A growing literature on this topic has emerged, referring to the erosion of democracy,⁶⁶ the rise of "populism"⁶⁷ and "illiberal democracy"⁶⁸ or "competitive authoritarianism"⁶⁹, "post-democracy"⁷⁰ and the "twilight" and death of democracy.⁷¹ Paradoxically, although nominally democracy has been adopted in some form or other in most countries around the world, it is also said to be in crisis.⁷² Surveys indicate that there is growing dissatisfaction with democracies and that democracy is in a "state of malaise".⁷³

By contrast, authoritarian regimes are seen to compare favourably. For instance, China is increasingly referred to as a country whose authoritarian regime is not only capable of addressing environmental problems more effectively, to the point of becoming a model to the rest of the world, but that is also superior and more attractive on a range of other fronts, including delivering economic growth and rising living standards, safeguarding its economy from economic crises that regularly afflict the West, and for its political stability and pursuit of a harmonious society.⁷⁴ Not surprisingly, the Chinese government eagerly feeds such propaganda.⁷⁵ Similarly, Singapore has also often been referred to as a benign authoritarian city-state based on "Asian values" that has delivered a prosperous, stable and neat society.⁷⁶

⁶⁶ Cerny, Philip G. (1999), "Globalization and the Erosion of Democracy", *European Journal of Political Research*, Vol.36, No.1, 1-26; McChesney, Robert W. and John Nichols, *People Get Ready: The Fight against a Jobless Economy and a Citizenless Democracy*.

⁶⁷ Mudde, Cas (2004), "The Populist Zeitgeist", *Government and Opposition*, Vol.39, No.4, 541-563; The Guardian (2019), The New Populism, <https://www.theguardian.com/world/series/the-new-populism> (Accessed: 3 April 2019); Mounk, Yascha (2018), *The People Vs Democracy: Why Our Freedom Is in Danger and How to Save It*. Cambridge, Mass.: Harvard University Press.

⁶⁸ Zakaria, Fareed (1997), "The Rise of Illiberal Democracy", *Foreign Affairs*, Vol.76, 22-43.

⁶⁹ Levitsky, Steven and Lucan A. Way (2002), "The Rise of Competitive Authoritarianism", *Journal of Democracy*, Vol.13, No.2, 51-65.

⁷⁰ Crouch, Colin (2004), *Post-Democracy*. Malden, MA: Polity; Swyngedouw, Erik (2011), "Interrogating Post-Democratization: Reclaiming Egalitarian Political Spaces", *Political Geography*, Vol.30, No.7, 370-380.

⁷¹ Levitsky, Steven and Daniel Ziblatt (2018), *How Democracies Die: What History Reveals About Our Future*. New York: Crown Publishing; Keane, John, *The Life and Death of Democracy*; Applebaum, Anne (2020), *Twilight of Democracy. The Seductive Lure of Authoritarianism*. New York: Doubleday.

⁷² Freedom House (2018), Democracy in Crisis, Freedom House, <https://freedomhouse.org/report/freedom-world/freedom-world-2018> (Accessed: 22 January 2018); Foa, R.S., Klassen, A., Slade, M., Rand, A. and R. Williams (2020), *The Global Satisfaction with Democracy Report 2020* Cambridge, United Kingdom: Centre for the Future of Democracy.

⁷³ Foa, R.S., Klassen, A., Slade, M., Rand, A. and R. Williams, *The Global Satisfaction with Democracy Report 2020*.

⁷⁴ Halper, Stefan A. (2010), *The Beijing Consensus: How China's Authoritarian Model Will Dominate the Twenty-First Century*. New York: Basic Books.

⁷⁵ The State Council Information Office of the People's Republic of China (2021), *China: Democracy That Works* Xinhua.

⁷⁶ Wee, C. J. W. L. (1999), "'Asian Values', Singapore, and the Third Way: Re-Working Individualism and Collectivism", *Sojourn: Journal of Social Issues in Southeast Asia*, Vol.14, No.2,

However, the argument that less democratic or authoritarian regimes are better able to cope with the many and often conflicting demands of a modern society, including the demands associated with the environmental challenge as described in Chapter 1, is unconvincing. The argument is commonly based on one or more of the following grounds or assumptions. First, the environmental situation has reached the status of a crisis or emergency which makes it necessary to deal with it urgently and decisively. Second, decisions made by an environmentally committed authoritarian regime are likely to be based on superior knowledge and therefore will be more effective than decisions made in democratic systems. Third, it is possible to establish an authoritarian regime that will (continue to) assign the highest priority to environmental protection. Fourth, democracy is not the most important value – collective survival is – and historically democracy has not been a common or popular form of government. Finally, the (environmental) failings of (liberal-) democratic systems cannot be remedied by reform – the creation of authoritarian regimes is the only option. I will briefly elaborate on each of these grounds and assess their plausibility.

The first argument, that the environmental situation has reached the status of an emergency that requires immediate and decisive action that can only be taken by an authoritarian leader or system assumes that the environmental crisis is of the same nature as, for instance, a medical emergency or emergencies on a ship or a plane, which are often used as metaphors. However, such analogies are flawed. The emergencies referred to may require vital decisions to be taken within minutes or hours, whereas it would be very risky and foolish to make decisions aimed at addressing the environmental crisis (including the climate change emergency) within such a short time, even if that were possible. It is questionable whether it is even appropriate to use the term crisis in this context. As I argued in Chapter 1, the environmental challenge has always existed and is an enduring element of the human predicament that will never be solved by particular decisions taken at any one time (of crisis). Although I do not deny that environmental problems can reach crisis proportions (for instance, when water supplies run out or harvests fail in a series of subsequent years), such problems cannot be resolved enduringly by crisis decision-making, although this can provide relief in the short term. While it is understandable to feel alarmed by the scale and pace of environmental degradation and climate change impacts, and it is justified or even mandatory to demand from political leaders that they take urgent action, what this means or should mean is that they must assign the highest level of priority to these issues, not that they make rash and authoritarian decisions based on questionable expertise and ideas about what needs to be done. Addressing the environmental challenge effectively requires looking at fundamental roots and causes (more akin to disease or disaster prevention) than quick decisions in an ad hoc emergency by an “environmental captain”. This leads to the second point.

While in real emergencies or crises, it is or at least may seem rational to put one's trust or faith in the expertise and experience of people who can be considered to know best what to do, and who may have been trained for dealing with such emergencies,

332-358; The Guardian Editorial (2015), "The Guardian View on Lee Kuan Yew: A New Generation Should Build on His Successes, Not Rest on Them", *The Guardian*, 23 March.

it is far from clear who has the expertise to save humanity from the environmental challenge. Ecologists? Climate scientists? Given the multi-faceted nature of the environmental challenge in its manifestations, roots and causes, there simply is not one kind of expert to turn to. The assumption that decisions affecting the environment made by an authoritarian regime are likely to be superior to those made in a democracy is highly questionable. Given the broad and deep nature of this challenge, which touches upon all aspects of societies including their fundamental values, inevitably, the knowledge and views of any small group of environmental professionals will be limited and contestable, as reflected in the diversity of views that exists even among environmental advocates and experts. This does not mean that there is no place for experts in decision- and policymaking affecting the environmental challenge. There surely is and must be. But it is naïve, risky, and unwise to assign supreme power to a select group of experts and to assume that better decisions will be made by a group of environmental rulers (“ecological guardians”), let alone by one authoritarian leader (an “eco-philosopher king”). The smaller the group of decision-makers, the easier it may be to act decisively, but the greater the chance of getting it wrong in more than one sense.

Third, it is not clear how a select (self-selected?) group of ecological or environmental experts would gain or be granted authoritarian power. If existing liberal democracies are dominated by vested interests or elites that stand in the way of making better environmental decisions and policies, these may, to say the least, be reluctant to cede power to such a group, unless they are carefully selected to make it unlikely that their decisions would pose a threat to the interests of the already powerful. Where authoritarian leaders already exist (such as in “illiberal democracies”), it is also not very plausible that they will cede power to a group of environmental advocates or experts, or an environmentally minded competitor. More likely, authoritarian rulers or regimes (will) claim that they already are environmentally aware and committed. But even if a group of dedicated eco-authoritarian leaders were to get into power, how can we be sure that they will continue to give the highest priority to environmental values or imperatives and not to their own interests? In the light of history, Lord Acton’s saying that “Power tends to corrupt, and absolute power corrupts absolutely”⁷⁷, implying that absolute rulers are likely to put their interests first at all costs, still seems more believable.

Fourth, the argument that democracy is not necessarily the most important value, and that *therefore* authoritarian regimes based on other values may be legitimate, raises some fundamental questions indeed, but cannot be detached from instrumental considerations. Ultimately, it is true that judgements of political systems depend on one’s values and their relative importance, depending also on the context. When their life is truly at stake or when people struggle to make a living, people may assign low priority to democracy. In other contexts, people sometimes risk or sacrifice their lives to fight for democracy and against dictatorship. For some, democracy has intrinsic value and stands for recognising the fundamental equality and dignity of all people and their right to have a say in how they are governed. Others may assign

⁷⁷ Wikipedia (2019), John Dalberg-Acton, 1st Baron Acton, https://en.wikipedia.org/wiki/John_Dalberg-Acton,_1st_Baron_Acton (Accessed: 25 October 2019).

primarily instrumental value to political systems, including democracy, accepting any type of regime as long as it provides security, stability, and social order, enabling people to get on with their affairs and/or to meet their needs.

Yet, it is far from clear that authoritarian regimes are necessarily (better) guardians of these other values than democracies, however limited or flawed the latter are. History has shown that authoritarian regimes almost by their very nature trample on human rights and oppress and torture their citizens (especially minorities) in the name of order, stability and the general interest. Wealth protection has been the main priority of oligarchs throughout history, not the well-being of societies, let alone the environment.⁷⁸ They tend to exploit people and the environment to the benefit of the ruling few rather than let them get on with their lives. If they provide social order and stability, it is because they suppress dissatisfaction and use oppressive techniques to protect the power, values, and interests of the elite. Benign dictatorship is a contradiction in terms for anyone who disagrees with the leadership. Moreover, even if a majority of the people living under an authoritarian regime are dissatisfied with the leader and would like to replace him or her or introduce constraints on the leadership, this may prove to be very difficult, and increasingly so with the near-totalitarian surveillance powers that such states build up and deploy. Altogether, history provides little if any support for the view that authoritarian regimes better represent, protect, or advance the (collective) values and interests of their citizens than democratic regimes.

It is certainly true that, throughout history, democracy has not been the default political system and that even today, despite the prevalence of (more or less) liberal democratic systems around the world, it is far from secure and guaranteed to survive. But often people only start appreciating something after they have lost it. If, for environmental or any other reasons, an authoritarian regime replaces a liberal democratic system, people may soon regret it and pine for its restoration.

Fifth, advocates in favour of the creation of eco-authoritarian regimes all too easily assume that the (environmental) failings of (liberal-) democratic systems cannot be remedied by reform. Given those failings, authoritarianism is seen as the only alternative. Yet, we should not rule out the possibility that existing democratic systems can be changed significantly to deal more effectively with this challenge. One line of thinking is that liberal democracies should and can be transformed and strengthened, or even replaced, by more meaningful forms of democracy. Some have argued in favour of stronger, participatory, or more direct forms of democracy⁷⁹ to enable citizens to have a greater say in decision-making and policy selection. That meaningful democracy implies the existence of opportunities for citizens to debate the relative merits of ideas, proposals or options—on a “level playing field”—lies at the core of a school of thought centred around the concept of deliberative or discursive

⁷⁸ Winters, Jeffrey A., *Oligarchy*.

⁷⁹ Barber, Benjamin R. (1984, 2003), *Strong Democracy: Participatory Politics for a New Age*. Berkeley: University of California Press; Pateman, Carole (1970), *Participation and Democratic Theory*. London: Cambridge University Press.

democracy.⁸⁰ Other ideas for improving democracy relate to the introduction or strengthening of environmental rights and ecological representation, sometimes linked to social justice issues under the label of “ecological democracy”.⁸¹ More radical ideas involve the decentralisation of political power from nation-states to smaller political entities based on the assumption that local communities are more motivated and able to give environmental protection the priority that it deserves, accompanied by a belief that this will also create more democratic and better societies.⁸² In Chapter 14, I will present my ideas about how democracy could be strengthened by revisiting the notion of popular sovereignty.

Rather than giving up on democracy, we should focus on the actual limitations and shortcomings of the specific institutions which have been adopted to shape a particular democratic system. Some of these relate to the point often raised by advocates of eco-authoritarianism that certain rights or freedoms should be restricted. For example, explicitly prohibiting or restricting the freedom to cause serious social and environmental harm (and making “ecocide” a legal crime) does not constitute curtailing democracy or political or human rights.⁸³ Similarly, treating corporations as (legal) persons with (almost) the same political rights as individual citizens, is an aberration that was first introduced in the United States, the abolition of which would not weaken but strengthen democracy.⁸⁴ Democracy involves putting in place rules to regulate freedoms to prevent that some people negate the freedom of others. As Berlin noted, “Freedom for the wolves has often meant death to the sheep”.⁸⁵

⁸⁰ Dryzek, John S. (2000, 2002 ed.), *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*. Oxford: Oxford University Press; Baber, Walter F. and Robert V. Bartlett (2005), *Deliberative Environmental Politics: Democracy and Ecological Rationality*. Cambridge, Mass.: MIT Press; Meadowcroft, James (2004), “Deliberative Democracy”, in R. F. Durant, et al. (eds.), *Environmental Governance Reconsidered: Challenges, Choices, and Opportunities*, 183-217.

⁸¹ Morrison, Roy (1995), *Ecological Democracy*. Boston Mass.: South End Press; Eckersley, Robyn (2011), “Representing Nature”, in A. J. Kean and W. Merkel (eds.), *The Future of Representative Democracy*, 236-257; Pickering, Jonathan, et al. (2020), “Between Environmental and Ecological Democracy: Theory and Practice at the Democracy-Environment Nexus”, *Journal of Environmental Policy & Planning*, Vol.22, No.1, 1-15.

⁸² Kohr, Leopold (1978), *The Breakdown of Nations*. New York: Dutton; Bookchin, Murray (1990), *Remaking Society. Pathways to a Green Future*. Boston, MA: South End Press; Sale, Kirkpatrick (1996), “Principles of Bioregionalism”, in J. Mander and E. Goldsmith (eds.), *The Case against the Global Economy*, 471-484; Dryzek, John S. (1987), *Rational Ecology: Environment and Political Economy*. Oxford, UK: Blackwell, Chapter 16.

⁸³ Making ecocide a globally recognised crime, as advocated by Polly Higgins, has gained growing international support and some traction. Higgins, Polly (2012, Kindle ed.), *Earth Is Our Business - Changing the Rules of the Game*. London: Shepard-Walwin Publishers Ltd; Monbiot, George (2019), “The Destruction of the Earth Is a Crime. It Should Be Prosecuted”, *The Guardian*, 28 March; Bowcott, Owen (2020), “International Lawyers Draft Plan to Criminalise Ecosystem Destruction”, *The Guardian*, 30 November.

⁸⁴ Korten, David C. (1995), *When Corporations Rule the World*. West Hartford, Conn.: Kumarian Press, notably chapters 4-6; Bakan, Joel (2004), *The Corporation: The Pathological Pursuit of Profit and Power*. London: Constable.

⁸⁵ Berlin, Isaiah (1969), *Four Essays on Liberty*. Oxford: Oxford University Press, p.xiv.

Such changes would create a more level playing field between environmental and other demands and interests. Admittedly, the big question that remains is how such changes could be achieved in existing political systems. But arguing that we need an authoritarian system to do so presents a false choice or dichotomy. In their actual forms (in the past and the present), neither liberal democracies nor authoritarian systems are able to adequately address the environmental challenge. But given the (for me) intrinsic value of democracy, and the considerations above, I would not want to put a bet on authoritarian systems when it comes to introducing such changes. Rather, as I will discuss further in Chapters 13 and 14, a more promising and rewarding approach is to fundamentally change liberal-democratic systems to make them *more* democratic *and* to impose limits on environmentally damaging behaviour and practices.

In brief, all states struggle and have thus far failed to transform their political-institutional systems to better accommodate environmental demands in the context of their role to manage many and often conflicting demands. To make environmental protection and integration a core function, all states, whether democratic or authoritarian, will require deep political-institutional changes.

But there is one more core function of states that needs our attention as it presents a major challenge that can make or break states: social integration.

Social integration: managing social fragmentation

As discussed in the preceding sections, conflict is inherent to all societies and a frequent phenomenon between societies. In modern, pluralist societies, states play a key role in accommodating conflicting needs or demands many of which are of an economic nature. However, from their emergence, states have also been confronted with what arguably has been an equally important source of tension and conflict: social fragmentation.⁸⁶

Social fragmentation and its opposite, social integration, refer to the question of what binds and holds people together. For a long time since the emergence of *Homo sapiens*, heavy dependence on kinship groups for survival provided the basis for strong social bonds. Families expanded into extended families, clans and tribes that shared (beliefs in) a common ancestry, culture, and oral history. With the evolution of agriculture, urban settlements and larger polities, symbols, common belief systems and socio-cultural institutions, as well as political institutions, became increasingly important in holding societies together.⁸⁷

It would be wrong to dismiss socio-cultural institutions, as Harari⁸⁸ seems to do, as simply figments of the mind and merely arbitrary constructions that are the result of people's cognitive capacity or imagination. Such institutions meet (basic) social or

⁸⁶ For a classic on the theme of social integration in the context of the development of modern society, see Tönnies, Ferdinand (1887; 2001), *Community and Civil Society*. Cambridge: Cambridge University Press.

⁸⁷ For a Marxist interpretation of the history of the family, see Engels, Friedrich (1891), "The Origin of the Family, Private Property and the State", in K. Marx and F. Engels (eds.), *Selected Works*, 191-334. And Zaretsky, Eli (1976), *Capitalism, the Family & Personal Life*. New York: Harper & Row.

⁸⁸ Harari, Yuval N., *Sapiens: A Brief History of Humankind*.

human needs, such as the need for belonging, finding meaning in or giving purpose to life, finding partners, sharing burdens, misery and adversity, fears, pleasure and joy, and ideas and hope, among many other things. Also, socio-cultural institutions evolved in widely different environmental contexts (geography, climate, resources) which influenced the ways people met their needs, for instance, related to types of food, housing, and clothes. Thus, how, and why socio-cultural diversity has evolved is far from arbitrary. Cultures and social institutions served (and serve) many social needs and purposes and have been essential to the functioning of societies, both materially and by providing their members with a sense of belonging, identity, and purpose.

At the same time, the ways social institutions have shaped and still shape individuals can be considered limiting or even oppressive. As individuals are socialised within a particular society and culture, they may get little if any choice regarding the dominant social norms and rules to which they are expected to conform, for instance, related to the place and role of women, the exercise of power by authoritarian institutions, and those prescribed by the dominant belief system. Thus, while humans are social animals that depend on others for satisfying many of their needs, the social institutions through which they do so can be restrictive and stand in the way of the development of the potential of individuals, creating a tension that lies at the core of sociology and social theory.⁸⁹ Effective social integration requires both the existence of a sense of community and the acceptance of shared social institutions on the one hand and a recognition of the importance of leaving or creating space for individuals to flourish on the other. But an extreme emphasis on individuals and their freedom is incompatible with the existence of communities or societies.⁹⁰

However, throughout history, cultures have united as well as divided people. As they provided common social-institutional and cognitive frameworks that bound groups and societies together they also created differences that, from a particular cultural perspective, were important. With the emergence of larger states and empires, rulers and governments inevitably were confronted with the challenge to deal with tensions and conflicts associated with cultural diversity, a challenge which continues to face societies and states today. Few modern states are culturally homogeneous. Although cultural diversity may be accepted or even valued by many people and governments, virtually all states have played, and still play, a key role in the promotion of a particular dominant culture. Historically, states may have done so mainly by introducing laws (which are always values-based), but from the 18th century onwards (nation-) states developed a whole array of ways to forge, promote and uphold what was perceived to be the national culture. These included the adoption of a national flag and hymn, the teaching of national geography and history at schools, the

⁸⁹ For a few classics on this topic, see Tönnies, Ferdinand, *Community and Civil Society*; Fromm, Erich (1955), *The Sane Society*. New York: Fawcett World Library; Marcuse, Herbert (1964, 1969 ed.), *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. Boston: Beacon Press; Sphere Books.

⁹⁰ A view which seemed to be held by UK Prime Minister Thatcher who, in an interview, stated that "[...] who is society? There is no such thing! There are individual men and women and there are families". Keay, Douglas (1987), "Margaret Thatcher. Interview for *Woman's Own*", *Woman's Own*, 23 September.

introduction of national holidays and commemorative events, the building of museums and art centres to display artefacts of national-historical importance, the provision of support for sports in which nationals tend to excel, and a variety of other ways to promote national culture and identity.

There is hardly a need to point out the enormous costs wrought by excessive nationalism and affirmation of cultural identity, especially when coupled with politically motivated interpretations of national security and integrity. While political-economic factors and developments lie at the root of many if not most conflicts, both within and between states, they tend to take on a more fanatic and lethal character when overlain with an ethnic-cultural and nationalistic layer. At times, swept up by feelings of both superiority and hatred for the "other", governments and ethnic groups have committed, and still commit, atrocities against members of other groups or cultures. While such extreme forms of animosity between ethnic groups may be relatively rare, ethnic differences can be, and often are, a source of prejudice, discrimination and inequality within societies that give rise to social and political tensions and sometimes to demands for greater autonomy or independence.

Given the history of animosity, rivalry, and violence between cultural or ethnic groups one might be tempted, like Harari, to downplay the importance of culture, among other, by pointing out that cultural institutions change over time.⁹¹ However, cultural change does not necessarily make cultures any less important as foci of social identification. If anything, cultures must change to remain relevant to their adherents in changing conditions. Cultural rigidity and the failure of the elites of societies to adapt cultural institutions to changing resource/environmental conditions have contributed to the collapse of societies in the past.⁹² Arguably the main problem associated with the present-day cultures, national as well as those of many ethnic groups, is that they are no longer relevant to the conditions in which they find themselves and that they fail to adapt (rapidly enough) to those conditions.

As noted above, nation-states have played a crucial role in forging national cultures and identities that bind people together. These efforts became increasingly important with the social upheavals and disintegration brought about by industrialisation, urbanisation, and capitalism. As the traditional material bases and mechanisms of social integration, including economic systems reliant foremost on local and regional production and consumption, weakened or disintegrated, the creation of national cultures and identities became crucial means for social integration and holding societies together. At the same time, nationalism was instrumental in meeting the needs of capitalism by creating national markets and infrastructures, supporting the opening up of new markets in other countries, including by colonisation and imperialism, and by assisting the exploitation of people and resources in many parts of the world. Not surprisingly, competition between nation-states in support of their largely nation-based capitalist interests led to new levels of international and global conflict, including two world wars that were fuelled by swept-up appeals to national pride and interests.

⁹¹ Harari, Yuval N., *Sapiens: A Brief History of Humankind*.

⁹² Diamond, Jared M., *Collapse: How Societies Choose to Fail or Succeed*.

Industrialisation has been accompanied by other cultural changes that have been supported by national governments because they served the needs of capitalism and/or modern development. Many of these changes people now take for granted. They include the regimentation of work and life based on the clock, the value attached to extended schooling, the centrality of work (wage labour for most) in life, the rise of materialism, and the importance of income and wealth as measures of achievement and status. Linked to these is an emphasis on competitive individualism as the driver of both individual and collective progress and success. While most of these cultural elements are not intrinsic to particular national cultures, they were (and are) essential to the flourishing of nation-based (capitalist) economies and their international competitiveness. But they have also come at the cost of eroding the social bonds and traditions in modern societies, forcing individuals to make their own choices in forging their lives in the face of growing uncertainty and risks.⁹³

Paradoxically, modern (mostly capitalist) political-economic systems have made individuals more interdependent and less materially self-sufficient than ever before while cultivating individualism and selfishness. While nationalism may have provided a basis for social identification and has incited people to do their best or even sacrifice themselves for their country (such as in sport or war), it has been an inadequate counterweight to the social differentiation, fragmentation, individualism, and alienation wrought by (especially capitalist) development. While capitalism, assisted by governments, produced a dominant culture that served its needs, in many respects it does not serve the social needs of people. This is reflected, among other, in the growth of mental disorders, despite or because of rising standards of living and materialism.⁹⁴

As a result of these developments, many countries suffer from a social integration crisis as well as from environmental, political, and economic crises. The former manifests itself in a variety of ways, such as the decline in public trust in political institutions, the decline in support for the main political parties and the fragmentation of the political spectrum into a raft of smaller parties, growing political alienation and a withdrawal of political participation (including voting), and the rise of identity politics as people search for and emphasise alternative bonds (to national ideologies) that tie them to others, including along the lines of gender, ethnicity, and regional cultures. It has also led to virtual forms of social integration through the social media, often across national boundaries, but also to much confusion and apprehension about what is going on in societies and the world at large. The social integration crisis is perhaps most acute in the member countries of the European Union. Here, the material basis that underlay national cultures has been largely lost while Europeanism has failed to provide a convincing substitute. Although EU politicians and bureaucrats have a major influence on the lives of EU citizens, the distant and opaque decision-making processes, and the socially harmful policies that they have produced, have fed anti-European resentment and re-fuelled nationalism. Moreover, it has become

⁹³ Beck, Ulrich, *Risk Society. Towards a New Modernity*.

⁹⁴ Hamilton, Clive and Richard Denniss (2005), *Affluenza: When Too Much Is Never Enough*. Crows Nest, N.S.W.: Allen & Unwin, Chapter 8. See also Erich Fromm on this theme. Fromm, Erich, *The Sane Society*.

increasingly apparent that the EU has limited power to protect and advance the interests of the citizens of its member countries.⁹⁵

While nationalism has provided an important ideological basis for social integration in much of Europe and the Americas for several centuries, it has been a more recent phenomenon in most other parts of the world. In Africa, the Middle East and Asia, most states were created in the process of decolonisation that only started in earnest from the end of WWII. Many of the newly created states were given rather arbitrary borders within which a (large) variety of ethnic groups found themselves faced with the need to live together under the same political institutions, while some groups were split up between two or more states. Not surprisingly, forging nation-states based on a common sense of identity has proved to be a major challenge in many of these countries, especially when and where ethnic differences overlapped with socio-economic inequalities and a history of rivalry and conflict. But that social integration remains a big challenge in all multi-cultural states, even in Europe, is illustrated by the disintegration of the former Yugoslavia, the splitting up of Czechoslovakia into the Czech Republic and Slovakia, and the secessionist movements in Spain (Catalonia), Belgium (Flanders), and the United Kingdom (Scotland). Multi-culturalism remains politically and socially problematic in most if not all countries, despite its celebration in liberal circles. While, at least in part, these problems can be attributed to political exploitation by ultra-nationalist right-wing groups, one cannot simply ignore the need for some socio-cultural ties to hold modern societies together, especially politically.

Even though nationalism supported, and still supports, nation-based capitalism, the gap between the culture of nationalism and the reality of growing international and global interdependence affecting the material well-being and even survival of people has become wider than ever. With globalisation, which has been supported and promoted by governments and capitalist interests alike, the capacity of all nation-states to protect the security and economic well-being of their citizens has been steadily eroded. The growing gap between the international or global material basis on which countries and states depend and their ability to meet the expectations of their societies has led to an erosion of the legitimacy of national governments led by the dominant (establishment) parties, but also to a backlash against globalisation and the sharpening of anti-immigration feelings, fuelled and exploited by right-wing and populist parties. While it is easy to dismiss such reactions as misguided and deplorable, a good case can be made for the argument that this growing gap points to a need for citizens to reclaim their states and to increase their collective power and capacity to meet their needs. As I will discuss in Chapters 11 and 12, globalisation should not be seen as an end in itself, nor does it necessarily imply positive political, economic, social, and cultural outcomes.

In this context, of the four core functions of the state, the need for social integration arguably offers more opportunities for positive synergies with the need for

⁹⁵ Tooze, J. Adam (2018, e-book ed.), *Crashed: How a Decade of Financial Crises Changed the World*. United Kingdom: Penguin Random House. This became apparent also during the COVID-19 pandemic. Butler, Katherine (2020), "Coronavirus: Europeans Say EU Was 'Irrelevant' During Pandemic", *The Guardian*, 24 June 2020.

environmental protection than with the other three functions. The reason for this lies in the possibility that all citizens of a state may (more or less) feel or develop a connection with the biophysical environment within the official borders of the state. This could be because of the particular features and beauty of that environment, its unique (endogenous) flora or fauna, its particular landscapes, resources, and the ways the human (urban, settled) environment has been shaped by history and culture. These features can be an important source of national (and regional and local) identity and pride that binds people together in a positive way and that does not need to involve xenophobia or hatred of other countries. On the contrary, these environmental values and diversity are commonly recognised internationally and are perhaps the main motivation behind international tourism. They also provide a (potentially) powerful source for public demands, support and action for environmental protection, stewardship, and integration. Arguably, environmental nationalism is one of the key drivers of environmental protection and integration accepted by many governments, even if only to promote the tourism industry. However, the development of mass tourism in many countries has created many environmental and social problems that raise questions about its sustainability, but that are often ignored or downplayed by the vested business interests as well as governments.

Despite the challenges to the nation-state, (nation-) states will likely continue to play a key role in social integration, despite or perhaps because of globalisation. Most people still look at their (nation-) states and governments for, among other, the provision of security, meeting their economic and other needs (especially in times of duress), the protection of their rights, the provision of public or collective goods and services, including health and education, the management of conflicts, the promotion of social harmony, and the protection of the environment. Although people increasingly depend on TNCs for goods and services, such businesses do not have a responsibility or obligation to meet the essential needs of people, let alone to look after the material (and broader) well-being of all the citizens of a country; rather, their first and main concern is to meet the (profit) expectations of shareholders. It would be equally irrational to think that global organisations or bureaucracies would be better able to meet the many and diverse needs of people than national-level (and local) agencies, except perhaps at times of emergency when the capacity of nation-states to look after their citizens, or refugees, is overwhelmed. Making super-sized global organisations responsible for meeting the diverse needs of billions of people around the globe and holding them accountable for how they (cannot) do this, simply does not make sense. States remain vital institutions for meeting the basic needs of their citizens and can be held accountable for that, a point recognised by most people. This remains true despite, and because of, globalisation, which has significantly increased most people's vulnerability to global (financial-economic, social, health, environmental, and other) risks. It is the erosion of the capacity of states to deal effectively with the risks and harm inflicted by unaccountable globalisation, to the presumed benefit of the economy, that has generated widespread public concern, discontent, and protests in many countries.

It is therefore not surprising that nationalism is far from dead and, if anything, has made a political come-back. There are few if any countries in the world where

nationalism has become less important as a means of social integration and identification. Some have argued that cultural or civilisational differences have supplanted ideological dividing lines, heralding an era of a "clash between civilisations" on a world scale.⁹⁶ This discourse does nothing but lift the issues of social fragmentation and integration to a higher level (civilisations rather than national cultures), fuelling division and (potential) conflict on a larger scale. But a good case can be made for re-recognising the crucial importance of states and their functions for meeting the basic needs of people and societies, including the need for social integration. That does not imply supporting or condoning extreme nationalism, racism or fuelling hatred for the "other". Rather, we must look at the capitalist forces that deliberately imposed globalisation on the world, forcing states to adapt their functions to the imperatives of transnational capital, while disempowering citizens in the process, as the actors responsible for the extremist nationalist backlash.

Conclusion

This chapter has focused on the role and importance of political institutions, in particular the state and its core functions, to environmental integration. The four functions that were identified and discussed are the security function, the economic function, demand and conflict management, and social integration. States must fulfil these core functions or imperatives, which are linked to the individual and collective needs of citizens and societies, to at least a perceived level of adequacy to maintain their legitimacy and even existence. Yet, these functions can be and have been interpreted in different ways in line with the ideologies and interests of the most powerful in societies. Not surprisingly, the ways states have fulfilled these functions have been the subject of ongoing contestation and conflict. States and governments are continuously evaluated on their performance in these areas, provoking variable judgements and consequences.

From an environmental point of view, it is important to note that environmental protection has never been a core function of states. Worse, the efforts of states to fulfil the four functions discussed here have been largely detrimental to environmental protection. This is particularly so in respect of the security and economic functions. In both areas, decisions and practices have had, and continue to have, major adverse consequences for the environment. While, in many societies, this is acknowledged by a growing number of people, virtually all governments continue to assign top priority to these two functions. To manage demands and conflicts, which arguably is the staple of day-to-day politics, states have adopted a wide range of different (more or less democratic, or authoritarian) political institutions which mostly favour particularistic, short-term, and non-environmental interests. The environmental (state) institutions that have been created tend to be less powerful than the pre-existing agencies. Social integration poses another ongoing challenge to states, notably in increasingly culturally diverse and fragmented societies. Nationalism is a traditional means by which states (and societies) emphasise what binds or holds their citizens together, albeit at the risk of invoking extremism. But arguably, in a moderate environmental

⁹⁶ Huntington, Samuel P., *The Clash of Civilizations and the Remaking of World Order*.

form (environmental nationalism), it may be conducive to environmental protection and integration.

This chapter also raised the question of whether democracies or authoritarian political systems are more conducive to environmental integration. While most political analysts argue that liberal-democratic political systems generally outperform authoritarian regimes in environmental performance, this should not be taken as evidence that liberal democracies are addressing the environmental challenge effectively. To do the latter, significant change will be required to the political-institutional frameworks of existing liberal-democratic systems to strengthen the position and power of environmental advocates and to impose (much) stricter control on the behaviour and practices that (potentially) cause serious environmental (and social) harm. If that need is recognised by authoritarian regimes these may well be in a better position to impose such limitations (even though their implementation may leave to be desired), but this is not a guarantee that environmental interests will (continue to) be assigned the priority that they deserve. But rather than juxtaposing these two types of systems as alternatives, there is more merit in promoting the need for significantly strengthening the position and power of environmental advocates within the political-institutional frameworks of *all* political systems or states. However, fundamentally changing political institutions to vest environmental interests and advocates with the power to require and achieve comprehensive environmental integration along the lines described in Chapter 1 thus far has proven to be elusive in all states. Arguably, underlying this failure are the power and interests of political-economic forces that are able to define the state's core functions and to influence or shape its institutions. The next chapter will further explore that argument.

Chapter 6 – Political-Economic Systems and the Environment

Introduction

The preceding chapter discussed four core functions of states and how these circumscribe and constrain their approach to the environmental challenge. Whether and how environmental interests are addressed by the state depends to a large extent on how environmental interests are linked or added on to the dominant interpretations of these four core functions. Thus far, there is no evidence that environmental protection has become a core function of any state, let alone that it has become the most important or overarching function.

This chapter looks at some of the main reasons why this has been and still is, the case. As discussed in the preceding chapter, how the functions of the state are interpreted or defined depends largely on a continuous battle between different interests within the state and society. However, this battle does not occur on a level playing field. Some of the parties in this battle have (much) more power than others and have the advantage that their interests have already been institutionalised in the state's organisations and rules (including laws) that serve particular functions. In some cases, the line between a state agency's role as regulator and advocate of a particular interest group (such as the agricultural industry) is blurred, even to the extent that an agency may be said to have been captured by such a group.¹ In some cases, however, the influence of particular interests may be less obvious and well hidden under the veil of bureaucratic neutrality. Corruption, of course, is another well-known (but normally hidden) phenomenon by which particular individuals or groups find favour with a government or government agency.

In this chapter, however, the focus is on how the economic role and function of the state are influenced and shaped by political-economic systems. While agency plays a significant role in influencing the policies and institutions of government, agency itself is influenced by the economic system that, to a large extent, shapes the positions and interests of actors. At any one time, individuals and groups operate within an economic system on which they have little if any control, and that influences their decisions and behaviour. Depending on their role and positions in that system, they have more or less economic power, which also influences the extent to which they can influence the policies and decisions of governments. This power and influence, in turn, may lead governments to change economic institutions and the distribution of

¹ The phenomenon of regulatory capture is well recognised in the public policy literature. See, for instance, Levine, Michael E. and Jennifer L. Forrence (1990), "Regulatory Capture, Public Interest, and the Public Agency: Towards a Synthesis", *Journal of Law, Economics, and Organization*, Vol.6, Special Issue, 167-198; Turner, John D., et al. (2016), "An International Comparison of Regulatory Capture and Regulatory Outcomes. The Case of Pension Regulators in Ireland and the United States", *Journal of Financial Regulation and Compliance*, Vol.24, No.4, 382-401; Lodge, Martin (2014), "Regulatory Capture Recaptured", *Public Administration Review*, Vol.74, No.4, 539-542; Moss, David A. and Daniel Carpenter (2016), "Conclusion. A Focus on Evidence and Prevention", in D. Carpenter and D. A. Moss (eds.), *Preventing Regulatory Capture. Special Interest Influence and How to Limit It*, 451-465.

political, economic, and other forms of power. Thus, what governments do and don't do, and what happens in the economic realm, depends on the interaction between political and economic factors and actors. Political and economic systems are intertwined, and to (better) understand what happens in the political and economic spheres we need to look at how they interact, shape, and influence each other. The field of political economy is the study of these interactions.

The realm of economics interacts not only with governments and states but also with societies as a whole. Strictly speaking, economic actions, practices and institutions are not separable from societies but occur within the societal context. Most economic actors are members of a society and are influenced by broader societal values, norms, demands, views, and interactions. In other words, economic institutions and practices are, to some extent, embedded within, and guided and constrained by societies. However, it has been argued that the extent to which the realm of economics is embedded within modern societies has significantly declined over time.² Based on the idea of economics as a sphere that operates (best) as a "free" (uncontrolled) market, economic institutions and practices have become largely independent from societies, impose their needs (or imperatives) on societies, and treat humans primarily as means or (human) resources. At the same time, economic institutions have been left at liberty to also treat nature and the environment as nothing more than means to (economic) ends. Nonetheless, it must be emphasised that this process of disembedding economics from societies and nature could only occur through the involvement of and support from governments and states. Again, this highlights the importance of looking at the interactions between politics and economics and the interconnections between the political-institutional sphere (political systems) and the economic realm.

In this chapter, I broadly discuss the importance of economics, differences in political-economic systems, and the social and environmental implications of the continuing process of disembedding economics from societies. Although much of the field of political economy is focused on the study of the interactions between (the developments in) capitalism and political systems (at the national and global level), it is important to recognise that other types of political-economic systems have existed and are at least thinkable. Based on differences between political systems and economic systems, I identify six types of political-economic systems, five of which have had counterparts in reality. It is debatable to what extent these systems are more or less conducive to, or incompatible with, environmental integration and can be greened. This question will be elaborated upon in the following three chapters).

However, notwithstanding the importance of the differences between political-economic systems, it can be argued that the process of social and environmental disembedding has been allowed to continue unabated in all hitherto existing economic systems. This has been attributed to what is commonly referred to as industrialisation, a process linked to the development and application of science and

² Polanyi's work has been seminal in describing the sources of this process (based on the idea of creating a "self-regulating market" and the separation between economics and politics) linked to the development of large-scale factory production (industrialisation), pointing out the fundamental flaws on which this idea is based. Polanyi, Karl, *The Great Transformation. The Political and Economic Origins of Our Time*, Chapter 4.

technology in the service of production and consumption. That industrial technologies have had major adverse effects on societies and the environment has long been recognised. But despite the discourse about the emergence of a post-industrial era and societies, the development of advanced industrial technology (applied to production and consumption) has not only been disembedded from societies but is increasingly subjugating and shaping societies, possibly creating (near) totalitarian technocratic systems. The prevailing trend is towards creating a human-made and controlled world that can function without the need to consider nature, including human nature.

First, I will briefly discuss the development and significance of economics and economic systems, putting forward my take on what economics is about and the importance of social, institutional, and material (technological) aspects. The second section discusses the importance of the interactions between political and economic systems and identifies and briefly characterises six different types of political-economic systems. The third section delves into the crucial importance of industrialism and the associated development of science and technology and their application to production and consumption. The importance of industrialism as an independent force that shapes societies has generally been underestimated.

Economics and economic systems

Economics is commonly referred to as a discipline (or science) that studies the allocation of scarce resources. Samuelson, in one of the classical economics textbooks, defined the discipline as “the study of how men and society choose, with or without the use of money, to employ scarce resources, which could have alternative uses, to produce various commodities over time and distribute them for consumption, now and in the future, among various people and groups in society.”³ It is interesting to note that his definition does not refer to issues of ownership, to how choices are made (by markets, governments, or society), and to a need for money. Also, it keeps open the option that resources are set aside for use in the future and implies that economics involves making societal choices associated with distribution. Thus, Samuelson’s definition of economics acknowledges the role of values and politics and (possibly) the needs of future generations (by not using resources now). His interpretation of economics suggests that economics as a discipline could be based on principles of sustainability and equity. It keeps open the possibility that societies have or adopt different economic institutions or systems to make such choices. Samuelson also recognised that economics “borders on other important disciplines” including sociology, political science, psychology, and anthropology, and that it “draws heavily on the study of history.”⁴

However, over time, Samuelson’s broad interpretation of economics transmogrified into a far narrower view. Arguably, his view was influenced by the fact that at the time of writing (1967), capitalism was not seen as the only possible economic system. The Soviet Union, among other countries, was practising quite a

³ Samuelson, Paul A. (1967, Seventh ed.), *Economics. An Introductory Analysis*. New York: McGraw Hill Book Company, 5.

⁴ *Ibid.*

different (socialist) economic system, and quite successfully so in terms of economic growth (measured in GDP).⁵ This forced the economics discipline to acknowledge that economics could be studied and practised in different ways – that there were alternatives. This view changed radically with the collapse of the Soviet Union and the perceived victory of free market economics over socialist economics. No longer, it seemed, was there a need for considering alternatives, or for complicating the study of economics by drawing on sociology, political science, and other disciplines. As a result, the focus of mainstream economics narrowed to the study of *efficiency* in the allocation of resources aimed at prescribing how efficiency can and should be increased, based on abstract mathematical modelling. Ironically, while economists decided to ignore (societal) complexities and reality, this was perceived to make economics more scientific. Having enthusiastically adopted quantitative methods and modelling used to prescribe the economic policies of governments, many economists considered their discipline to be the most scientific of the social sciences.

However, as pointed out by a growing number of critics of the newly dominant school of neoclassical or neoliberal economics, its prescriptions are based primarily on abstract assumptions—and rather implausible ones at that—and hardly on empirical research on actual economic behaviour and practices.⁶ Much of what goes under the label of economics is hardly more than an ongoing faith in miracles produced by the free market, largely in denial of the dependence of markets on the political-economic framework provided by states, and of the need for continuous state intervention to keep the economy afloat. This is most evident during financial-economic crises, but it applies also to the regulation of the labour market, the facilitation of exports and the imports of essential materials, the provision of a legal, physical, and social infrastructure (including laws and their enforcement, transport, energy and communications infrastructure, health, education, and social welfare services, and many other functions) without which the economy would simply not be able to function and collapse. Notwithstanding the claim that economics is a science, it manifests itself not as a body of accumulated knowledge based on empirical research, but as a more or less coherent set of political and policy prescriptions held up by the economics profession and media commentators as essential conditions for boosting or restoring economic growth. Economics has become a barely disguised set of ideological stances aimed at serving the imperatives of capitalism and maintaining the dominant political-economic system and its vested interests (notably of the economically most powerful). Ignoring social and environmental reality, mainstream economics has nothing to offer in terms of steering societies towards a sustainable and more desirable future.

As discussed in Chapter 5, states fulfil an economic function. While this function can be described in general terms as the protection and advancement of the economic

⁵ The first two pages of the textbook present a graph showing the steep (more than fourfold) rise of GDP in the USSR between around 1930 and 1964, narrowing the gap with the US, Great Britain, and Germany.

⁶ Keen, Steve, *Debunking Economics. The Naked Emperor Dethroned*; Raworth, K., *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*; Chang, Ha-Joon, *23 Things They Don't Tell You About Capitalism*.

interests of the state and its citizens, there is scope for interpreting and defining these interests differently. In large part, how these interests are interpreted depends on agency and the relative power of the main groups and actors involved in the struggle for control over the state and its political institutions and policies. However, who these actors are, and their interests and power, is to a large extent influenced, albeit not determined, by the economic system that prevails in a society or country. The rise of the neoliberal paradigm during the 1980s, and its dominance around the world during the 1990s, was not just a result of a convergence of political developments and ideological activism, but rooted in an economic (capitalist) system which assigned, accumulated, and concentrated most economic power into relatively few hands, and that required the state to accept, protect and advance the interests of this group for the system to be able to continue to function.⁷

Economic systems can be defined as ensembles of means, human inputs, and practices (production systems), and institutions (rules and organisations) that support such systems. Production requires biophysical means (materials, plants, animals, water, and energy, among other), human input (physical and mental), and tools. Historically, systems of production were largely circumscribed by local/regional conditions, influencing what biophysical resources were used. As humans live in societies, production is a social activity requiring (more or less voluntary) cooperation, which inevitably involves organisation and rules (institutions). Thus, production systems are dependent on economic institutions for their functioning. The latter influence or determine, among other, which and how biophysical means and tools are (to be) used, how work is organised, and how the outputs are distributed. This broad interpretation of economic systems makes clear the interdependence between production systems and economic institutions, and the importance of political and social systems and relations in shaping economic institutions for the regulation and development of production systems.

Therefore, to (better) understand how states interpret and (try to) fulfil their core functions, including the economic function, and fail to recognise or assign importance to environmental protection as a (core) function, we need to look at the links between economic, political, and social systems. The institutions that make up these systems do not emerge or evolve according to some kind of natural law but are created or changed through human agency, involving politics and power, and conflicts between classes or groups that stand to gain or lose from changes in these institutions. Thus, over time and across countries, economic systems have developed (or rather, been developed) in different ways, creating often unique political-economic configurations and systems. These differences affect how the functions of the state are interpreted, assigned (relative) importance, and institutionalised. Naturally, this will have significant implications for the importance assigned to environmental concerns or imperatives and/or how these are linked to the dominant core functions.

⁷ Harvey, David, *A Brief History of Neoliberalism*; Harvey, David (2014), *Seventeen Contradictions and the End of Capitalism*. Oxford; New York: Oxford University Press, USA; Jessop, Bob (2015), "Crisis, Crisis-Management and State Restructuring: What Future for the State?", *Policy & Politics*, Vol.43, No.4, 475-492.

Notwithstanding the claim that capitalism is the only economic system that has proven to be viable and successful, and the spread of neoliberal economics as its legitimating ideology across much of the world, there remains scope for different ways to make the kinds of choices that Samuelson referred to in his definition of economics. Not surprisingly, given the varied socio-cultural, geographical, political, economic, and other realities of countries, governments have continued to interpret the needs or imperatives of their economic systems differently. This applies not just to the handful of countries that remain officially committed to socialism (such as Cuba), but also to countries with capitalist systems or mixed (capitalist & socialist) systems. In large part, the variety in capitalist systems, and the ways states and governments interpret and give consequence to the economic needs or imperatives of their systems, depends on the size, level, history, and structural composition of their economies. It just does not make sense to argue that countries like the United States, the Netherlands, Botswana, Brazil, and India all share, or should share, the same interpretation of economic needs or imperatives, even though they all have capitalist systems. The fact that neoliberal economics has become the prevailing economic paradigm in most countries has more to do with the size, needs, and power of American capitalism (backed up by the US state) than anything else.⁸ Alternative ways of managing the economy, designing economic institutions and/or an economic system as a whole are not only possible but needed and/or highly desirable given the significant differences between countries. But whether and how a country can do so, depends, among other things, on its relative size, resources, and level of development, the structure of its economy, its dependence on or need for other countries (and their resources), and its power (of various kinds) and position in the global political-economic system, as well as on the choices made by those who dominate the state and government, linked to the political economy of a country.

Thus, historically, societies (in practice, their political-economic elites) developed their own economic systems based on different contexts. These systems comprised sets of economic institutions (rules and organisations) that guided or prescribed the type of economic choices made on the matters referred to by Samuelson in his broad definition of economics. Such rules governed production and distribution (consumption) and could include what is being produced, how much, how, by whom, where, who owns what, the remuneration system, how goods are distributed, how they should be used or consumed, what is traded or exchanged, who has the right to make or participate in decisions regarding all these matters, and anything else that is deemed important by a society or its (political) leaders. It is on such grounds that one can distinguish most clearly between hunter-gatherer, feudal, capitalist, socialist, and other systems. However, despite the (potential) diversity of economic systems, much of the thinking and debate about economic systems during the last 150 years or so has been dominated by two rival ideologies and systems: capitalism and socialism. Of

⁸ Panitch, Leo and Leo Gindin (2012), *The Making of Global Capitalism: The Political Economy of American Empire*. London and New York: Verso Books; Petras, James F. and Henry Veltmeyer (2001), *Globalization Unmasked: Imperialism in the 21st Century*. New York: Zed Books; Ikenberry, G. John (2007), "Globalization as American Hegemony", in D. Held, and A. McGrew (eds.), *Globalization Theory. Approaches and Controversies*, 41-58.

these two, capitalism has been the dominant system, first in the West but, as noted above, after the demise of the Soviet Union, also globally, even to the point that it has been touted as the only realistic (and desirable or even acceptable) economic system.

The global dominance of capitalism, and the extent to which it is intertwined with political systems, makes it important to assess to what extent it presents systemic or inherent obstacles to meaningful and long-term environmental integration, or whether it can be greened to make it (more) compatible with environmental imperatives. This is a task that I will undertake in the following chapter. However, there are good grounds for exploring whether there are any alternative economic systems (including socialism) that may be compatible with long-term environmental protection. In the following section, I will identify the options based on the kinds of systems that have had a track record (no matter what), and that are sometimes held up as realistic and/or desirable options.

Political-economic systems

As discussed above, economic and political systems are closely intertwined. Economic systems need the power and support of the state to be established as the dominant (or hegemonic) system, while the institutions of the state, and the role and functions of governments, are strongly influenced or shaped by powerful economic actors and their (perceived) interests. The economic power accumulated by the latter often allows them to have their way in terms of the decisions and policies made by governments. Together, politics and economics influence or determine who gets what, when and how, giving an economic dimension to politics and a political dimension to economics. However, although economic and political systems are closely intertwined, it is not only useful but also important to distinguish between them.

As discussed in the preceding chapter, states (presently the most important political institutions) have four core functions. Although the economic function (the protection and promotion of economic interests) is one of these, it is not the only one. Moreover, although economic interests may exert a disproportionate influence on states and governments, these are not necessarily homogeneous and unified in their interpretation of economic imperatives. As discussed in Chapter 5, political systems are ensembles of formal political institutions that assign official power to offices and organisations and that lay down the rules by which decisions on behalf of all the members of a polity (such as a state) are made. In principle, political institutions (can) cover any issue affecting the members of a polity. Therefore, states are (still) the most important ensembles of political institutions and have, in principle and also in practice, a degree of autonomy that can be used for different and even conflicting purposes.

In this context, it is important to keep in mind the formal sovereignty and primacy of political institutions over economic institutions. States are the sovereign political institutions (constituting the highest power within their boundaries) that formally represent all citizens and that have the legitimate right and responsibility to shape economic institutions, whereas economic institutions have neither a formal right nor responsibility to shape political institutions. In the literature, the hierarchical nature of the relationship between political and economic institutions is referred to as "embeddedness": economic institutions are or at least should be, embedded into the political system. Although the relationship and interactions between political and

economic systems can be heavily influenced or even dominated by (highly) concentrated economic power, economic systems should be subordinate to and embedded within, the political institutions that represent the whole of society, not vice versa.

Thus, from a political (in particular democratic) point of view, it is important to emphasise the relative autonomy of the state and its potential to make decisions that may not be welcomed by, or that are perceived to go against the interests of, powerful economic actors. This is, of course, highly relevant to the discussion about the scope for the greening of political systems and the debate on the extent to which governments are capable of (or may develop the will to) alter economic systems. More strongly, if economic obstacles are inherent to the economic system, the question arises whether, and if so how, governments can fundamentally transform the economic system into one that is compatible with long-term environmental protection. For these reasons, when analysing and discussing the interactions between political and economic systems, we need to look closely at the (kind of) economic system that prevails and the kind of political system that is in place and its relative autonomy from, and actual or potential control over, the economic system. Also, it is important to assess whether or to what extent the political system itself is conducive or contains fundamental obstacles to environmental integration. It is thinkable that, depending on the kind and strength of the links between the economic and political system, the economic and the political system of a country are both fundamentally incompatible with long-term environmental integration. In that case, it speaks for itself that it will be even harder to move that country towards sustainability.

Table 7 presents a classification of political-economic systems based on two main factors or criteria: first, the extent to which political systems are more or less democratic or authoritarian; second, whether their economic system can be characterised as capitalist, socialist, or a mixed or hybrid system. This leads to six types of (possible) political-economic systems, five of which have had counterparts in the real world.

As noted above, although capitalism has become a globally dominant economic system, there are differences between countries in the way(s) capitalism has been practised and/or managed. This applies even within the two categories of capitalist systems identified above, as discussed in the “varieties of capitalism” literature.⁹ This is also reflected in the comparative environmental policy literature, in particular in the research that claims that some types of liberal-democratic systems (in particular more consensual, cooperative or corporatist systems) have a better environmental record than others, as mentioned in Chapter 2. However, whether or to what extent liberal-democratic political systems are capable of addressing the environmental challenge effectively, notably the sources or causes of unsustainability in the capitalist system(s), is a more contentious question. In large part, the answer to this question depends on

⁹ Soederberg, Susanne, *et al.*, *Internalizing Globalization: The Rise of Neoliberalism and the Decline of National Varieties of Capitalism*; Prevezer, Martha (2017, 1 Edition. ed.), *Varieties of Capitalism in History, Transition and Emergence: New Perspectives on Institutional Development*. London: Routledge; Busch, Andreas (2005), "Globalisation and National Varieties of Capitalism: The Contested Viability of the 'German Model'", *German Politics*, Vol.14, No.2, 125-139.

whether capitalism is, or is not, inherently incompatible with long-term environmental protection. If not, the first question becomes almost irrelevant and another question arises: is it possible to change (fundamentally) the political system so that it can undertake the task of abolishing capitalism and put in place an alternative economic system?

Table 7 - Political-Economic Systems

Economic systems Political systems	Capitalist	Socialist	Mixed
Democratic (more or less)	Liberal-democratic capitalist	Democratic-socialist	Social-democratic
Authoritarian (more or less)	Authoritarian-capitalist	Authoritarian-socialist	Authoritarian hybrid

Arguably, this is where authoritarian-capitalist systems become interesting. It could be argued that countries with an authoritarian political system are more able than countries with liberal-democratic systems to fundamentally transform the capitalist economic system and turn it into a different system that is compatible with long-term environmental protection. It could be argued that this applies to China, where the state operates or manages a capitalist system “with Chinese characteristics” which is often referred to as a hybrid or mixed economic system. However, it must be noted that China embarked on this path from a socialist starting point and its own type of (authoritarian) political system (and ideology). This applies also to Vietnam and possibly a few other countries with (ex-) socialist economic systems. It is harder to find examples of authoritarian-capitalist countries that have taken steps towards abolishing capitalism or developing mixed capitalist-socialist systems. Although several Latin-American countries come to mind (including Venezuela, Bolivia, and Ecuador), it is debatable whether they started their reforms under (more or less) liberal-democratic or authoritarian political systems. Some may argue that what occurred (or occurs) in these countries was/is more like a socialist revolution (albeit undertaken via electoral means in Bolivia and Ecuador). It is interesting to explore to what extent environmental concerns have played (or still play) a significant role in these “revolutions” and have been integrated into both the political and economic systems.¹⁰

¹⁰ In both Bolivia and Ecuador, “the environment” has been integrated into the political constitutions, but it is debatable to what extent the economic systems in these countries have moved towards socialism and/or have been greened. See Zimmerer, Karl S. (2015), “Environmental Governance through “Speaking Like an Indigenous State” and Respatializing Resources: Ethical Livelihood Concepts in Bolivia as Versatility or Verisimilitude?”, *Geoforum*,

But although some authoritarian-capitalist systems may have (had) governments that give the impression of taking the environment seriously, it is far more common for such systems to ignore environmental concerns and demands. Classic examples of that can be found in dictatorial-capitalist countries in Latin America, Africa, and the Middle East, where rulers are themselves major players in exploiting people and the environment with or without the assistance of foreign corporations. Russia and other illiberal democracies come to mind as other examples where rule by the wealthy (oligarchy) has become the norm. Arguably, oligarchy has been the default political-economic system throughout history in much of the world, and perhaps it still is, given the concentration of economic power facilitated by capitalism.¹¹ It may de facto exist in countries that openly pride themselves on their (liberal) democratic system. In such systems, the political elite has no interest whatsoever in abolishing capitalism even if it destroys the Earth. At most, they may adopt very limited and token gestures to protect the environment, notably, if these are profitable, with little if any positive environmental effect.

Thus far, to my knowledge, all countries with a socialist economic system have also (had) authoritarian political systems, often centred around a dominant leader. The Soviet Union had Lenin and Stalin, China, Mao, Vietnam, Ho Chi Minh, Cuba, Fidel Castro, and so on. One big question facing the advocates of socialism is why most, if not all, of these systems, also appear to have had appalling environmental records. Does this prove that socialism is inherently incompatible with effective, long-term environmental protection? I will address this question in Chapter 8. One of the possible factors that may help explain why socialist countries have had poor environmental records is the absence of democracy, a view that has become commonplace among more recent advocates of socialism. But as democratic socialism (which should be distinguished from social democracy) has not been put into practice anywhere, it remains an open question what this means for the design and creation of such systems. What economic institutions can or should be put in place for a modern and democratic socialist system? And, if liberal democracies are incapable of moving societies towards sustainability, what kind of democratic political system(s) can and should be created? These are challenging issues that I will begin to discuss in Chapter 12, but that need much more debate and work.

In many Western countries, social democracy was the prevailing system in the period following WWII until the 1980s, although there is room for arguing that in some countries it already existed earlier and has continued to be the dominant political-economic system. Characterised by institutions that allowed for a considerable input

Vol.64, 314-324; Webber, Jeffery R. (2012), "Popular Movements, Political Economy, and the State in Bolivia: An Interview with Oscar Olivera and Freddy Villagómez", *Capitalism Nature Socialism*, Vol.23, No.3, 6-19; Grugel, Jean and Pia Riggirozzi (2012), "Post-Neoliberalism in Latin America: Rebuilding and Reclaiming the State after Crisis"; Charman, Karen (2008), "Ecuador First to Grant Nature Constitutional Rights", *Capitalism Nature Socialism*, Vol.19, No.4, 131-133; Gallegos, Franklin Ramirez (Translated by Krystina Horko) (2018), "Ecuador Veers to Neoliberalism", *Le Monde Diplomatique (English edition)*, December, 7; Mariette, Maëlle (Translated by George Miller) (2018), "In the Name of the Mother", *Le Monde Diplomatique (English edition)*, April, 14-15.

¹¹ Winters, Jeffrey A., *Oligarchy*.

from the labour movement, and widespread acceptance of the need for governments to play a major role in the management of the economy, including by public ownership of companies and infrastructure that were considered to be in the public interest, social-democratic systems can justifiably be categorised as mixed systems. With the rise of neoliberalism and the large-scale privatisation of publicly owned companies and infrastructure, the move towards deregulation, and the disempowerment of the trade unions, it can be argued that social-democratic systems have been transformed into purer capitalist systems whilst retaining a weaker form of liberal democracy.

With the growing recognition of the fundamental flaws and adverse social and environmental effects of neoliberalism, the restoration of social democracy, albeit with an added green dimension, is often held up as a desirable or essential beacon for change. This is reflected, among other, in the rising popularity of the notion of Green New Deals and the rehabilitation of Keynesianism. However, while such ideas are attracting considerable support, also in environmental circles, serious doubt must be raised about the effectiveness of these proposed courses of action in addressing the roots of the environmental crisis, in particular related to their continued reliance on capitalism and industrialism. I will elaborate on these issues in Chapter 9.

As mentioned above, China is often regarded as a country with a mixed or hybrid economic system (capitalist and socialist) albeit with an authoritarian political system. In some circles, given the failure of liberal-democratic systems to halt and turn the tide of environmental pressures and problems, China's political-economic system has been held up as a possible model for addressing the environmental challenge more effectively. I will take issue with this point of view in Chapter 9, both on political and economic grounds.

This brief tour of actually existing political-economic systems may not inspire much hope or faith in the capacity of these systems to tackle the environmental challenge. And indeed, as I will discuss further in the following three chapters, the institutional features of these political and economic systems raise serious doubts about whether they can be greened. However, this assessment becomes even more gloomy when considering the material or physical dimension of these economic systems related to the industrial nature of their production and consumption systems. Combined with its own set of socio-cultural beliefs and power basis, the industrial system has also been referred to as industrialism. Industrial production systems have been common to all five political-economic systems discussed above, but their crucial importance has often been ignored, downplayed, or put in a positive light. Yet, industrialism, in association with the development of science and technology, arguably poses the most insidious environmental and social threat that makes the environmental challenge even more formidable. While there has been much debate about the relative (de-) merits of capitalism and socialism concerning their ability to effectively address the environmental challenge, the small matter of industrialism has received, by comparison, much less attention. This will be the focus of the next section.

Industrialism and the rise of technocracy

Although the notion of the Industrial Revolution suggests that industrialisation was a sudden and/or rapid sequence of events, often associated with the invention of the steam engine and a range of other inventions, notably in the production of textiles,

it was, rather, a much more gradual process. The key feature that it refers to is the increase in productive capacity by the improvement of tools or machines with the same or even a reduced level of human labour. As such, the use of water and windmills in the 11th and 12th centuries,¹² the invention of the printing press, paper mills, sugar refineries and the production in small factories of alum, gunpowder, saltpetre, iron, and metal tools, among other, all in the 16th century, were earlier manifestations of increased productivity based on technological innovation.¹³ Nonetheless, although there is still debate and uncertainty about the precise figures by which industrial production expanded and productivity (per worker) increased in the United Kingdom between the mid-18th and early 19th centuries, there is no doubt that in real terms the total production of goods increased substantially. This was most pronounced in the production of cotton, which increased more than thirty-five times between 1780 and 1830.¹⁴

While, initially, the cotton industry lay at the heart of the industrial revolution, it really got on its way in the 19th century by the combination of the expansion of factory production in the cities, powered by coal-driven steam engines, and improved modes of transport (canals, trains, shipping) offering access to new markets.¹⁵ The creation of a world market for Britain's industrial products with the help of the British government played a key role in the accumulation of capital and the expansion of the industrial system in the UK, which in turn made Britain the first global economic and military power. Since then, industrialisation has been sought by many governments around the world as a jumping board in the pursuit of economic development, albeit with variable success, in large part linked to the extent of a country's integration into and position within the global economic system.¹⁶ What is clear, though, is that industrialisation was also eagerly embraced by countries with socialist economic systems, notably the former Soviet Union and China (even before its capitalist turn). Although one may disagree on the (de-) merits of these political-economic systems, there can be no doubt about their enthusiasm for industrialisation and the development of science and technology that supports it. The main difference between the Soviet Union and China in this respect is that the pursuit of industrialisation has been more successful in the latter country after it allowed space for capitalism to speed up the process.

Here, I refer to an *industrial production system* as a system of large-scale production based on the application of science and technology and the use of foremost non-human energy inputs. Originating in a series of technological

¹² White, Lynn (1967), "The Historical Roots of Our Ecological Crisis", 1204.

¹³ Nef, John U. (1958), "Not One, but Two Industrial Revolutions", in P. A. M. Taylor (ed.) *The Industrial Revolution in Britain. Triumph or Disaster?*, 7-15.

¹⁴ Jackson, R. V. (1992), "Rates of Industrial Growth During the Industrial Revolution", *The Economic History Review*, Vol.45, No.1, 1-23.

¹⁵ Braudel, Fernand (1984), *The Perspective of the World*. London: William Collins Sons & Co Ltd, Chapter 6; Hobsbawm, Eric J. (1962, 1996 ed.), *The Age of Revolution 1789 - 1848*. New York: Vintage Books, Chapter 2.

¹⁶ Frank, Andre Gunder (1966), "The Development of Underdevelopment", *Monthly Review*, Vol.18, No.4, 17-31; Rodney, Walter (1982), *How Europe Underdeveloped Africa*. Washington, D.C.: Howard University Press; Braudel, Fernand, *The Perspective of the World*.

developments over centuries, industrial production systems became the dominant way of production around the world, displacing more traditional small-scale production methods that foremost depended on human energy inputs, skills, and local consumption. It should be noted that industrialism is not just linked to factory production, but also occurred and occurs in the agricultural sector, and can apply also to the large-scale provision of services (such as in the mass tourism industry, health, education, internet services).¹⁷ A common feature of industrial production is its reliance on experts, techniques and/or tools, and training. Although the requirements may vary greatly depending on the position of a worker in the industry (with few skills and training required in some jobs), those at the top of the hierarchy often claim or command specialist knowledge and qualifications (including managers) to make the whole process possible.

The adverse social effects of industrialisation, as they first emerged in the United Kingdom and subsequently in many other parts of the world have been well-documented and do not need to be elaborated upon here.¹⁸ Similarly, the environmental consequences of industrial production, from large-scale mining of raw materials, their transport, the production processes, the unsustainable use of natural resources including water and energy, the kind of (hazardous) chemicals and materials invented and used, the pollution and waste generated, and the effects of the use of products and their end-of-life disposal need no more discussion here. Despite 50 years of environmental discourse and policies, globally, virtually all these problems have increased rather than diminished, while some of the worst industries have been shifted to industrialising countries with “emerging economies”. The environmental damage caused by industrial agriculture has been at least as bad, if not worse, given its role in the large-scale destruction of natural areas and biological diversity, its unsustainable management of natural resources (including soil and water), the heavy reliance on

¹⁷ Although internet services are often thought of as intangible, they are in fact highly material intensive, with the hardware on which these services are based requiring large-scale mining of a range of minerals, some of which are fairly scarce, large-scale production facilities (for computers, cables, data storage devices), and large amounts of energy. The latter applies also to, for instance, so-called cryptocurrencies like Bitcoin. It is therefore misleading to think of the provision of such services as being “post-industrial”. Crawford, Kate (2021), *Atlas of AI. Power, Politics, and the Planetary Costs of Artificial Intelligence*. New Haven and London: Yale University Press; Schmidt, Stephan (2010), “The Dark Side of Cloud Computing: Soaring Carbon Emissions”, *The Guardian*, 30 April 2010; Hern, Alex (2021), “Bitcoin Rise Could Leave Carbon Footprint the Size of London’s”, *The Guardian*, 10 March 2021.

¹⁸ Engels’s work is a classic on this front. Engels, Friedrich (1845, 1892 ed.), *The Condition of the Working-Class in England in 1844*. London: S. Sonnenschein & Co. But the exploitation of, and harsh working conditions for, workers is a theme that has followed industrial development throughout the world right up to the present, especially in so-called developing countries. For a few accounts, see the documentary by John Pilger: Pilger, John (2001), *The New Rulers of the World a Special Report by John Pilger*, Carlton Television, SBS; Watts, Jonathan (2012), *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*. London: Faber & Faber, Chapter 6; International Labour Office (ILO) (2017), *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage* Geneva: International Labour Office (ILO); Theuvs, Martje and Pauline Overeem (2014), *Flawed Fabrics. The Abuse of Girls and Women Workers in the South Indian Textile Industry* Amsterdam: Stichting Onderzoek Multinationale Ondernemingen (SOMO).

harmful chemicals and unsustainable external inputs (including fossil fuels and artificial fertilisers), serious environmental pollution resulting from their use, GHG emissions, and the cruel treatment of animals, among other things. To significantly reduce or eliminate these sources of environmental degradation and destruction requires addressing the material and biophysical nature of these problems and a transformation of production systems, whether they are practised in capitalist or socialist economic systems.

Therefore, it can be (and has been) argued that the development of industrialisation is the common root of many societal and environmental ills and that abolishing capitalism and/or the introduction of capitalism is not a sufficient condition for addressing the environmental challenge. As such, industrial production systems can be seen as a deeper or underlying dimension of economic systems, with their own rationale. Here, I briefly discuss three grounds for such an argument. First, industrial production systems are inherently unsustainable because they have a built-in growth imperative. Second, industrialisation has generated socio-cultural changes that led to the emergence of *industrial societies* that are antithetical to environmental imperatives. These changes include the widespread adoption of a view that sees nature only as a pool of resources (raw materials and energy) to be exploited for human ends, and that disregards the importance and natural cycles and the intrinsic values of nature. Third, the growing dependence of complex industrial societies on science and technology has led (and continues to lead) to a shift of power to experts and the emergence of technocracy that entrenches and continues to propagate anti-environmental thinking and practices.

First, that industrialism involves large-scale production and has a built-in growth imperative seems undeniable and is almost a tautological assertion. Industrial production involves the production of goods or services with the use of tools or machines (physical capital) that significantly increase productivity and the scale of production. While the increase in productivity (the output per worker) makes it theoretically possible to produce the same number of units with less labour, in practice, industrial production systems have always led to increased production. A fundamental reason for this (apart from capitalist imperatives that will be discussed in the next chapter) is that, regardless of the economic system, it makes no sense to set up a large-scale production facility if there is no intention to use it. Setting up a system for large-scale production is costly, and to make this economically and financially feasible requires running it at (near) capacity. If a machine or factory has been designed and built to produce 200 units of something, economically it makes no sense to produce only 100 units as this would double the fixed costs per unit. By contrast, if technological innovations increase labour productivity by 100%, it is most economic to increase production to 400 units (potentially doubling revenue and profits). These economies of scale apply regardless of who owns the machine/factory. It is economically rational to use machinery at full capacity, especially if the capital costs are high and/or financed by credit (which needs to be repaid). As Polanyi noted: "Since

elaborate machines are expensive, they do not pay unless large amounts of goods are produced".¹⁹

At the same time, of course, increased production assumes the existence of sufficient demand and markets for the larger quantities produced. This requirement applies to the whole (economic) lifespan of the machinery. Thus, with continuous and increasing production, ever bigger markets must be found. Once domestic markets have been saturated, foreign markets must be opened up. The bigger and more efficient an industry, the greater the need for expanding markets, especially in the case of more durable goods.²⁰

While this is true for consumer goods, it applies also to the machines that make the consumer goods, commonly referred to as capital goods. Industrial capacity designed for making the machines that produce consumer goods (the capital goods industry) will also have to be used year upon year (ideally at full capacity), which implies that also the market for capital goods (machines) must be expanded continuously. But the increase in production capacity for consumer goods implies that the markets for the latter must expand even more. Hence, a main driver behind the need to expand the market for consumer goods lies in the need to keep the production of capital goods going at ever-higher levels. Thus, industries that are in the business of mining, building factories, machines, roads, ports, power stations, oil exploration and production, ships, planes, trains and any other (infrastructural and capital) goods that are needed for making and selling consumer goods possible, require a continuous expansion of both production capacity and consumption. All these industries and industry sectors must keep on finding ever more buyers for their products every year, and even more so the higher the increase in efficiency and labour productivity. Once industrialisation has taken off, it creates a "treadmill of production" that also forces a continuous search for new markets.²¹ The larger the scale of production, and the higher the rate of (labour) productivity growth, the more frantic the search for new markets becomes.

While all of this may be or seem obvious, the key point is that the inherent economic efficiency rationale or logic of an industrial production system does not only apply to industrial *capitalism*. The treadmill of production applies to all production

¹⁹ Polanyi, Karl, *The Great Transformation. The Political and Economic Origins of Our Time*, 41.

²⁰ The faster produced goods are consumed, the less the need for new markets, although there is a limit to how much people are able to consume even of perishable goods. One well-known way to speed up the rate of consumption of relatively durable goods is the practice of "built-in obsolescence", a phenomenon that all consumers of, for instance, electronic goods such as mobile phones, will be familiar with.

²¹ Schnaiberg has been credited with the development of a "theory of the treadmill of production" that identifies the source of the rapid environmental degradation after WWII in technological innovation driven by big corporations seeking to increase production and profits. But although this theory rightly emphasises production rather than consumption as the main source of environmental problems, it seems to ignore the growth imperative that is inherent to *industrial systems*. Schnaiberg, Allan (1980), *The Environment, from Surplus to Scarcity*. New York: Oxford University Press; Gould, Kenneth Alan, et al. (2008), *The Treadmill of Production: Injustice and Unsustainability in the Global Economy*. Boulder: Paradigm Publishers.

systems designed for large-scale production, using equipment that is itself produced industrially (the capital goods industry). While some (“post-Fordist”) machinery may offer the possibility of producing a variety of products, this does not mean that this inherent logic or imperative no longer applies. The fundamental need to use the machinery to recuperate its costs, and to continuously find markets for whatever it is producing, does not change. Similarly, a capital goods industry may be able to produce tractors and/or cranes and/or bulldozers, for instance, but will need to continue to sell any or all of those goods to remain in business – if the market for one product declines or gets saturated, this increases the need for selling more of the other goods.

A second ground for arguing that industrialisation is an underlying source of unsustainability is that it has produced socio-cultural changes and led to the emergence of *industrial societies* that are antithetical to environmental imperatives. Industrial societies are based on beliefs, values, and norms that define human progress in terms of ever-higher consumption, and the idea that humans are able to manipulate, dominate or even supersede nature.

Industrial production is rooted in a view that regards nature only as a pool of resources (raw materials and energy) which can be exploited for human ends, without regard for nature. This view, which goes back to the Enlightenment and the idea that nature can and should be subjugated, dominated, or tamed for human purposes, has arguably found its purest expression in the tools of industrial production. Tractors, bulldozers, diggers, pumps, grinders, drills, chainsaws, and all types of heavy machinery, especially when driven by fossil fuel energy, are designed to overpower nature, force it to surrender its resources, and shape it according to human wishes. “Raw materials” are exploited and processed to extract whatever is deemed to be useful, with the rest discarded as waste. The sheer scale of exploitation and pollution associated with mass production makes it inherently impossible to avoid environmental destruction. This is further aggravated by the harmful nature of many technologies, including hazardous chemicals and materials that are alien to nature and unable to be integrated into natural cycles.

The development of industrial production has also been driven and justified by another factor, the belief in progress made possible by the development of science and technology. Although the (relatively slow) development of science and technology was only one of the factors that contributed to the industrial revolution, it was accompanied and supported by a growing belief that societies could be improved by the advancement and application of science and technology. Such Enlightenment views were also shared by many of the critics of capitalism. Karl Marx and, even more strongly, Friedrich Engels believed that industrialisation constituted the holy grail towards the workers’ paradise. Communism, a system in which industrial capacity and production had been expanded to the extent that it was possible to provide for everyone according to their needs (compared to their labour contribution in a socialist system), could only be achieved by liberating the industrial forces of production from the contradictions (and irrationality) inherent to capitalism, and which would be able to flourish under socialism. Engels, in particular, was adamant that the factory system imposed its rationale on the production process, assigning it despotic powers,

requiring rigid labour discipline.²² That increased consumption was desirable, and an indicator of progress in terms of improvement in the standard of living, was also accepted in actually existing socialist systems, even though the governments of these ("underdeveloped") countries emphasised the need to first develop heavy industries.

Another development that has accompanied industrialisation, and that has brought about significant social and cultural change, is urbanisation. Urbanisation, the migration from rural to urban areas, arguably has been one of the most important consequences associated with industrialisation. On the one hand, as Polanyi analysed in *The Great Transformation*, the enclosure of common land in the United Kingdom for the development of larger-scale (proto-industrial) agriculture drove many people off the land and forced them to search for other ways to survive. On the other hand, the expansion of industries in certain areas provided new employment opportunities, drawing many people into growing urban areas.²³ Thus, in many cases, migration to cities has not so much been a matter of choice than of necessity and survival, driven by the concentration of land ownership and rural impoverishment. Although towns and cities predate the industrial era, notably as centres of commerce, industrialisation, wherever it occurred, led to the rapid expansion of cities, often creating atrocious living conditions and immense social pressures and misery. Across the world, the process of urbanisation continues unabated with more than half of the global population now living in cities and the proportion expected to reach more than 66% by 2050.²⁴

Whether urbanisation is inherently unsustainable is open to debate. In theory, the environmental effects of concentrating large numbers of people in relatively small areas can be mitigated by good design and planning. Compact cities that take on board all the lessons that can be learned from the sustainability literature and the good examples offered by some cities arguably can minimise their environmental effects, even though the concentration of people, industries, and infrastructural requirements in a relatively small area will always pose big challenges in terms of staying within local and regional environmental limits. However, the reality is that most cities have not been designed and planned with the environment in mind, and have evolved or expanded without much, if any, environmental considerations or controls, let alone environmental design. Only relatively recently, the idea of creating "eco-cities" has gained some currency,²⁵ but whether or to what extent cities can be made sustainable remains doubtful. Apart from local and regional biophysical conditions, other issues relate to the standards of living, consumption, and resource demands of

²² Winner, Langdon, *The Whale and the Reactor. A Search for Limits in an Age of High Technology*, 16-17.

²³ Polanyi, Karl, *The Great Transformation. The Political and Economic Origins of Our Time*.

²⁴ United Nations Environment Programme, *Global Environmental Outlook GEO-6. Healthy Planet, Healthy People*, 31.

²⁵ China has been referred to as an example on this front, but also there this remains a fringe development. See Pearce, Fred (2006), "Master Plan", *New Scientist*, Vol.190, 2556, 17 June, 43-45; Chang, I. Chun Catherine and Eric Sheppard (2013), "China's Eco-Cities as Variegated Urban Sustainability: Dongtan Eco-City and Chongming Eco-Island", *Journal of Urban Technology*, Vol.20, No.1, 57-75. See also Low, Morris (2013), "Eco-Cities in Japan: Past and Future", *Journal of Urban Technology*, Vol.20, No.1, 7-22.

urban populations (and the dependence on imports), existing structures, layout, and infrastructure, as well as the governance of cities in a broader political context.²⁶

But apart from the biophysical environmental consequences and issues associated with the development of cities, their socio-cultural effects are at least as important. Over time, the bright lights of the city, their association with freedom, diversity, action and excitement, entertainment, arts and culture, and the expectation of higher incomes and standards of living, turned them into social magnets, places that were considered to be more attractive to live and work compared to “backward” rural areas. Cities are almost completely humanly modified environments, detached and often at a large distance from less or unmodified natural environments. Thus, the development of (especially large) cities has created a physical as well as a mental gap between humans and nature, contributing to their alienation from nature.²⁷ Not only has this given rise to the view that the urban (human-created) environment and way of life are preferable to that of rural societies, but it has also made many of the (distant) environmental effects of cities invisible. Having become increasingly dependent on industrial (mass-) production and the continuous exploitation and supply of resources from elsewhere, even for the basic necessities of life, urban dwellers have little choice but to accept, take for granted, or ignore the environmental effects of the industrial production system.

Thus, industrialisation, linked to the development of science and technology, and urbanisation have brought about significant socio-cultural changes that have created industrialism and industrial societies. The complex of economic, socio-cultural, and technological effects that have accompanied and/or been produced by these processes are not just of a material and biophysical nature but also comprise the socio-cultural fabric that has evolved with this development. Analysts of these developments have raised much concern and debate about their social and psychological consequences.²⁸ But while many of these social and cultural changes can be seen as problematic, they have also created a socio-cultural support basis for the industrial production system. This should not be interpreted as a form of materialistic determinism, as these developments interact and sustain each other. Materialism and consumerism, and the expectation of continuous innovation and ever-rising standards

²⁶ For a rather pessimistic (or realistic?) view on this question, see Atkinson, Adrian (2007), “Cities after Oil—1: Sustainable Development’ and Energy Futures”, *City*, Vol.11, No.2, 201-213. On the issue of governance in a broader political context, see Bulkeley, H. and M. M. Betsill (2005), “Rethinking Sustainable Cities: Multilevel Governance and the ‘Urban’ Politics of Climate Change”, *Environmental Politics*, Vol.14, No.1, 42-63.

²⁷ A not original indication of this is the urban child that has never seen a cow and thinks that milk comes from a pack bought at the supermarket. The irony is that lab-grown dairy products may well become the norm in a decade or so. See Hall, Rachel (2021), “Lab-Grown Dairy Is the Future of Milk, Researchers Say”, *The Guardian*, 31 July.

²⁸ For critical analyses of these developments, see Kasser, Tim (2002), *The High Price of Materialism*. Cambridge, Mass.: MIT Press; Kassiola, Joel Jay, *The Death of Industrial Civilization*; Marcuse, Herbert, *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society*; Mishan, E. J., *The Costs of Economic Growth*; Heilbroner, Robert L. (1991), *An Inquiry into the Human Prospect. Looked at Again for the 1990s*. New York: W.W. Norton, Chapter 3. Fromm, Erich, *The Sane Society*.

of living defined as progress, have become socio-cultural pillars of industrialisation. It must be acknowledged that increased production and consumption have contributed to a significant improvement in the standard of living of many people. Whatever one's views on consumerism and the consumer society, it seems undeniable that most people around the world, when given the opportunity, buy happily into a lifestyle with washing machines, televisions, cars, computers, mobile phones, and many other mass-produced consumer goods, and relatively few people would be willing to forego such items once they have become an integral part of their lives. Also, who could claim to have the moral right to deny access to such products to many (millions or billions of) people who would like to but cannot afford to purchase such items? Such questions are very much about equity and equality that need to be addressed in the political arena. But they also raise highly troubling questions about the addiction of societies to unsustainable industrialism.

Arguably, many or even most people in modern societies that have become so dependent on the products and technologies created by this system have come to accept its drawbacks and adverse effects as a necessary price that has to be paid for progress. Also, one cannot deny the impressive achievements of science and the marvels of modern technologies that can do things that would have been considered miracles in the past. People may come under the spell and magic of technology as much as they can be enchanted by nature. This has become most apparent by the extent to which people have become virtually addicted to information and communication technologies (ICT), notably computers and mobile phones, without which many would find life unthinkable. The idea of progress has become inextricably linked to the continuous advancement of science and technology, of knowledge that enables the development of ever-smarter technologies to change, manipulate, and control nature for human purposes. This idea is supported by developments in almost all areas of science but has become perhaps most widely accepted in the realm of medical research, where much hope and faith are put in the development of cures for cancer and many other diseases that afflict humankind. But this faith is not just confined to the ability to combat diseases; it has also been extended to the idea of improving humans themselves by technological manipulation, of considerably extending their capabilities as well as lifespan, even to the point where death will become a matter of choice rather than an inevitability.²⁹

Such ideas have been driven by spectacular advances in the ability of science and technology to manipulate nature, including developments in genetics and biotechnology, nanotechnology, and robotics. While these developments, and their (potential) applications in industries (such as agriculture) and to humans have raised considerable concern and fundamental questions about the ethics and aims of

²⁹ Such beliefs have been referred to as Transhumanism and appear to be quite popular among the techno-billionaires of the Silicon Valley, including Elon Musk and Peter Thiel. McKie, Robin (2018), "No Death and an Enhanced Life: Is the Future Transhuman?", *The Observer*, 6 May 2018; O'Gieblyn, Meghan (2017), "God in the Machine: My Strange Journey into Transhumanism", *The Guardian*, 18 April. See also Harari for an upbeat view of this prospect, referring to the possibility of "upgrading *Homo sapiens*", which raises the "final" question: "what do we want to become?" Harari, Yuval N., *Sapiens: A Brief History of Humankind*, Chapter 20.

science,³⁰ it appears that they are very difficult to control. The idea that “you can’t stop progress” (meaning the development of science and technology) has become firmly entrenched in many societies. Critics who draw attention to the drawbacks of modern technology tend to be pejoratively accused of being anti-progress, (neo-) Luddites, or “technophobes”.³¹

Moreover, as noted in the Introduction, the view that nature is dead and that we have already reached the stage where humans have no choice but to play God to keep the Earth liveable for humans, has gained considerable currency with the recognition of the Anthropocene as the latest geological era. If nature is no longer an autonomous force of its own, ultimately, it appears, the aim of science and technology is not just to dominate or control nature, but to supersede nature. Increasingly, science and technology are now looked upon as our only hope for saving the planet, for instance, by producing lab-grown meat and dairy products. Ultimately, it seems, the goal is to create a completely artificial world created by humans that does not need nature, even though that world may have to be controlled by artificial intelligence as it would be too complex for humans to manage.³² This is also, of course, one of the main themes in the field of science fiction. It hardly needs pointing out that such ideas and associated practices are at the opposite end of the view that humans need to (learn to) adapt their behaviour and practices to environmental imperatives, the very notion of environmental integration. They constitute an ultimate form of hubris and, to the extent that they become (or have already become) dominant, they are bound to lead to the demise of the human species.

This brings us to the third area of concern that has arisen with the emergence of industrial societies and industrialism, the issue of power and control. As noted above, it is often suggested that the development of science and technology is an autonomous process, unstoppable and beyond control. At the same time, however, in apparent contradiction to this view, it has been argued that the growing dependence of complex industrial societies on science and technology has led (and continues to lead) to a shift of power to experts and the emergence of technocracy.

³⁰ Fukuyama, Francis, *Our Posthuman Future. Consequences of the Biotechnology Revolution*; Rees, Martin J., *Our Final Hour: A Scientist's Warning: How Terror, Error, and Environmental Disaster Threaten Humankind's Future in This Century- on Earth and Beyond*.

³¹ Luddism refers to the 19th century movement that arose in England (ascribed to Ned Ludd) that attacked the machines that were (rightly) blamed for destroying the livelihood of those who depended on small-scale production. See Douthwaite, Richard (1993), *The Growth Illusion. How Economic Growth Has Enriched the Few, Impoverished the Many, and Endangered the Planet*. Tulsa, Oklahoma: Council Oak Books, Chapter 6. Wikipedia (2020), Neo-Luddism, <https://en.wikipedia.org/wiki/Neo-Luddism> (Accessed: 30 December 2020); Wikipedia (2020), Luddite, <https://en.wikipedia.org/wiki/Luddite> (Accessed: 30 December 2020).

³² This may seem far-fetched, but ICT technology has already created an artificial world in which many people have become totally absorbed. Facebook’s launch of its “Metaverse” is another step in the direction of creating a virtual reality (world) in which people may spend much of their lives. Milmo, Dan (2021), “Enter the Metaverse: The Digital Future Mark Zuckerberg Is Steering Us Toward”, *The Guardian*, 28 October; Wakefield, Jane (2021), “Facebook’s Metaverse Plans Labelled ‘Dystopian’ and ‘a Bad Idea’”, *BBC News*, 4 November.

Sometimes, the view that you can't stop science is ascribed to the inherent and irrepressible curiosity of scientists and/or the drive of inventors who put humanity on the path of continuous discovery and innovation. Such individuals are often depicted as the heroes of science and innovation who can and should be credited for the progress that has been achieved throughout the ages, but especially during the last five centuries. While there is some validity in this account, especially at the time when science was still very much an affair undertaken by a small group of individuals who often had to fight to have their discoveries recognised,³³ this is a romantic picture of how science developed that no longer holds. With industrialisation, the number of scientists and inventors involved in innovations and their application has grown rapidly, now counting millions across the world.³⁴ It can be plausibly argued that not all these scientists are directed or controlled from a single centre, or even that they collectively and purposefully steer their research towards the same goal(s), or even in the same direction. Yet, this does not mean that all science and technology develop without any control, steering or purpose.

Concerns about the uncontrollability of science and technology are nothing new. The theme of people using their limited knowledge to do or create things that they cannot control, and being punished for that, is central to Goethe's ballad of the *Sorcerer's Apprentice* (1797), Mary Shelley's *Frankenstein* (1818), the Greek myth of *Prometheus*, and even to the biblical story on *Adam and Eve* (with Eve eating fruit from the forbidden tree of knowledge). These stories are still highly relevant to those who manipulate nature (for instance, by genetic engineering) and who think or claim that they know what they are doing. But the idea has also been applied to the way science and technology have developed as a whole, out of control or beyond the control of societies and governments. In the 20th century, a growing number of social theorists picked up on this theme, including Max Weber, Lewis Mumford, Jacques Ellul, Herbert Marcuse, and Ivan Illich. It is worth standing still at some of their ideas as these are still relevant and valid in some respects.

Although Weber's work does not focus specifically on science and technology, he ascribed the development of modern societies to the inexorable rise and spread of "instrumental rationality", of which the expansion of bureaucracy, led by and largely composed of experts, was a principal manifestation. In his view, the bureaucratic mentality was gradually but steadily taking over all areas of society, including politics and economics, leaving less and less room for individuality and creativity. Societies were increasingly guided by instrumental values, notably efficiency, and losing sight of fundamental values and ends. From this perspective, the development of science and technology have become instruments for increasing efficiency as an end in itself. And as science leaves no room for a sense of wonder or magic about nature

³³ For a fascinating account of Kepler's work and efforts (and that of a handful of other astronomers) to convince people that the Earth rotated around the Sun instead of vice versa, see Koestler, Arthur, *The Sleepwalkers: A History of Man's Changing Vision of the Universe*. Many similar accounts have been written on the contributions of scientists in different areas of science.

³⁴ According to a UNESCO report, there were 7.8 million full-time equivalent researchers globally in 2013. UNESCO (2021), *Unesco Science Report*, <https://en.unesco.org/unesco-science-report/figures> (Accessed: 25 November 2021).

(enchantment) or for spirituality, its push for progress lacks direction and comes at the price of the erosion of values in societies.³⁵

In the 1960s, Jacques Ellul and Lewis Mumford both looked at the growing influence of science and technology on societies as an autonomous process driven by its own rationale. Ellul spoke of "technique" rather than technology, interpreting it as "any complex of standardized means for attaining a predetermined result", including socio-political tools like planning. He foresaw the "ever-expanding and irreversible rule of technique [...] extended to all domains of life", including politics and economics.³⁶ This implied increased control by the state and planning, and ultimately the rise of dictatorship as this would be regarded as the most efficient form of government. Ellul did not think that there was an effective alternative to planning, or that the public would be able to put any constraints on these developments. This development would lead to the complete dominance of technique (instrumental rationality) and the progressive de-humanisation of society by creating needs and distractions (including popular culture and the media). It must be emphasised that Ellul, like Weber, did not see this as a process initiated or steered by a group or plan (even though it would lead to that), but as inherent to the development of technique.

Similarly, Mumford³⁷ looked at the development of technology in a broader socio-cultural context that provides the basis for innovation (he ascribed a key role to language and art in the early development of tools). It was the invention of the hierarchical organisation (based on the claim to divine authority, as in Egypt) that marked the beginning of the subjugation of people and nature to a growing ensemble of techniques that Mumford referred to as the "Megamachine". In his view, this development had intensified in the last three centuries and led to "delusions of omniscience and omnipotence" on the part of those who are in control of the Megamachine (whom he also identifies as the "military scientific elite").³⁸ Although, in contrast to Ellul, Mumford does not regard this development as autonomous, putting responsibility at the feet of an elite, he became increasingly pessimistic about the possibility of turning things into what he saw as a more desirable direction aimed at the development of a "life-centred technology" that serves "every part of the human personality, not merely those functions which serve the machine."³⁹

Herbert Marcuse, too, offered a fundamental critique of how technological development shaped modern industrial societies, substituting false needs for real human needs, and cultivating a "one-dimensional man" preoccupied with efforts to meet the former. This applied to capitalist as well as (then) existing socialist societies. While Marcuse advocated an alternative order based on central planning and control over production, he also was not optimistic about the prospects for change, arguing

³⁵ Gerth, J. H. and C. Wright Mills (1946), *From Max Weber: Essays in Sociology*. New York: Oxford University Press, 51-54, 196-244.

³⁶ Ellul, Jacques, *The Technological Society*, vi.

³⁷ Mumford, Lewis (1965), "Technics and the Nature of Man", *Nature*, Vol.208, No.5014, 923-928.

³⁸ *Ibid.*, 927.

³⁹ *Ibid.*, 928.

that “Nothing indicates that it will be a good end.”⁴⁰ Ivan Illich also held a negative view about the way technology was developed, arguing that, with industrialisation, technology (broadly conceived) produced “tools of enslavement” controlled foremost by experts.⁴¹ He noted the growing power of professionals who created monopolies over particular areas (including health and education), defining and controlling society’s needs and determining how these were to be met (or rather, not met). Interestingly, Illich proposed that terms like health and education should not be used as nouns, as these are not things that can be produced, bought, or sold, but require actions that individuals can undertake for themselves.⁴² He advocated the development of (“convivial”) tools that people could control, but admitted that this would require a “political inversion”. Although he foresaw a “breakdown of society and that growth will grind to a halt”, there was no guarantee that such an alternative would be adopted, as such an event “could easily lead to one-man rule, expert government, and ideological orthodoxy”.⁴³

Thus, in the 1960s and 1970s, many critics of industrial society and its reliance on the continuous development of technique, rationality, and science and technology regarded these developments as (virtually) unstoppable and uncontrollable, even though they also assigned growing power to experts (professionals) and the state (bureaucracy) over their application. This unease or fear about states using the increasingly sophisticated power of science and technology should be seen in the context of the time. As discussed in Chapter 5, after WWII, in many Western countries, states played a major role in guiding economies and societies to ensure stability and promote social welfare. Planning was still not a dirty word and was seen as desirable or even necessary to avoid a repeat of the pre-war economic crisis and its disastrous social-economic and political consequences. In that context, it was not unreasonable to think or expect that the power of science and technology would be increasingly concentrated in and wielded by the state.⁴⁴

However, the idea that the growing dependence of societies on science and technology has led, or leads to, the emergence of technocratic rule by scientists and/or experts is contestable. The main reason for this is that it confuses or conflates different forms of power. More specifically, it assumes that cognitive power (including that of scientists) is, or has become, an independent form of power and, more strongly, that it has been accumulated or even monopolised by experts and used to acquire other forms of power, in particular political-institutional power, notably that of the state. This interpretation is neither supported by a coherent and plausible theory of the role of power in societies, nor by the facts.

⁴⁰ Marcuse, Herbert, *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society*, 201.

⁴¹ Illich, Ivan (1973), *Tools for Conviviality*. London: Calder and Boyars.

⁴² *Ibid.*, 16.

⁴³ *Ibid.*, 21.

⁴⁴ This idea can also be found in fictional literature, such as Aldous Huxley’s *Brave New World*. But while Orwell’s *1984* was inspired by the horrors of dictatorship in the Soviet Union, Huxley’s dystopia was based on a recognition of the potential use of technology to manipulate people to keep them “happy”.

Support for the idea of the existence of technocracy (rule by experts) is commonly based on two assumptions: first, that power is inherent to (or implicit) in technology; second, that the creators or producers of scientific knowledge and/or technology are in control over their creations or products. While the first assumption is quite plausible and can be backed up by evidence, the second assumption is much less plausible and not supported by actual developments.

That technology is never neutral but serves and advances particular (political) interests is an insight that has been recognised by many thinkers and analysts. The validity of this argument is most obvious and plausible when a technology can be used only for one particular purpose and/or if it requires a particular type of expertise to be operated. An often-mentioned example is that of nuclear energy. Nuclear power stations can only produce electricity (as a useful product, not considering nuclear waste, radiation, and contaminated water used for cooling). Moreover, given the resources, knowledge, costs, and risks involved, this is not a form of energy that people can produce in their backyards; it comes with technical, economic, and safety requirements that can only be met by larger entities (states or business organisations). This is irrespective of what the generated electricity is used for. Nuclear energy thus concentrates power in the hands of a few and creates dependence for many.⁴⁵ By contrast, other technologies have been advocated because they can be used for a wider range of purposes and/or be operated and controlled by a larger number of people, distributing their benefits.⁴⁶ However, the way "low tech" technology shapes the environment can also embed particular interests. Winner provides the example of how some of the bridges over the parkways on Long Island, New York, were built extraordinarily low, thereby preventing access by buses used mainly by racial minorities and low-income groups and the ability of these groups to access a predominantly white area.⁴⁷ Therefore, the question of what purpose(s) a technology serves and/or how and why it is applied is relevant to all technologies, whatever their level of sophistication.

However, while technologies are never neutral in the sense that they have particular goals or interests embedded in them, their creation, development, and application are all influenced or even determined by powerful non-scientific actors, in particular those who have control over the development of science and technology. Although (some or many) scientists may support or be dependent on (funded by) those actors and interests, or even be members of such groups, they seldom have control over the funding and application of science, and hence over the direction of scientific research and the purposes and interests it serves. While scientists may have considerable cognitive power, most have not so much political-institutional and

⁴⁵ See Winner for a discussion on this point. Winner, Langdon, *The Whale and the Reactor. A Search for Limits in an Age of High Technology*.

⁴⁶ Schumacher's concept of "appropriate technology" and Lovins's notion of "soft energy" are often put forward as examples of alternatives that promote democratic control. Schumacher, E. F., *Small Is Beautiful: A Study of Economics as If People Mattered*. Lovins, Amory B. (1977), *Soft Energy Paths: Toward a Durable Peace*. San Francisco: Friends of the Earth International.

⁴⁷ Winner, Langdon, *The Whale and the Reactor. A Search for Limits in an Age of High Technology*, 23.

economic power to enable them to make or shape the decisions about research funding and its purposes. As discussed in Chapter 4, science and technology have functioned foremost in the service of the economically powerful as well as military interests. Science and technology have become increasingly intertwined (to become “technoscience”), with most science now being undertaken to develop (technological) applications that serve particular (notably economic and military) interests rather than being conducted for its own sake, the public good, or for its curiosity value.⁴⁸

Although science and technology play an increasingly important role in the day-to-day practices and the lives of people and societies, this does not mean that scientists or experts hold or control the strings over this form of cognitive power, as some analysts seem to suggest.⁴⁹ It implies even less that governments are ruled predominantly by scientists or experts (technocracies).⁵⁰ This is not to deny that policy and decision-making are often depoliticised by arguing that they must be evidence-based. Such claims are indeed commonly made in many if not most policy areas, including health care, environmental policy, and economic policy. For illustration, faced with the COVID-19 pandemic, many governments argued emphatically that their responses were science or expert-based. Nonetheless, even in this (crisis) situation economic and political interests played a significant role in shaping government responses, as reflected by the differences in responses to the same or very similar situation. Inevitably, governments were forced to weigh up the relative importance of protecting the health of vulnerable groups in society, the economic fall-out of lockdowns and other measures aimed at containing the virus, and the social-psychological effects of such measures on populations, and a whole host of other factors, not in the least the opposition to these decisions and measures from those

⁴⁸ Bucchi, Massimiano (2009), *Beyond Technology. Science, Politics and Citizens*. Dordrecht: Springer. Buchi (p.27) notes that, worldwide, more than 70% of the costs of research and development is funded by multinational corporations.

⁴⁹ For instance, Neil Postman argues that the United States was the first country to become a “technopoly”, which he defines as “totalitarian technocracy” in which “human life [in that country] must find its meaning in machinery and technique.” In other words, life is totally, in all facets, dominated by technology or “technique” (in the sense also used by Weber, Ellul, and Mumford discussed above, including “soft” means or tools by which people are guided or controlled). But even if one were to agree with this, this does not imply that scientists or experts control these technologies or techniques, let alone rule the country. Postman, Neil (1992), *Technopoly. The Surrender of Culture to Technopoly*. New York: Vintage Books, 48-52. See also Swyngedouw, Erik (2011), “Interrogating Post-Democratization: Reclaiming Egalitarian Political Spaces”; Swyngedouw, Erik (2011), “Depoliticized Environments: The End of Nature, Climate Change and the Post-Political Condition”, *Royal Institute of Philosophy Supplements*, Vol.69, 253-274.

⁵⁰ Arguably, China is an exception. Several authors have noted that many of the people in leadership positions in China are scientists and engineers or have an “engineers’ mentality”. Shapiro, Judith (2012), *China's Environmental Challenges*. Cambridge, U.K.: Polity Press, Loc 1087; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Chapters 13 and 14; Economy, Elizabeth (2010, e-book ed.), *The River Runs Black: The Environmental Challenge to China's Future*. Ithaca, N.Y.: Cornell University Press, Loc 4205. Whether China’s political-economic system is a ‘totalitarian technocracy’ is a question that I will pick up on in Chapter 9.

who perceived these as an attack on the fundamental rights of citizens and democracy, a perception which has been commonly dismissed by governments as being based on misinformation.

But while governments may claim that their policies and decisions are evidence or science-based, this is more an attempt to depoliticise issues (especially those that are quite controversial) and to legitimise their decisions based on the high regard and trust that is accorded to science in many countries, rather than an indication of technocratic rule. Most of the time, such depoliticization efforts are difficult to sustain for long as adversely affected interests are usually quick to make sure that politics reasserts itself. Technocratic economic policy based on “neutral” neoliberal prescriptions has long been debunked as ideologically based policies that hurt many people. Health policies cannot avoid having to make choices about who gains or loses in the health care stakes. Education policies allow or even facilitate inequality in educational chances (including through public and private education). Transport policies may favour private transport interests above public transport on which lower-income groups disproportionately rely. By definition, all policies are political in the sense that they create winners and losers, whether or not they are (claimed to be) based on science or evidence.

The main conclusion to be drawn from this brief discussion of technocracy is that science and technology do not develop autonomously and that their development is not controlled by scientists and experts themselves. No natural or physical law steers science and technology into a particular direction, whether towards progress or to some kind of dystopian future. What direction the development of science and technology takes depends on the decisions of those who have the most power and control over science, which is foremost linked to political-institutional (in particular state) power, and to economic power, which enables the funding of research and the development of technology. The high costs involved in the development of technoscience (from medicines and medical equipment, new renewable energy technologies, the development of quantum computers, information and communication technologies (ICT; AI), new ventures into space exploration, or the development of the latest generation of smart weapons) makes that this is well beyond the capability of scientists and engineers to fund or control, even though they may be well paid for the services that they provide to those who do have the means to fund such projects.

This does not mean that the development of science and technology cannot or will not lead to totalitarian technocratic control. Arguably, this process is already well on its way in those countries where the intertwining or even fusion between concentrated economic power and political-institutional power, with a near-monopolistic control over the funding (and therefore steering) of science and technology, is leading to the subjection of societies to almost universal, comprehensive, and continuous surveillance and manipulation for commercial and political purposes determined by a political-economic elite. In such countries, with

China being a leader and the United States arguably not far behind,⁵¹ science and technology function foremost as tools of suppression, manipulation, and control, albeit through highly sophisticated means and insidious ways that its citizens often do not even notice. Huxley's *Brave New World* may indeed not be too far from being turned into a reality.

But whether this eventuates depends foremost on what happens in (really) existing political-economic systems, many of which are based on capitalism and a form of more or less democratic political systems. To better understand the developments in such systems, we need to have a closer look at the dynamics of capitalism and its political and social implications, including how these affect the possibilities or prospects of more effective environmental integration. This is the topic of the next chapter.

Conclusion

The aim of this chapter was to clarify and discuss the links between economic systems and political systems as a basis for identifying how political-economic interactions impinge or may impinge on environmental integration.

Economic systems have two main components: material and institutional. The material component refers to the (bio-) physical aspects associated with production, distribution, and consumption, including the materials and natural resources that are used as inputs (including rocks, soil, plants, minerals, water, and energy), human labour as well as human skills and human-made tools (technologies and materials such as chemicals), and physical infrastructure (buildings, roads etc.), and the final products for use or consumption. The institutional component refers to the rules and organisations by which production, distribution and consumption are organised, prescribed, or guided. Both components evolve together, albeit not autonomously or based on some kind of natural law. Economic systems are human, societal products that are influenced and shaped by many factors, including geography and biophysical environments and conditions, human ingenuity, societal norms and traditions (culture), and socio-political relations (classes, distribution of power of different kinds), as well as agency (the choices made by individuals and groups). Thus, economic systems are socially and politically constructed and subject to change based on the choices and decisions made by individuals and groups, in particular by the most powerful in societies. In turn, economic systems (both the physical and institutional components), influence or even shape the allocation and distribution of (most forms of) power in societies, creating a strong link between economic and political systems. Therefore, to (better) understand how politics and economics, and economic and political systems, affect the chances of environmental integration, we need to look more closely at the (specific) political-economic systems that have been developed.

Based on two main criteria, the more or less democratic or authoritarian nature of political systems, and whether an economic system can be classified as capitalist, socialist or a hybrid form, six different types of political-economic systems can be

⁵¹ Zuboff, Shoshana, *The Age of Surveillance Capitalism*; Liang, Fan, et al. (2018), "Constructing a Data-Driven Society: China's Social Credit System as a State Surveillance Infrastructure".

identified. While five of these have had counterparts in the real world, one—democratic socialism—thus far has been only a theoretical possibility. While, at a systemic level, the five types of political-economic systems that have actually existed (or still exist), appear not to be very conducive to environmental integration, there are likely to be variations between these types of systems in terms of environmental performance and the systemic obstacles that they pose. Again, at a theoretical level, the possibility of environmental integration being adopted as a core function of the state appears to be most promising in a democratic socialist system.

However, it must be recognised that all (modern) political-economic systems that have been in existence have been characterised by a reliance on industrial production systems and that such systems have been highly environmentally damaging. These systems have been facilitated and supported by both capitalist and socialist economic systems, raising the question of whether industrial production should be seen as an underlying and common cause for the environmental onslaught that has taken place since the industrial revolution. Two inherent features of the process of industrialisation can be identified that support such a view: its need for continuous expansion and its socio-cultural effects linked to the notion of progress. The first is based on a logic inherent to large-scale production systems. The second refers to the emergence of industrial societies based on the idea of infinite progress linked to the (unstoppable) development of science and technology and the expectation of ever-higher standards of living, in particular in material terms. To the extent that none of the extant political-economic systems recognises the unsustainability and disastrous consequences of this treadmill, there appears to be little if any hope and chance that environmental integration will become a priority anywhere. On the contrary, the more the environment unravels, the stronger the calls to speed up this treadmill and to rely on the development of science and technology to make nature redundant and to enable (modified) humans to live happily in their own completely artificially created world.

An additional worrying trend that accompanies this process is that it offers the prospect of total control not only over the environment but also over people and societies. Although early warnings issued by social analysts, as well as contained in fictional literature, that the unstoppable rise of instrumental rationality and science and technology would inevitably lead to totalitarian technocracy may have been premature, present trends provide growing evidence and support for the view that such a dystopian future may become a not-too-distant reality. However, this is not because scientists and experts are, or are likely to become a dominant (technocratic) class. More probably, it is the development that occurs in existing political-economic systems, leading towards the fusion of increasingly concentrated, economic, political, cognitive, and physical power that may bring about such societies.

For that reason, it remains crucially important to have a closer look at the dynamics of existing political-economic systems and to identify the main drivers behind the inexorable process of environmental destruction, as well as the concentration of power, as a basis for developing strategies for fundamental change. This is the main task of the following three chapters.

Chapter 7 – Capitalism and the Environment

Introduction

The aim of this chapter is to discuss whether, or to what extent, capitalism has been an important obstacle to environmental integration and protection, and if so, whether it is possible that this obstacle can be overcome by greening it. That economic development has led to significant environmental problems and pressures is now widely recognised around the world. Most governments have introduced environmental policies and institutions aimed at controlling these problems (as reflected in the expression “pollution control” rather than pollution elimination or prevention). However, most of these control efforts have failed to stem the growth of environmental problems, even in the most advanced countries, let alone globally. This raises the question of why governments have not developed and adopted more effective measures, policies, and institutions, in particular measures aimed at addressing the sources or causes of environmental problems.

It will be clear from the discussion in Chapter 6 that finding answers to this question requires looking at the ways political and economic systems are linked and interact. In this chapter, I argue that, in Western countries, states and governments have played a crucial role in the development of capitalism, defining the state’s economic function and shaping institutions foremost based on capitalist imperatives. Although there is scope for interpreting these imperatives somewhat differently, depending on the stage or type of capitalism and the relative power of capitalist factions and the labour movement, these imperatives circumscribe, and often trump, the other core functions of the state. This applies even more so to the emergent or added on function of environmental protection.

As noted in Chapter 6, there may be significant differences between countries with capitalist systems given their different histories and contexts, for instance, related to geography and resources, population size, socio-cultural patterns, political culture and institutions, and other factors that have influenced and shaped the economic system (its biophysical and institutional components). For instance, the “varieties of capitalism” literature aims to understand, in particular, how institutional factors influence the economic performance of countries in terms of economic development and growth. Similarly, the more or less democratic or authoritarian nature of the political system may be significant in terms of the way or extent economic actors, and a capitalist economic system, are guided towards particular goals linked to a government’s interpretation of its economic function as well as other functions (security, conflict and demand management, and social integration), and the relative priority assigned to these. Given the limitations of what can be undertaken here, this chapter offers a broad discussion of what can be considered the common or generic features of capitalist systems and assesses whether or to what extent these are compatible with meaningful and long-term environmental protection. While part of the discussion, notably of the development of capitalism, may highlight some countries (notably the United Kingdom), the account here does not cover the experiences of specific countries. Most of the discussion here will be based on the general literature on capitalism, which is already extensive enough.

First, I offer my take on what is capitalism, its main features, and how it has developed. Although this is a daunting task to undertake within the scope six or seven pages, it is a necessary step for being able to address the main question with which this chapter is concerned: can capitalism, and the presently prevailing political-economic systems in which it is entrenched, be greened to be made compatible with environmental imperatives?

Capitalism and its development

Before discussing capitalism, it is necessary to clarify what I mean by it, given the rather loose way this label is often being applied. For instance, it has become increasingly common to equate capitalism with the free market. This is highly misleading and manipulative language. Markets have existed long before capitalism emerged.¹ Markets imply only a very limited kind of freedom (of buying and selling) and the idea that a market can operate without a socio-cultural and political-economic context is just nonsense, referred to as utopian by Polanyi,² although dystopian would be a better label given the damage and dangers associated with the pursuit of this ideology.

The term capitalism came into use in the 18th century but remains a highly contested and politically charged concept open to different interpretations.³ Here, my aim is not to discuss the diversity of definitions and views of capitalism, but to make and discuss what I think is an important distinction, namely between capitalism as a *practice* and as a *system*. As a practice, I define capitalism simply as *the use of money for the main purpose of making more money (turning it into capital), by whatever means*. A capitalist system refers to a set of *political-economic institutions that condone and support capitalism as a dominant practice*. Capitalism as a practice is much older than capitalism as a system. For instance, in many pre-industrial societies in which money was used, moneylenders were lending money to make more money by charging interest. Although going back thousands of years, this practice was not always approved of, let alone supported, by the authorities.⁴ By contrast, capitalist systems emerged only in the 14th century, in particular with the rise of the Italian city-states, and in the following centuries in other European cities like Antwerp and Amsterdam. Here, the art of accumulating money was practised by traders and bankers who developed a range of financial mechanisms to facilitate investments (in ships, merchandise, insurance, among other), in particular for long-distance trade, which was highly profitable.⁵ In these cities, authorities not only condoned but participated in lending and/or borrowing for profit, making what is generally referred

¹ Braudel, Fernand (1979, 1983 ed.), *The Wheels of Commerce*. London: William Collins Sons & Co, Book Club Associates.

² Polanyi, Karl, *The Great Transformation. The Political and Economic Origins of Our Time*.

³ Braudel, Fernand, *The Wheels of Commerce*, Chapter 3; Kocka, Jürgen (2016), *Capitalism. A Short History*. Princeton: Princeton University Press.

⁴ Charging interest on loans has long been condemned by the Catholic church and was referred to as "usury".

⁵ Braudel, Fernand, *The Wheels of Commerce*, Chapter 4.

to as “merchant capitalism” the dominant economic system.⁶

It is important to emphasise that money and capital are not the same thing. Money, in a variety of forms, has been used throughout the ages as a means to facilitate the exchange of goods and services. Although people may save money to enable them to buy expensive items, or to have a reserve for hard times or retirement, this is not building capital or capitalism. We speak of capital and capitalism as a practice *only* if money is used and/or accumulated with the main aim to generate more money.⁷ Capitalism can be practised in many different ways, using different means to transform money into more money. As noted above, arguably the oldest practice is that of moneylending, which occurred in many societies with economic systems that no one would call capitalist. What form capitalism takes is largely dependent on the existing (dominant) system of production as these systems create different opportunities for making money from money by (re-) investing it. While investing money in (long-distance) trade was the main way to build capital in merchant capitalist systems, the development of industrial production systems, which created the need for a continuous expansion of markets and trade, took the opportunities for capitalist investments to a whole new level, from the funding of machinery and other capital goods, including infrastructure (shipping, canals, railroads) to the financing of imports (of the raw materials needed) and for the opening up or creation of new markets. But these developments were only possible with the active support of the state, among other by the creation of a political-economic institutional framework (creating and protecting property rights, the protection of investments, market rules, labour relations, organised military power to facilitate and protect foreign investments and markets). Hence, the development of the industrial system of production relied on the state (first in the United Kingdom) to be turned into an industrial capitalist system, a process that was followed by other West-European countries and the United States in the 19th century and exported around the world in the 20th century.

In this context, it is also important to restate the distinction between industrialism and capitalism, as the two are often seen as inextricably intertwined and inseparable. While it is true that, from the 18th century, capitalism and industrialism developed hand-in-glove, creating expanding industrial-capitalist economic systems, capitalism can be practised in agriculture (a practice which preceded and arguably prepared the ground for industrial capitalism) and became the dominant system in countries in which neither agriculture nor industrial production was the most

⁶ Wallerstein, Immanuel), *The Modern World-System II : Mercantilism and the Consolidation of the European World-Economy, 1600-1750*. New York: Academic Press; Heller, Henry (2019), *A Marxist History of Capitalism*. London: Routledge.

⁷ Marx uses the formula M-C-M (Money-Commodities-Money) to refer to this process, by which money is transformed into commodities (goods or services produced for the purpose of selling them with a profit), with the result of generating more money. However, as Marx also acknowledged, money can be used to make more money via purely financial (notably speculative) transactions (depicted by the formula M – M), a practice which has become increasingly significant in capitalism. But the point to emphasise is that only if money is used for the purpose of making more money, it is referred to as capital, and the user of that money as a capitalist. Marx, Karl (1867; 1887, First English edition ed.), *Capital. Volume 1. The Process of Production of Capital*. Moscow: Progress Publishers, Chapter 4.

important mode of production. For instance, the service industry (which includes banking and investment services) has become an increasingly important or even dominant sector in many so-called developed countries, institutionally and otherwise supported by states and governments, producing a form of capitalism that is often referred to, for lack of a better term, as “post-industrial”, but which could also be labelled service capitalism or finance capitalism. A capitalist political-economic system can, of course, condone and support more than one of these forms of capitalism, to the point where capitalist practices pervade all sectors of an economy and society. Industrialism, on the other side, is compatible also with non-capitalist systems, as demonstrated by the socialist systems created in the 20th century in the Soviet Union, China, and other countries. The distinction, as discussed in Chapter 6, is quite important when assessing claims that capitalism and/or socialism can be greened.

Similarly, it is important to keep in mind that capitalism can take a variety of systemic forms depending on the specific institutions (rules and organisations) by which it is given shape in a society where ‘making more money from money’ is condoned and supported by the political authorities. Although capitalism as an economic system, following the traditional Marxist view, is often defined as a system in which the means of production are predominantly privately owned, in contrast to a socialist system where public ownership is the rule, this definition leaves scope for interpretation and considerable confusion regarding particular political-economic systems. For instance, in many countries that are generally deemed to have capitalist economic systems, significant amounts of land, water, minerals and other natural resources, as well as large chunks if not most of the physical infrastructure (roads, railways, communications systems) have been or are still owned (formally) by the state. According to this definition, a country like Saudi Arabia, where the state owned (until recently) the main (oil) industry and oil reserves, was a socialist state, a pertinently absurd assessment. For this reason, it seems wise to broaden the definitions of capitalism and socialism. It also makes sense to keep the door open for having a category of mixed or hybrid (or even “other”) political-economic systems given the diversity of really existing systems.

But despite all this variety, as argued earlier, in my view, the essence of capitalism lies in the *practice* of making money from money, whether it is based on agriculture, industry or any other economic sector or activity. Therefore, as suggested above, I prefer to define a capitalist system as a political-economic system that condones and supports the use of money for the sake of making more money (building and expanding capital), by whatever means. These means do not necessarily have to be productive investments (the production of “use values”). Increasingly, it can be argued, capitalist growth has been created by intangible means (including intellectual property rights) and largely speculative investments and practices that have produced nothing but greater wealth for the owners of financial capital. This phenomenon has also been referred to as “rentier capitalism”, which arguably has become the dominant form of capitalism in the 21st century.⁸ Although this does not mean that capitalist production is no longer important and a source of profits, the evolution of the capitalist economic

⁸ Christophers, Brett (2020), *Rentier Capitalism. Who Owns the Economy, and Who Pays for It?* London and New York: Verso; Piketty, Thomas, *Capital in the Twenty-First Century*.

system (condoned and facilitated by governments) has increasingly been built and become dependent on a financial system that is not only largely detached from the “real” (productive) economy, but that is highly unstable, and socially damaging (for instance as a driver of growing inequality in wealth and income, and of rising house prices that have made houses unaffordable for a large proportion of people in societies). This has also deprived people of the few opportunities that they (sometimes) had to participate in the economic decision making of the company they worked for, while the accumulation and concentration of financial power have further eroded and undermined liberal-democratic systems. Therefore, if private ownership of the means of production is seen as an element of a capitalist system, at the very least, this should be extended to ownership and control over financial capital, even if financial capital is not, strictly speaking, a means of production.

In this context, it should also be pointed out that using the adjective private when referring to ownership of the means of production, as well as of financial capital, is misleading. Traditionally, the term private was associated with the wishes and/or rights of individuals to have control over their personal sphere or space, encompassing the right to do as they wish in their private life without others looking in. This was based on the presumption that what people do in their own space or sphere has little or no adverse effects on other people. Similarly, private property suggests that the ownership and use of such property are only of concern to the owner and have little or no impact on other people. But private ownership of and control over the means of production in a capitalist system, and of financial capital, increasingly concentrated in a relatively small number of individuals, corporations, banks, and financial institutions, affects many thousands or even millions of other people (non-owners). Thus, what big businesses do, or do not do, is very much in the public rather than the private realm. Yet, the notion of private property rights is commonly invoked by capitalists to justify their right to do as they wish with their property and the income derived from it. While it may be very hard to ban this abuse of the term private from public discourse, people should be aware of the manipulative nature of this type of language.⁹

This clarification of what I consider to be the essence of capitalism and capitalist systems is just a starting point for identifying and discussing a range of common elements or features that can be regarded as lying at the core of all capitalist systems, and that are highly relevant to the discussion and assessment of its environmental credentials later in this chapter. Marx, who was foremost a researcher of capitalism, has been instrumental in identifying these core elements, which provided the basis for his theory of capitalism. Here, I liberally interpret Marx’s views, and those of several other Marxist scholars who built on his ideas, by identifying five features that flow more or less logically from its defining characteristic as described above, the practice of making money from money, but at the stage of what is commonly referred to as industrial capitalism. These features will be referred to as the profit motive; competition; the need for capital accumulation; commodification; and the tendency towards overproduction and crisis.

⁹ For a similar argument, see Schumacher, E. F., *Small Is Beautiful: A Study of Economics as If People Mattered*, 222. He notes that “When we come to large-scale enterprises, the idea of private ownership becomes an absurdity”.

First, the *profit motive* arguably is the most fundamental driving force behind capitalism. It expresses itself in the age-old practice of charging interest (often at exorbitant rates), referred to as usury. It is debatable whether this practice finds its source in a basic (or natural) human characteristic like selfishness,¹⁰ or whether the practice has emerged because some people appear to be more inclined to take advantage of others when the opportunity arises, and when socio-cultural norms weaken and/or allow this to happen. I am inclined to support the second view, believing that even if all people may be inclined to be selfish they as well have a capacity to be empathetic.¹¹ Whether and to what extent such inclinations are manifested in a society depends foremost on its dominant cultural norms. History has shown time and again that humans are capable of committing atrocious acts against each other. But not all people do so all of the time, and arguably most people in most societies behave in more socially desirable ways encouraged and constrained by the prevailing standards and norms of society. Hence, although it will always remain speculative how money lending or usury arose as an acceptable practice, it is likely that certain conditions had to be present. First of all, money had to exist or be created. Second, certain creative individuals must have invented the idea and practice of money lending. Third, the society or societies in which this occurred, or their rulers, must have accepted or even approved of the practice.

The latter condition existed in the Italian city-states where credit and the practice of making money with money by investing it in long-distance trade became the source of growing fortunes, condoned, and actively participated in, by rulers. By the time capitalism became the dominant economic system, banking, credit and charging interest were already prevalent and institutionally accepted and supported practices. The main difference between industrial capitalism and earlier societies was that the former opened up far greater opportunities for making money from money by investing it in large-scale industry as well as in trade. The main driver and motivation of those involved in these practices was to make money with money. Those who invested money in industry did (and still do) so with the expectation not only to recuperate the costs, but also to get a financial return on their investment. For capitalists, profit is income. Being profitable is the bottom line that trumps all other concerns. For industrialists (and traders) the need for profit is increased if investments have been financed by borrowed money on which interest needs to be paid. Banks and other institutions that own and control finance (credit) do so only because they also expect a (good) return from lending and investing money, not to serve social needs or purposes. The belief that selfishness and greed are conducive to producing

¹⁰ Argued to be "hard-wired" - rooted genetically, see Dawkins, Richard (1989; 2006, 30th anniversary edition ed.), *The Selfish Gene*. Oxford: Oxford University Press.

¹¹ Similarly, Rifkin argues that the human inclination towards empathy is not a natural constant but has gradually been growing with the improvement of socio-psychological conditions for cooperation as well as global communication technology. However, human consciousness also remains captured by less inclusive ways of thinking, a tendency that is fuelled by rising environmental and resources stresses. Rifkin, Jeremy (2009), *The Empathic Civilization. The Race to Global Consciousness in a World in Crisis*. New York: Penguin.

optimal outcomes for everyone was further strengthened by the abuse of Adam Smith's notion of the "Invisible Hand".¹²

In a capitalist system, as a rule, multiple traders and/or producers compete with similar products and services in the same market. *Competition* is a second core feature of capitalist systems, forcing producers and traders to provide goods or services in the most cost-efficient way, by minimising costs and maximising labour productivity to be able to offer similar products or services at lower prices than competitors. Competition, even if not perfect (in the absence of complete information, and as some businesses enjoy certain advantages) constitutes more than an incentive to minimise costs and to increase efficiency: it makes it imperative. Losing the competition battle brings about a loss in sales and profits, threatening the financial viability of a company, and potentially causing its demise. Not for nothing, life in a capitalist system is often portrayed in Darwinian terms as a struggle for survival of the fittest or more colloquially as a "dog-eat-dog" world. However, this creates a contradiction: it implies that companies that perform best grow at the expense of others, creating a dynamic that ultimately leads to the survival of only a few or even just one company: an oligopoly or monopoly – monopoly capitalism.¹³ Logically, then, a free market capitalist system leads to the dominance of monopolistic companies that, theoretically, are the most efficient, but that can charge pretty much what they want (depending on the elasticity of demand and/or their success in creating demand) for their products or services. This process also occurs in financial capitalism as reflected in the collapse of and mergers between banks and other financial institutions, leading to increasingly bigger financial institutions that, when threatened with collapse, have been deemed by governments (notably the US government and the Federal Reserve Bank) to be too big to be allowed to fail, leading to multi-billion dollars bailouts sanctioned by the state.¹⁴

Economic growth or expansion is a third essential feature of capitalism driven by competition and the struggle for survival. Companies compete for market share and hence must be able to expand to increase economies of scale, productivity, and profit more than their competitors. If such opportunities in an industry decline, they must seek outlets for new profitable investments elsewhere. Capital will flow towards those industries or sectors where the highest rate of return can be obtained. Hence, in a capitalist system, for each company, economic growth (the accumulation of capital; finding new opportunities for profitable investments) is a must, not a choice ("grow or

¹² It must be noted that Smith did not argue that the market mechanism of the Invisible Hand implied that the pursuit of self-interest should be morally condoned and/or that this would ensure that the collective good would be served by it, which is an important distinction. Bishop, John D. (1995), "Adam Smith's Invisible Hand Argument", *Journal of Business Ethics*, Vol.14, 165-180. The use of this metaphor is an example of how, more broadly, Smith's work has been abused by free market ideologues. See Sen, Amartya (2011), "Uses and Abuses of Adam Smith", *History of Political Economy*, Vol.43, No.2, 257-271.

¹³ Baran, Paul A. and Paul M. Sweezy (1968), *Monopoly Capital. An Essay on the American Economic and Social Order*. London: Pelican Books.

¹⁴ Tooze, J. Adam, *Crashed: How a Decade of Financial Crises Changed the World*.

die").¹⁵ In such a system, economic growth is not simply an addiction as some analysts seem to think¹⁶ – it is a systemic imperative. However, expansion is only viable if demand also increases and if profits can be newly invested. As the demand for a product is likely to decline when markets get saturated, companies constantly develop new or slightly different products that are presented to potential consumers as superior even if the changes are minor or mostly cosmetic. Shortening production cycles, in part by building in obsolescence and manufacturing non-repairable throw-away products has become a dominant commercial strategy. Creating consumer loyalty to a brand that is presented as an essential element of an individual's or group's identity, needs or lifestyle induces consumers to keep up with the latest fashion, model, or trend.¹⁷ *This* is what can be referred to as a created addiction. Getting people addicted to endless consumerism is a means of meeting the growth imperative.

For the same reason, capitalist systems have been a driving force behind the reduction or elimination of the barriers to exporting to other countries (albeit not necessarily barriers to imports from foreign competitors). Historically, capitalist accumulation has been linked with colonialism and imperialism, to create opportunities for investments and new markets (as well as to secure resources and to use free or cheap labour) with governments providing or seeking to provide favourable conditions and offering security guarantees.¹⁸ It has also been the driving force behind economic globalisation.

A fourth core feature of industrial capitalism, linked to the accumulation imperative, is a world outlook in which *everything is regarded as a (potential) commodity*. Nature is nothing but a pool of resources that provides the raw materials for production. Humans are merely the embodiments of labour – a production factor or "human resource", treated and traded as a commodity traded on the labour market. Everything is prone to be turned into a commodity, a new opportunity for investment (capital accumulation) and a source of profit. This includes all of nature (including plants, animals and their genetic characteristics, water) as well as social services or functions that previously were regarded as public goods and/or collective responsibilities like education, health care, child care, care for the elderly, public transport, waste management, and even security (private security firms, private military contractors), among many other.¹⁹ Personal data and information harvested from electronic media communications and the public realm, and gross invasions of

¹⁵ For a good summary of the capitalist growth imperative, see Douthwaite, Richard, *The Growth Illusion. How Economic Growth Has Enriched the Few, Impoverished the Many, and Endangered the Planet*, Chapter 2. See also Smith, Richard A., *Green Capitalism: The God That Failed*, 18-20.

¹⁶ Daly, Herman E., "The Steady-State Economy: Toward a Political Economy of Biophysical Equilibrium and Moral Growth", 149-152; Hamilton, Clive, *Growth Fetish*.

¹⁷ Klein, Naomi (2001), *No Logo: No Space, No Choice, No Jobs*. London: Flamingo.

¹⁸ Baran, Paul A. (1957), *The Political Economy of Growth*. New York: Monthly Review Press; Barrat Brown, Michael (1974), *The Economics of Imperialism*. Harmondsworth: Penguin Books.

¹⁹ Lee Peluso, Nancy (2012), "What's Nature Got to Do with It? A Situated Historical Perspective on Socio-Natural Commodities", *Development and Change*, Vol.43, No.1, 79-104; Harvey, David, *A Brief History of Neoliberalism*; Lysandrou, Photis (2005), "Globalisation as Commodification", *Cambridge Journal of Economics*, Vol.29, No.5, 769-797.

people's private spheres, are also means for producing highly sophisticated services that enable the surveillance and manipulation of people for commercial and political purposes.²⁰

A fifth core feature of capitalism is that it is *prone to crises*. Crises may result from overproduction in a market that is getting saturated especially when multiple companies offer similar products or services with each trying to maximise its share of the market, and/or from a lack of new profitable investment (capital accumulation) opportunities, slowing down economic growth. Notwithstanding all marketing and branding efforts, there are limits to what people regard as truly innovative, essential, or even desirable "must-have" products or services. Although foreign or global markets may offer seemingly unlimited scope for expansion, this may be hampered by protectionism and trade barriers and weak demand due to low incomes, not in the least caused by capitalism's inherent logic to keep the price of labour down. When, at irregular stages, overproduction results in losses rather than profits, companies without sufficient financial reserves are forced to contract or close down, worsening unemployment, lowering incomes and demand, and creating a downwards spiral in the economy as a whole.

In addition to overproduction, another source of instability and crises lies in the financial system. Finance plays a key role in funding economic expansion and, increasingly, the standard operations of companies. From the 17th century, economic growth has been largely fuelled by credit made available by private banks whose profits (based on charging interest) depended on the ability of commerce, and later of industries, to undertake and expand their operations. If the "real" (productive) economy stagnates and new opportunities for profitable investments dry up, banks are hit by a reduction of demand for credit as well as the risk of companies defaulting on their debts. It has been argued that investment cycles are linked to long-term technological developments (referred to as a process of "creative destruction") in industries or sectors that have stimulating effects across a large part of economies.²¹ Failing such moments of deep technological transformation, wars have offered alternative opportunities for massive investment, both during wartime (for the arms industry and national mobilisation efforts) and in their aftermath (the rebuilding of infrastructure and industrial capacity). The financial sector is heavily dependent on continuing economic expansion (based on credit) and hence is at the sharp end of economic downturns and prone to crisis even when *expectations* of economic growth (and hence the demand for credit) decline.

Increasingly, with the deregulation of the financial sector, speculative investments in financial instruments or derivatives like futures trading, currency trading, and commodity trading, as well as in shares and real estate, have provided new opportunities for capital accumulation and profit-making. Investments in these areas have become more attractive and even vital for banks, other financial institutions, and big corporations as outlets for accumulated capital and to maintain

²⁰ Zuboff, Shoshana, *The Age of Surveillance Capitalism*.

²¹ Schumpeter, Joseph A. (1943; 1966), *Capitalism, Socialism, and Democracy*. London: G. Allen & Unwin; Mason, Paul (2015, ebook ed.), *Postcapitalism: A Guide to Our Future*. London: Allen Lane, Chapter 2.

their profitability, often offering higher returns than investments in the real economy. While these new capital investment tools provided alternative opportunities for capital accumulation, generating enormous profits and incomes for investors and the managers of capital, creating many new billionaires, they have done nothing to diminish capitalism's proneness to crisis. On the contrary, they have fuelled speculative bubbles, aggravated financial instability and been a source of financial crises that also have serious repercussions on the real economy.²² These developments further illustrate capitalism's imperative of continuously finding new capital accumulation (and profit) opportunities even by producing nothing and investing in thin air (making money with money only), albeit at the cost of greatly increasing inequality of wealth and income and the economic vulnerability of millions of people.

It should be clear from even this brief sketch of the main features of capitalism that it is fundamentally at odds with environmental protection. But this is not widely accepted. I will elaborate on this in the next section.

Can capitalism be greened?

In this section, I expand on why capitalism is incompatible with effective long-term environmental protection and assess some of the main arguments that it can be greened.

The argument that capitalist systems are incompatible with meaningful, long-term environmental protection is based on four main sub-arguments. First, its inherent logic or imperative to minimise costs, and hence to ignore adverse environmental (as well as social) effects of the exploitation, transport, production, distribution, and consumption of resources and, if that is no longer possible, to shift the costs for addressing these effects to consumers, communities, societies, and governments. Second, its built-in dynamic for technological innovation, regardless of the (potential) risks and adverse effects, for the same reason as mentioned under the first point. Third, its inherent imperative for continuous economic growth, which inevitably implies continuing and growing resource use notwithstanding opportunities for increasing resource efficiency, and which is fundamentally at odds with ecological processes and limits. Fourth, the grip that capitalism holds on states and governments (and international organisations), subordinating these to its imperatives and creating a degree of interdependence that makes it almost impossible to fundamentally transform capitalism.

As discussed in the preceding section, in a competitive capitalist system, businesses must minimise their costs and maximise their profits to outcompete their rivals. It is therefore in the very nature of capitalist businesses to ignore the adverse social and environmental effects of their operations if preventing or addressing those effects would come at a cost that would put them in a disadvantaged competitive position. They will only consider such costs if the law requires them to do so and/or if the government (or governments in the case of international competition) create a level playing field by imposing the same requirements on all the competing

²² Tooze, Adam (2018), "The Forgotten History of the Financial Crisis: What the World Should Have Learned in 2008", *Foreign Affairs*, Vol.97, 199-210; Tooze, J. Adam, *Crashed: How a Decade of Financial Crises Changed the World*.

companies. But even then, imposing the same requirements does not necessarily imply creating a level playing field as companies may have different cost structures, among other related to the nature and state of technology that they use. This may lead them to strongly oppose the introduction of such rules or requirements, a situation which can be observed in many industry sectors both at the national and the international level, for instance, related to the growing demand for reducing greenhouse gas emissions. But this business imperative has been at work across all economic industries and sectors linked to all kinds of damaging social and environmental effects.

The argument that businesses *do* take social and environmental concerns seriously is commonly backed up by examples of individual companies. Such businesses are held up as models or sources of inspiration for other companies to follow on the assumption that the whole system of production and consumption can be greened if all or most businesses would follow suit. This could be called the individual company pathway towards sustainable capitalism, which according to some is already underway.²³

There are several weaknesses in this line of thought. First, the assumption that what may be possible in some companies can be applied to whole sectors or even to the whole economy is problematic given the significant differences between industries. For instance, while some industries may produce truly sustainable clothing, cosmetics, furniture, or carpets, this is much more problematic in a range of other industries that produce more complex items with many inputs (such as computers, mobile phones, televisions and many other electronic products, cars, trains, planes, and ships), or that almost by definition are unsustainable (like the coal, oil and gas, concrete, and mining industries). Second, many of the most sustainable businesses cater for relatively small niche markets and are able to survive because of this focus. But even then, competition from other, less scrupulous, companies in these markets may start impinging on the bottom line of green companies. The resulting pressure may force green companies to compromise or even push them out of business altogether. Third, while it cannot be denied that some companies or managers appear to have been serious in their greening efforts, their environmental achievements have mostly been very modest and have failed to make a significant dent in the unsustainable practices of the sectors in which they are operating. This is reflected in the continuing environmental degradation caused by industries in all sectors, including agriculture, manufacturing, energy, mining, transport, and urban development.²⁴

Neither should one be fooled by the expressions of environmental and social concern by, and the charitable activities of, billionaires. At best, these are inspired by genuine feelings even if mixed with considerable doses of guilt about the huge

²³ Suzuki, David and Holly Dressel (2002), *Good News for a Change. Hope for a Troubled Planet*. St Leonards, N.S.W.: Allen & Unwin; Hawken, Paul, et al., *Natural Capitalism: Creating the Next Industrial Revolution*; Lovins, L. Hunter and Amory B. Lovins (2000), "Pathway to Sustainability", *Forum for Applied Research and Public Policy*, Vol.15, No.4, 13-22.

²⁴ For a good discussion of the limitations of the often heralded greening efforts of some industrial leaders, see Smith, Richard A., *Green Capitalism: The God That Failed*.

discrepancy between their wealth and the poverty and misery suffered by millions or billions of people around the world. But, looking at these activities more sceptically and realistically, these efforts constitute public image exercises that may themselves prove to be quite profitable given the positive public attitudes that they generate towards their companies. They may also forestall calls for the abolition of obscene inequalities in wealth and income that have emerged. At the same time, they do nothing about the causes and sources of the misery and problems that have been created by capitalism, putting small plasters on some of the symptoms. Moreover, in societies where governments take the interests of their citizens seriously, there should be no need for charitable activities as meeting all the basic needs of people and society should be, as of right, guaranteed by states and governments.²⁵

Second, capitalism's built-in dynamic for technological innovation produces a continuous stream of new materials, products, and processes, many of which turn out to have unforeseen serious environmental and social effects. While governments, usually only after these effects have manifested themselves and public concerns have reached politically sensitive levels, may introduce measures, policies and/or legislation to mitigate such effects, the problems are seldom addressed effectively, as discussed in Chapter 2. As a result, environmental problems continue to grow, new problems and risks keep on being added, and environmental degradation continues unabated.

But while it may be true that, in a capitalist system, businesses can be guided or forced towards the development of less unsustainable technologies, practices, and products, economic imperatives force them to use production methods and practices that maximise productivity, and to develop products that can be sold at a competitive price, whatever their social and environmental costs (that are offloaded to workers, communities, societies and the environment). This has been frequently illustrated in the case of pesticides and the many other human-made materials and chemicals that have become standard inputs in many processes and products. Often, therefore, technological innovation simply implies shifting problems and generating new ones rather than creating truly sustainable processes and products. These uncertainties, risks and potentially uncontrollable and disastrous effects have only become greater with the development of ever smarter and more complex technologies, including genetic manipulation, nanotechnology, and the use of artificial intelligence. Yet, as long as the "private" sector remains in control of technological development, it will, driven by economic imperatives, continue to ignore or downplay the (potential) problems and risks and emphasise the (potential) advantages and benefits of new technologies, while those who raise concerns and objections against new technologies and products are commonly dismissed as Luddites or people who are against progress.

²⁵ Giridharadas, who was an insider of the capitalist "doing good crowd", frankly recognises the misguidedness (or is it hypocrisy?) of the efforts of the global elite to ease their conscience by spending billions of dollars on good causes while ignoring the systems that lie at the root of the problems but from which they have made their fortunes in the first place. Giridharadas, Anand (2018), *Winners Take All. The Elite Charade of Changing the World*. New York: Alfred A. Knopf. The hypocrisy can also be read from the vanity, lifestyles, and business priorities of billionaires.

Third, as noted above, capitalism requires continuous expansion and economic growth. Although the defenders of capitalism, including many academics, claim that economic growth can be (made) compatible with a *reduction* of resource use and other environmental effects, this argument, while it may apply to some resources and some effects in some industries in some countries, remains pie-in-the-sky inasmuch as whole economies (national and global) are concerned. I will elaborate a bit more on this argument here as it probably is a keystone on which the claim that capitalism can be greened is based.

The belief that capitalism can be greened is commonly linked to the technological innovation drive that is inherent to capitalism. As noted above, competition drives innovation as businesses aim to increase their productivity and thus the costs per unit produced, making it possible to offer lower prices than their competitors and/or to offer new or "better" products. This systemic tendency of capitalism works across all businesses, sectors, and the economy as a whole. It has been argued that one effect of this dynamic is that production systems become increasingly efficient, producing more from less, including energy and materials as well as labour.²⁶ Similarly, managers also have strong incentives to continuously improve productivity and efficiency by managerial means, such as by providing incentives and restructurings that cut costs and/or reduce resource use. Thus, it is said, capitalism promotes continuous improvements in resource and materials efficiency, greening it, as it were, from the inside. It has been argued that this tendency is at work regardless of any efforts by governments, although it is usually acknowledged that (notably small) businesses may need some financial or regulatory stimulus to put them onto this path.²⁷

Thus, businesses and governments put much of their faith in the greening of capitalism on the assumption that its environmental impacts can and will be mitigated by technological and managerial means. While it is often (explicitly) acknowledged that capitalism requires continued economic growth, it is thought that these impacts can be mitigated by a continuous improvement in the use of resources. This claim is backed up by research that demonstrates that resource efficiency gains have been made in a range of sectors, with positive environmental results. Such developments, which have been studied foremost in the context of high-income countries, are said to only scrape the surface of what is possible, and it is believed that much higher levels of resource efficiency can be achieved.²⁸ This kind of thinking is further buttressed by

²⁶ Huber, Joseph (2000), "Towards Industrial Ecology: Sustainable Development as a Concept of Ecological Modernization", *Journal of Environmental Policy & Planning*, Vol.2, No.4, 269-285; Huber, Joseph (2003), "Environmental Policy Shift through Technological Innovation", Paper presented at the *Berlin conference on the human dimensions of global environmental change: governance for industrial transformation*, Berlin, 5-6 December. <http://www.fu-berlin.de/ffu/akumwelt/bc2003/>.

²⁷ Hawken, Paul, et al., *Natural Capitalism: Creating the Next Industrial Revolution*.

²⁸ Angrick, Michael, et al. (2014), *Factor X Policy, Strategies and Instruments for a Sustainable Resource Use*. Dordrecht: Springer Netherlands; Weizsäcker, Ernst von, et al., *Factor Four. Doubling Wealth - Halving Resource Use*.

the discourse of ecological modernisation²⁹ and has been at the core of the sustainable development agenda.³⁰ Nonetheless, most advocates of these schools of thought recognise that governments need to play an active role in that transition as “the market” on its own is unlikely to (be able to) overcome the economic and other obstacles that stand in the way of the implementation of these ideas.³¹

Although it is plausible that resource efficiency can be significantly increased, and that waste and pollution can be minimised, there is little evidence that this is occurring. In this context, the literature distinguishes between relative and absolute decoupling. Relative decoupling means that over a particular period resource consumption, emissions, pollution, or waste increase proportionally less than GDP, while absolute decoupling means that these decline in absolute terms while GDP increases. If one accepts that it is necessary or desirable to *reduce* environmental pressures, only absolute decoupling meets this requirement. Relative decoupling implies that resource consumption, emissions, pollution, and waste continue to increase in absolute terms and thus add to existing levels of pressure. The claim that economic growth and environmental protection are compatible can only be upheld if indicators of resource consumption, emissions, pollution, and waste show a continuously declining trend while GDP increases. Moreover, such a trend must be observed in the world as a whole. Even if some (high-income) countries were to show such a trend, these improvements may well be negated by other countries, in part because more resource-intensive and polluting industries have been shifted from high- to low-income countries. Given the increasingly interrelated global production chains, the environmental performance of countries can only be meaningfully assessed in a global context.

While there is some evidence to support the view that relative decoupling has occurred in some areas in high-income countries, notably in the areas of energy consumption and some forms of air pollution, there is virtually no evidence to support the idea of absolute decoupling. In 2010, the World Watch Institute reported that despite a 30% increase in resource efficiency, global resource use had expanded by 50% over the preceding three decades.³² If resource consumption embedded in trade

²⁹ Simonis, Udo E. (1987), *Ecological Modernisation: New Perspectives for Industrial Societies* ZBW - Leibniz Information Centre for Economics; Simonis, Udo E. (1989), "Ecological Modernization of Industrial Society: Three Strategic Elements", *International Social Science Journal*, Vol.121, 347-361.

³⁰ Huber, Joseph (2000), "Towards Industrial Ecology: Sustainable Development as a Concept of Ecological Modernization"; World Commission on Environment and Development, *Our Common Future*; Giljum, Stefan (2006), *Global Appropriation of Environmental Space. Past Trends and Future Scenarios of Natural Resource Use in Different World Regions*. Vienna, Austria: Sustainable Europe Research Institute (SERI).

³¹ Hawken, Paul, *et al.*, *Natural Capitalism: Creating the Next Industrial Revolution*; Lovins, L. Hunter and Amory B. Lovins (2000), "Pathway to Sustainability"; Porritt, Jonathon (2005), *Capitalism as If the World Matters*. London: Earthscan; Mathews, John A. (2014), *Greening of Capitalism: How Asia Is Driving the Next Great Transformation*. Palo Alto, United States: Stanford University Press.

³² Flavin, Christopher (2010), "Preface", in L. Starke and L. Mastny (eds.), *State of the World 2010 - Transforming Cultures. From Consumerism to Sustainability*, xvii-xix.

is taken into account as measured by the concept of Material Footprint (MF), the consumption of materials in high-income countries has kept pace with the rise of GDP.³³ In other words, high-income countries may seem to have reduced their consumption of resources in relative or even absolute terms, but when their material footprint associated with the production of imported goods is taken into account, this apparent improvement evaporates. With the internationalisation of production in global value chains, measuring the environmental (including resource) performance of high-income countries based on domestic production and activities alone gives a distorted picture of their environmental/resource impact associated with their consumption levels. The shift of more energy-intensive and polluting activities to low-income countries has simply amounted to displacing pollution. China in particular, which has taken on the role of the world's factory, has paid for this with disastrous environmental consequences.³⁴

The rising tide of materials consumption in high-income countries in absolute terms is also reflected in the amount of household and other waste produced in these countries. Between 1990 and 2017, the total amount of municipal waste produced in OECD countries increased from 551 million tons to 675 million tons while per capita generation increased from 502 kilograms to 524 kilograms.³⁵ Apart from this, there is a rapidly growing stream of electronic waste (e-waste) amounting to 44.7 million tons globally per annum. Only 20% of this is collected and recycled, with the rest being undocumented, although much of it has been exported for "recycling" to low-income countries, notably Nigeria.³⁶ Another materials waste stream that recently has become a focus of global public concern is that of plastic. It has been estimated that the production of plastic materials grew from 2 million tonnes in 1950 to 322 million tons in 2015, resulting in a cumulative total of 8.3 billion tons of plastic in 2017.³⁷ In 2016, higher-income OECD countries exported 70% of plastic waste to lower-income countries in East Asia and the Pacific, with China and Hong Kong importing more than 72% of that. China's introduction of a ban on the import of plastic waste (from 2018) was expected to displace an estimated 111 million tons of plastic waste by 2030, creating headaches in the countries of origin.³⁸

Similarly, energy consumption, a crucial factor affecting climate change, has increased in absolute terms with economic growth, even in high-income countries which supposedly are best placed (economically and technologically) to adopt energy-efficiency measures. Although, between 1990 and 2005, energy efficiency in those

³³ Wiedmann, Thomas O., *et al.* (2015), "The Material Footprint of Nations".

³⁴ Shapiro, Judith, *China's Environmental Challenges; Economy, Elizabeth, The River Runs Black: The Environmental Challenge to China's Future.*

³⁵ Organisation for Economic Co-operation and Development (2018), *Global Material Resources Outlook to 2060 - Economic Drivers and Environmental Consequences.* Paris: OECD.

³⁶ Baldé, C. P., Forti V., Gray, V., Kuehr, R., Stegmann, P. (2017), *The Global E-Waste Monitor – 2017.* Bonn, Geneva, Vienna: United Nations University (UNU), International Telecommunication Union (ITU) & International Solid Waste Association (ISWA).

³⁷ Geyer, Roland, *et al.* (2017), "Production, Use, and Fate of All Plastics Ever Made", *Science Advances.* Vol.3, No.7, e1700782.

³⁸ Brooks, Amy L., *et al.* (2018), "The Chinese Import Ban and Its Impact on Global Plastic Waste Trade", *Science Advances,* Vol.4, No.6, eaat0131.

countries slightly increased per unit of GDP, the rise was much slower than in preceding decades, and in absolute terms energy consumption increased by 15% over that period.³⁹ According to the International Energy Agency, between 2000 and 2017, global primary energy demand rose by 39%, despite energy efficiency improvements of 15%.⁴⁰ In the most optimistic “Efficient World Scenario” sketched by the IEA, between 2016 and 2040, energy intensity (energy use per unit of GDP) would improve by 3% per year, but total world energy demand would still rise by 7%. Although it is argued that this scenario would lead to an overall decline in GHG emissions of 12% on 2017 levels (based, among other, on an increase in renewable energy production and fuel switching – to natural gas), this would only contribute 40% of the abatement required to be in line with the Paris Agreement.⁴¹

Altogether, these figures and developments make a joke of the claim that economic growth has been or can be achieved with an absolute reduction of material throughput and its associated environmental impacts. While there is no doubt that resource efficiency can be significantly increased in many areas, and that this makes eminent sense to mitigate pressures on the environment, we should not fall into the trap of thinking that increasing efficiency can be maintained at a rate that will more than compensate for continuing economic growth and lead to a significant reduction of environmental pressures. In large part, this is also a matter of costs: the first measures taken to increase resource efficiency may be quite cost-effective, taking advantage of opportunities to reduce costs and increase profits that are often referred to as the “low-hanging fruit”. But after the easiest and cheapest ways of doing so have been exhausted, further increases in efficiency become increasingly difficult and costly. This makes it unlikely that, over time, resource efficiency gains can be kept at the same rate and costs. Simple mathematics dictates that even if the economic growth rate would be a modest 2% per year, resource efficiency would have to increase by close to 3.9% every year for 35 years to halve resource use, and at 4.8% if the growth rate would be 3%. If the rate of economic growth rises to 5%, still considered modest for “developing” countries, the annual increase in resource efficiency in those countries would have to be at 6.6% per year for 35 years to halve resource use. Justifiably, it has been concluded that the argument that continuous economic growth can be achieved while reducing resource consumption is based on a “heroic assumption” and should be dismissed as a myth not supported by the facts.⁴²

Moreover, even if resource efficiency can be improved significantly for a range of products, there are economic and absolute (and logical) limits to an infinite

³⁹ Taylor, Peter G., *et al.* (2010), “Final Energy Use in IEA Countries: The Role of Energy Efficiency”, *Energy Policy*, Vol.38, No.11, 6463-6474.

⁴⁰ International Energy Agency (IEA) (2018), *Energy Efficiency 2018 - Analysis and Outlooks to 2040* Paris: OECD/International Energy Agency, 17, 23.

⁴¹ *Ibid.*, 30.

⁴² Victor, Peter A. and Tim Jackson (2015), “The Trouble with Growth”, in L. Mastney (ed.) *State of the World 2015. Confronting Hidden Threats to Sustainability*, 1064-1334; Jackson, Tim, *Prosperity without Growth: Economics for a Finite Planet*, 67-71. See also Trainer, Ted (2016), “Another Reason Why a Steady-State Economy Will Not Be a Capitalist Economy”, *real-world economics review*, No.76, 55-64; Hickel, Jason and Giorgos Kallis (2019), “Is Green Growth Possible?”, *New Political Economy*, 1-18.

reduction of resource use. Regardless of the economics of pursuing ever-higher rates of resource efficiency, there are absolute limits, depending on the product or service, to further reductions in resource consumption that will be reached sooner or later. Building a house, making a car, computer or mobile phone, and tourism, for instance, will require at least a minimum of resources that cannot be reduced to zero. But by their very nature, capitalist industrial production systems involving large-scale production for mass markets, require continuous and infinite growth in production and sales (consumption), even when the competitive struggle has ended and only monopoly companies remain in existence. Inevitably, resource consumption will increase again even if (and as soon as) companies have maximised resource efficiency and exhausted the potential gains. In brief, increasing resource efficiency cannot be a solution for the infinite growth imperative that is inherent to industrial capitalism.

Perversely, the defence of economic growth in low-income countries has been built on the argument that it is good for the environment. Commonly referred to as the Kuznets curve theory, the argument is that countries and governments need to achieve a particular level of income before they become sufficiently concerned about environmental degradation and have acquired the means to address them. Colloquially this can be referred to as the "pollute first, clean up later" philosophy that provides an excuse to low-income countries not to worry too much about the degradation of the environment (often by foreign companies). The problem with this theory is, again, that it is poorly if at all supported by the facts. Support for the Kuznets curve hypothesis is based on a very limited number of (selected) indicators⁴³ that ignore the broad range and interrelatedness of environmental problems and their sources.⁴⁴ Moreover, even if some environmental improvements in high-income countries have been achieved at least in part by compositional changes in their economies as a result of shifting energy-intensive and polluting industries to low-income countries, this option is unlikely to be open to the latter.⁴⁵ But even though it is not evident that most people in low-income countries accept the "pollute first, clean

⁴³ Bo, Sun (2011), "A Literature Survey on Environmental Kuznets Curve"; Stern, David I. (2004), "The Rise and Fall of the Environmental Kuznets Curve"; Stern, David I. and Michael S. Common (2001), "Is There an Environmental Kuznets Curve for Sulfur?", *Journal of Environmental Economics and Management*, Vol.41, No.2, 162-178; Dinda, Soumyananda (2004), "Environmental Kuznets Curve Hypothesis: A Survey", *Ecological Economics*, Vol.49, No.4, 431-455; Arrow, Kenneth, et al. (1996), "Economic Growth, Carrying Capacity, and the Environment", *Ecological Applications*, Vol.6, No.1, 13-15.

⁴⁴ Dietz, S. and W. N. Adger (2003), "Economic Growth, Biodiversity Loss and Conservation Effort", *Journal of Environmental Management*, Vol.68, No.1, 23-35.

⁴⁵ Cole, Matthew A. (2004), "Trade, the Pollution Haven Hypothesis and the Environmental Kuznets Curve: Examining the Linkages", *Ecological Economics*, Vol.48, No.1, 71-81; Cole, Matthew A. and Eric Neumayer (2005), "Environmental Policy and the Environmental Kuznets Curve: Can Developing Countries Escape the Detrimental Consequences of Economic Growth?", in P. Dauvergne (ed.) *Handbook of Global Environmental Politics*, 298-318; Suri, Vivek and Duane Chapman (1998), "Economic Growth, Trade and Energy: Implications for the Environmental Kuznets Curve", *Ecological Economics*, Vol.25, No.2, 195-208.

up later" philosophy,⁴⁶ their governments may indeed be lenient or corrupt enough to allow this to happen notwithstanding their rhetorical commitment to sustainable development.⁴⁷

As environmental advocates have already pointed out from the 1960s onwards, infinite economic growth is incompatible with long-term environmental protection as growth almost always implies increased resource use and adverse environmental impacts. With economic growth, people and societies as a whole may increase their consumption of services, but there is no evidence whatsoever that this substitutes for the consumption of material goods. On the contrary, when income levels rise, people simply spend more on everything, including electronics, cars, international travel (a service that adds considerably to material consumption and pollution), as well as perhaps solar panels and organic produce. With the rest of the world following rapidly in the footsteps of high-income countries, the idea that industrial capitalism is making room for a "post-industrialist" system that consumes fewer resources is just a myth. For instance, in 2018, the world produced more than 70 million cars and 25 million commercial vehicles compared to 41 million and 17 million respectively in 2000,⁴⁸ and in 2021 1.53 billion smartphones were sold compared to 122 million in 2007.⁴⁹ Many more figures showing such staggering increases in production, consumption and materials consumption could be presented to make the point that (mostly capitalist) industrial production keeps on expanding. Given the increasingly global competition between industries, they must keep on producing new products and models to survive. This trend only slows down or reverses (temporarily) during times of economic crises or conflicts that cause large-scale destruction of production capacity. But this is not what believers in (the greening of) capitalism are willing to see.

This brings us to the fourth reason why capitalism is fundamentally incompatible with environmental protection and meaningful environmental integration. This is because, wherever capitalism takes hold, it can only do so with the support of states and governments, given the political-economic institutional framework that capitalism requires for its functioning (including the creation and protection of property rights, corporate and commercial law, market rules and the reduction or elimination of trade barriers, the building and maintenance of vital infrastructure, among other). As noted above, the idea that a free market can exist and function without the support of governments is just a myth. Historically, the introduction of capitalism as the dominant political-economic system has only been possible where and when governments, influenced or dominated by increasingly (economically) powerful capitalists and their

⁴⁶ Dunlap, Riley E., "International Opinion at the Century's End: Public Attitudes toward Environmental Issues".

⁴⁷ Munasinghe, Mohan (1999), "Is Environmental Degradation an Inevitable Consequence of Economic Growth: Tunneling through the Environmental Kuznets Curve", *Ecological Economics*, Vol.29, No.1, 89-109.

⁴⁸ OICA International Organization of Motor Vehicle Manufacturers (2022), 2018 Production Statistics, <https://www.oica.net/category/production-statistics/2018-statistics/> (Accessed: 17 January 2022).

⁴⁹ Statista (2022), Number of Smartphones Sold to End Users Worldwide from 2007 to 2021, <https://www.statista.com/statistics/263437/global-smartphone-sales-to-end-users-since-2007/> (Accessed: 17 January 2022).

supporters (including political philosophers) have been captured by these interests and ideologues. In the process, the political and legal institutions of the state have been shaped to serve the imperatives and needs of capitalism. At the same time, states and governments have become dependent on the capitalist system to fulfil their core functions, foremost the economic function (which is defined in terms of capitalist imperatives), as well as other functions (the security function being interpreted in terms of the protection of the country's vital national- capitalist economic interests; the conflict management function as accommodating the demands of workers inasmuch as this is compatible with the economic – meaning capitalist – imperatives and interests), as well as on a “healthy” and growing economy for the taxes arguably needed to fund its functions. Moreover, the political elite is strongly interwoven with the economic elite, as reflected in the revolving door phenomenon, giving credence to the public perception that members of the (power) elite “are all the same” and are in politics primarily to serve their own interests. This view is also backed up by a considerable body of research on elites and the oligarchic nature of capitalist political-economic systems, which has become even more pronounced with the rise of neoliberalism.⁵⁰ Thus, once capitalism has been entrenched as the dominant economic system by the state, the relative autonomy of the state vis-à-vis the economic system becomes compromised. As discussed in Chapters 5 and 6, states have an economic function that, in principle, can be interpreted and defined in different ways, subject to the relative power and influence of groups in society. But once capitalism has been firmly entrenched by the state, the state itself becomes a major obstacle to the greening of capitalism.

The strong interdependence between capitalism, states and governments makes it understandable why governments in liberal-democratic systems, which have their origin in the development of capitalism, only go so far in advancing social and environmental interests. As discussed in Chapters 2 and 3, no liberal-democratic government has been able and willing to advance environmental protection and integration to a point that the fundamental sources or causes of environmental problems and pressures are addressed and reduced, let alone eliminated. The overwhelming response of these governments has been to address and mitigate the effects and symptoms of the fundamentally unsustainable practices of capitalist systems. Economic growth remains the top priority for these governments and everything that may jeopardise it is usually dismissed as unacceptable. Rather than recognising and accepting that furthering economic growth is not compatible with reducing environmental pressures and problems, governments, along with businesses and most economists, have adopted the oxymoronic notion of “green growth” to

⁵⁰ Gilens, Martin and Benjamin I. Page (2014), “Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens”, *Perspectives on Politics* Vol.12, No.3, 564-581; Domhoff, G. William (2007), “C. Wright Mills, Power Structure Research, and the Failures of Mainstream Political Science”, *New Political Science*, Vol.29, No.1, 97-114; Winters, Jeffrey A., *Oligarchy*; Domhoff, G. William (2014, 7th ed.), *Who Rules America? The Triumph of the Corporate Rich*. New York: McGraw Hill.

argue that the required transition towards sustainability, in particular to sustainable energy systems, offers new opportunities for economic growth.⁵¹

Similar arguments underlie proposals for Green New Deals, programmes that involve significantly boosting government expenditure foremost focused on the creation of "green" infrastructures in energy and transport, housing and social spending, held up as an alternative to prevailing austerity policies that are considered to have had an adverse effect on effective demand and economic growth.⁵² Apart from the fact that such programmes bring with them a massive increase in new material throughput (among others, to produce solar panels, wind turbines, electric cars and other transport vehicles, batteries, and hydro dams) with the associated environmental costs (including pollution and adverse effects on biodiversity), it is not at all clear that they will result in a reduction of GHG emissions anytime soon. On the contrary, such a transition will significantly boost energy requirements, most of which can only be met by fossil fuels. While this boost in production will be good for "green" businesses and the economy (economic growth), it is unlikely to lead to a significant reduction of emissions in the short- and medium-term, let alone to a reduction of other environmental pressures.⁵³

Not surprisingly, enlightened capitalists are fully behind this move towards saving the world, or rather, capitalism. The problem is that this new wave of production and consumption will not save the world but bring about environmental collapse more rapidly. Many people (especially environmentalists) find such views hard to swallow. When Jeff Gibbs and Michael Moore released a documentary critiquing the idea that the large-scale adoption of renewable energy was the solution to climate change, environmental critics accused them of spreading misinformation and called for the film to be banned from the internet.⁵⁴ Yet, although some of the facts and information presented in the documentary may have been outdated or incorrect, the gist of the message is spot on. Like most governments and businesses, many environmentalists want to believe that the environmental challenge can be solved by technological means and that societies (and the whole world, including the billions of people who are still living below or just above the poverty line) will be able to continue to live in a world of infinite mass consumption. Arguably, they react so strongly to the

⁵¹ Jacobs, Michael (2013), "Green Growth", in *The Handbook of Global Climate and Environment Policy*, 197-214; Borel-Saladin, Jacqueline Madeleine and Ivan Nicholas Turok (2013), "The Green Economy: Incremental Change or Transformation?", *Environmental Policy and Governance*, Vol.23, No.4, 209-220.

⁵² Blackwater, Bill (2012), "Two Cheers for Environmental Keynesianism", *Capitalism Nature Socialism*, Vol.23, No.2, 51-74; Aşıcı, Ahmet Atıl and Zeynep Bünül (2012), "Green New Deal: A Green Way out of the Crisis?", *Environmental Policy and Governance*, Vol.22, No.5, 295-306; Willis, Rebecca (2019), Green New Deal: The UK Edition, New Economics Foundation, <https://neweconomics.org/2019/02/the-green-new-deal> (Accessed: 22 March 2019); Statistics Netherlands (2015), Green Growth in the Netherlands 2015. The Hague: CBS, <https://www.cbs.nl/en-gb/publication/2015/49/green-growth-in-the-netherlands-2015> (Accessed: 25 July 2016).

⁵³ Heinberg, Richard and David Fridley, *Our Renewable Future: Laying the Path for 100% Clean Energy*.

⁵⁴ See *Planet of the Humans* Gibbs, Jeff, (2020) *Planet of the Humans*. See also Wikipedia, Planet of the Humans.

questioning of this approach because they truly think that there is no other realistic alternative; it is our only hope. But it may also be that, like so many people, they are also addicted to growth and endless consumption.

Finally, although it can be argued that economic growth is a legitimate priority for governments in low- and middle-income countries, it will significantly add to the already mounting environmental pressures. As the main development paths open to these countries for achieving this are those of industrialisation and/or more intensive natural resource extraction and exploitation, it is not surprising that their material footprint is rapidly getting bigger, as illustrated most obviously by China, which now has, in absolute values, the highest material footprint in the world (twice that of the United States).⁵⁵ Based on the trends in material resource consumption, it is expected that between 2011 and 2060 global materials use will double in absolute terms even though the annual rate of increase will be less than that of GDP, which officially amounts to “relative decoupling”.⁵⁶

That the global material footprints of countries, and that of the world as a whole, are (rapidly) growing and unlikely to be reduced in the foreseeable future is not just because economic growth is and remains an imperative of capitalism and capitalist states. As discussed in Chapter 6, it is also because the development of capitalism has been closely intertwined with the rise and development of industrialism, which has its own inherent logic of expansion. Even the most highly developed (high-income) countries continue to depend on industrial production for most of their consumption (and economic functioning) even if many industries have been relocated to low- and middle-income countries. The idea that the world is on the way to developing a post-industrial production system is a fiction and this will remain so as long as large-scale mass production (whether concentrated or dispersed in chains) continues. Whatever new products TNCs will come up with, they will not be produced in relatively small artisanal workshops relying foremost on labour and crafts to produce durable items for mainly local, regional, or even national markets. More likely, capitalist competition and concentration will lead to the establishment of even bigger (giga-) factories or factory chains producing for global mass markets. While such factories may be increasingly equipped with robots and guided by AI (artificial intelligence), this will not bring about a reduction in the overall exploitation and use of resources and environmental pressures. Rather, such (highly labour-efficient) industries will need to be used to produce ever more “improved” or newly invented goods for which new consumer needs and markets must be created – at the penalty of economic collapse if this fails. The treadmill of production that is both an imperative of industrialism and capitalism can only be broken by a fundamental transformation of this production system into a predominantly de-industrialised mode of production and the replacement of capitalism with a commensurate economic system. This may seem, or be an impossible task, all the more so given the extent to which industrial production and capitalism have become globalised.

⁵⁵ Wiedmann, Thomas O., *et al.* (2015), “The Material Footprint of Nations”.

⁵⁶ Organisation for Economic Co-operation and Development, *Global Material Resources Outlook to 2060 - Economic Drivers and Environmental Consequences*.

Thus, one may conclude, to the extent that capitalism and industrialism have been strongly entrenched in a state, changing the economic system becomes politically virtually impossible. Not surprisingly, therefore, whenever capitalism has been abolished in the past, it required a political revolution to do so and/or exceptional conditions and leadership as in Russia, China, and Cuba. It is sometimes argued that it is easier to imagine the end of the world than the end of capitalism, a view that seems to have become even more plausible after the collapse of the Soviet Union, the adoption of capitalism by China, and the rapid increase of economic globalisation with the rise of neoliberalism around the world. Yet, as I will argue in the final chapters, if humanity is to have a future, abolishing capitalism will be necessary and may not be impossible, even though this requires a major political transfer of state power to the people.

Conclusion

The aim of this chapter was to discuss whether, or to what extent, capitalism has been an important obstacle to environmental integration and protection, and if so, whether it is possible that this can be overcome by greening it.

Although capitalism can be seen as a practice that has been around for thousands of years, it only took the form of a system when this practice was condoned, supported and institutionalised politically, first in the Italian city-states of the 14th century to facilitate highly lucrative long-distance trade that provided the basis for the accumulation of wealth in relatively few hands (including those of participating rulers), and which became a source of capital – money accumulated for the purpose of reinvesting it to make more money.

The opportunities for accumulating capital were enormously expanded with the development of industry, first in the United Kingdom, where industrial capitalism took off in the 18th century and where a less rather than more (liberal-) democratic capitalist system became the dominant political-economic system in the 19th century when its imperatives were strongly supported by states and governments, boosting economic development and trade to such a degree that the UK became the first global political-economic and military superpower. Already then, these developments also revealed the seriously harmful socio-economic and environmental effects of capitalism.

The chapter identified and discussed five main features of capitalist systems: the profit motive; competition; the need for capital accumulation; commodification; and the tendency towards overproduction and crisis. These features also imply the need for continuous economic growth and endless consumerism, profit-driven technological development, and ignoring or downplaying social and environmental harm resulting from development, all of which make capitalism fundamentally incompatible with meaningful and long-term environmental protection. Although some entrepreneurs may be genuinely concerned about the environment and try to green their companies, these efforts are circumscribed and limited by capitalist imperatives while leaving the economic system as a whole untouched. Only if governments impose legal requirements, companies may change their practices. However, in capitalist political-economic systems, states and governments have become so interdependent and interlocked with capitalism that they have lost the will, and some might say the ability, to bring about the transformation that is required to

eliminate the systemic barriers to environmental integration. Thus, the main point to extract from this discussion of capitalism and the environment is that there is no hope for meaningfully addressing the environmental challenge as long as capitalism remains the dominant economic system, supported by governments. This is all the more so because capitalism, although it has introduced increasingly intangible and esoteric practices of making more money with money to meet the accumulation imperative, also remains firmly tied to an increasingly globe-spanning industrial production system that has its own environmentally damaging and unsustainable expansion imperative.

But if capitalism is the problem, can socialism be a solution?

Chapter 8 – Socialism and the Environment

Introduction

In this chapter, I discuss whether socialism as an alternative economic system to capitalism has a better record and/or has more potential in advancing environmental integration as defined in Chapter 1. Although many people may argue that this discussion is no longer necessary as history has convincingly demonstrated that socialism is a flawed, failed, undesirable, and dangerous ideology, I take the view that this conclusion is unwarranted and premature. Although there are indeed very few countries left with self-proclaimed socialist economic systems, this does not mean that socialism *as an ideology* is dead and has nothing to offer in terms of thinking about what can be considered a desirable society. Of course, this is a subjective and ideological judgement on which people will disagree. But, from my reading of the literature on socialism, socialist ideology and thinking are far from dead. If anything, it has undergone something of a revival since the 2008 financial-economic crisis and the growing recognition of the deeply flawed nature of neoliberal ideology, as well as the highly unstable nature of global capitalism. Although neoliberalism proves to be stubborn to die, so is socialism. And although it has been argued that it is easier to imagine the end of the world than that of capitalism, this is more a politically self-serving argument propagated by those who want people to think that there is no alternative than a view supported by evidence. As we know, capitalism has been abolished before. And it may well become increasingly apparent to many people that capitalism is fundamentally unsustainable for environmental, social, and even economic reasons, and will be abolished again. Whether the alternative should, must or will be socialism remains an open question. This chapter aims to explore and discuss, based on the experiences of socialist systems and reflections on what democratic socialism *could* offer, whether socialism constitutes a more promising basis for creating environmentally sustainable as well as desirable societies.

As discussed in Chapter 6, all countries that have or had (at some stage) a socialist economic system were also more or less authoritarian political systems. Although arguably some of these systems have been less authoritarian than others, none have been, in my view, democratic in the sense of people being able to govern themselves, or even in the more modest form of liberal democracy. This raises the question of whether authoritarianism is inherent to the idea of socialism, or whether there were other factors at play in countries with socialist economic systems that turned them into authoritarian political systems. This question is, of course, highly relevant to the discussion of whether countries can adopt *democratic* socialist systems. The attractiveness of socialism, even if it were to be conducive to more effective environmental protection, would be greatly diminished if authoritarianism were to be an inherent element of socialist ideology. Not surprisingly, most advocates of socialism take the view that socialism can and must be combined with democracy and that it offers the prospect of a more encompassing version of democracy than liberal-democratic political systems.

That the environmental record of authoritarian-socialist political-economic systems has generally been appalling, possibly even worse than that of liberal-

democratic or authoritarian capitalist systems, has become a widely shared judgement. Again, the question is whether this environmental failure is an inherent element of socialism, either in thought or practice, or whether socialism can be (made) compatible with environmental imperatives. On the one hand, in the literature on socialism, the latter view prevails, with a range of authors delving into Marx's environmental credentials and claiming that, at a philosophical level, socialist thinkers recognised the importance of nature from the beginning. Eco-socialists have no difficulty making a case for green socialism based on the values of reducing inequality and promoting social/environmental justice and ecological sustainability. On the other hand, there is the small matter of industrialism which appeared to be a core element of Marxist and socialist ideology from the very beginning, and which many present-day socialists still seem reluctant to let go of, arguably because industrialisation has been instrumental in the emergence of the working class, which has been regarded as the main actor driving (revolutionary) political-economic change towards the establishment of socialism. But, as pointed out in Chapter 6, industrialism is inherently incompatible with long-term environmental protection, and the advocates of (eco-) socialism will need to put much more thought into what socialism without industrialism means, in theory, and practice.

First, I address the question "What is socialism?" given the existence of a variety of ideas within this school of thought, identifying what I see as three of its core principles. The second section looks at the environmental performance of authoritarian socialist systems and identifies and discusses some of the main reasons for their failure to adequately account for and address environmental imperatives. In particular, the focus will be on the Soviet Union, China during the Mao era, and Cuba, which is sometimes regarded as a positive example of environmental integration in a socialist country. Third, I elaborate on democratic socialism as a potential model for the development of a sustainable and desirable political-economic system, including by advocating a more comprehensive form of democracy.

What is socialism?

Arguably the most commonly used definition of socialism is an economic system in which the means of production are collectively or publicly owned (by the state or other polities), in contrast to a capitalist system in which most of these means are privately owned. This does not mean that in a socialist system private property does not exist at all: socialist systems have commonly allowed individuals to own durable and non-durable consumer goods, personal items and savings, houses for their own use, and even small plots of land. But when it comes to the means for large-scale production, a socialist system assigns formal ownership to the collective citizens of a polity.

However, apart from the fact that defining socialism (only) as the collective ownership of the means of production can lead to absurdities, as mentioned in the preceding chapter, it does not do justice to the rich vein of thinking and ideas that are associated with socialism as an ideology and social movement. Socialism, like all ideologies, offers an interpretation of social reality as well as a range of principles and ideas for the kind of changes (if any) that are considered to be necessary or desirable to create or move towards a better society or world. However, also like most

ideologies, socialism is a very diverse school of thought and there are many varieties of socialism.

Socialism emerged largely in response to the problems brought about by capitalism. In the 18th and 19th centuries, a range of political thinkers came forward, including Charles Fourier and Henri de Saint-Simon in France, and Robert Owen in England, who are sometimes, following a label used by Marx and Engels, referred to as utopian socialists.¹ They shared indignation about the extreme poverty and social misery caused by unbridled capitalism and advocated the collectivisation of the means of production, especially in small communities and cooperatives, as a means of transforming societies.² While sharing their indignation about the plight of the working class, Marx considered their ideas utopian as they were not grounded on what he considered to be a scientific analysis of capitalism and developments in the sphere of production, an approach he referred to as historical materialism.³ In his view, socialism was the inevitable next stage in this development as capitalism was fraught with contradictions that would lead to its demise, with the coup-de-grace to be administered by the working class (the proletariat) via a revolution.⁴

However, there are many streams within socialism, including utopian socialism, the Marxist school of thought, revolutionary socialism or communism, Leninism, Stalinism, Trotskyism, Maoism, Socialist Anarchism, Syndicalism, Feminist Socialism, Market Socialism, Eco-Socialism, Democratic Socialism and Socialism for the 21st Century, among other. In part, this variety reflects the different trajectories of socialism in actual socialist systems, but much of the diversity originates from the fractious nature of the socialist movement(s) and differences in interpretations of the ideas and writings of socialist thinkers, in particular Marx.

At the risk of over-simplification, I here identify three tenets or principles that I think most if not all self-proclaimed socialists share. These are:

First, anti-capitalism. Socialism was born out of the socio-economic conditions created by capitalism and the resentment these caused against the capitalist class and practices. Capitalism was, and is still, seen as responsible for the exploitation of workers, inhumane working and living conditions, extreme inequality and poverty, the destruction of families and the disintegration of communities and society, the cultivation of individualism and greed, for being a source of anomie and alienation from society and nature, and last but not least the destruction of nature. A key element in socialist thinking is the rejection of the commodification of (wage) labour as the main means of human exploitation (profit-making from "surplus value").⁵ Eco-socialist

¹ Engels, Friedrich (1892, 1970), "Socialism: Utopian and Scientific", in *Marx/Engels Selected Works*.

² Wikipedia (2019), Socialism, <https://en.wikipedia.org/wiki/Socialism> (Accessed: 15 April 2019); Engels, Friedrich, "Socialism: Utopian and Scientific".

³ Engels, Friedrich, "Socialism: Utopian and Scientific", Part III.

⁴ Marx, Karl and Friedrich Engels (1848; 2006), *The Communist Manifesto*, Socialist Labor Party of America.

⁵ It has been argued that the rejection of "wage slavery" and its replacement by the "free association of producers" was, in Marx's view, the keystone of socialism, more so than the collective ownership of the means of production. Kovel, Joel (2002), *The Enemy of Nature: The End of Capitalism or the End of the World?* New York: Zed Books, 200; Hutchinson, Frances, *et al.*

theorists have added capitalism's neglect and destruction of the ecological and resource basis on which it depends as another inherent contradiction.⁶ Hence, capitalism is seen as the cause of many of the ills of modern societies, which originally led most socialists to take the view that, to address these ills, capitalism needed to be abolished.

Second, concomitant to the previous point, socialists advocate giving control over work and working conditions to the workers and, more broadly, creating economic democracy, more egalitarian societies, and good working and living conditions for all. These are seen as conditions that enable people to cultivate their creativity and the social side of human nature, and for stimulating cooperation instead of conflict. In this respect, socialism is rooted in the Enlightenment, notably the belief in progress and that humans are capable of creating better societies. Rather than accepting existing societies and conditions as God-given, unchangeable, or natural, socialism is based on the belief that societies can be improved and that people do not have to accept their plight and to be content with putting their hope and faith in a better life after death.⁷ Such ideals were not only held by "utopian" socialists, but also by Marx and many other self-proclaimed socialists. For instance, Przeworski argues that socialism was/is about the abolition of "wage slavery", about collective deliberation and rational choice, and people acquiring control over their lives, free from want, so that they can develop their potential.⁸ These arguments illustrate that socialism is about more than abolishing capitalism and that it is based on the belief that collectively people can create better societies, even though it is left to the people themselves to determine what this means as a diversity of views may exist on that front.

Third, socialism advocates the establishment of an economic system based on rationality and planning. Capitalism is seen as an irrational and anarchic system prone to crises and causing many problems that can be avoided by taking a rational, scientific and values-based approach to the production, distribution and consumption of goods and services. Capitalist economic theory and management (based on the free market ideology) only serve the interests of capitalists and capitalism at great costs to society. The abolition of private ownership of (most of) the means of production, and their socialisation, is seen as a necessary condition for orienting economic decisions about production and consumption towards goods and services for their *use-values* and

(2002), *The Politics of Money. Towards Sustainability and Economic Democracy*. London: Pluto Press, 100-103.

⁶ O'Connor, James (1994), "Is Sustainable Capitalism Possible?", in M. O'Connor (ed.) *Is Capitalism Sustainable? Political Economy and the Politics of Ecology*, 152-175; O'Connor, James (ed.) *Natural Causes: Essays in Ecological Marxism*; Kovel, Joel (2014), "Ecosocialism as a Human Phenomenon"; Pepper, David, *Eco-Socialism. From Deep Ecology to Social Justice*; Sarkar, Saral, *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*.

⁷ This tenet of socialism can be found in the earliest streams of "utopian" communism and socialism, in particular the ideas of Robert Owen, de Saint-Simon, and Charles Fourier. See Hobsbawm, Eric (2011), *How to Change the World. Reflections on Marx and Marxism*. New Haven and London: Yale University Press, Chapter 2.

⁸ Przeworski, Adam (1985), *Capitalism and Social Democracy*. Cambridge and Paris: Cambridge University Press, Editions de la Maison des Science de l'Homme, Postscript.

towards collective needs and public goods rather than letting the profit-driven private owners of capital determine such matters, which leads to the exploitation of people and nature and the neglect of collective interests. The economy must be (re-) embedded into society and serve collective ends and needs rather than the interests of the few and/or the system.

However, socialists and actual socialist systems differ(ed) in their interpretations of these common tenets or principles and in the ways these can or should be put into practice. While revolutionary socialists have pursued the abolition of capitalism by forceful means, revisionist socialists adopted the view that socialist ends could be pursued gradually and via peaceful, parliamentary means. Socialist advocates and regimes have adopted different views about the kind of institutions by which socialist ideals and aspirations should or could be pursued, for instance, through small, decentralised communities, cooperative systems, national-level planning systems, workers' councils, and democratic or authoritarian institutions. A major point of difference relates to the particular form in which collective ownership should or must be institutionalised, for instance, as state ownership (nationalisation), workers' ownership, or social ownership by communities or newly created councils. Many of these points of difference relate to the political dimension of political-economic regimes. Some argue that to overcome the powerful opposition against socialism, power must be centralised and concentrated, whereas others put their faith in democracy as the best way to achieve and safeguard socialism.

Although there is much variety within both socialism and capitalism, there is a significant difference in the extent to which this variety has (had) its counterparts in really existing political-economic regimes. While the varieties of capitalism manifest themselves mostly in existing systems and less at the ideological level *only*, many varieties of socialism have (had) no counterparts in reality or much less enduringly so. While capitalism has been the dominant economic system around much of the world before and after the existence of the Soviet Union, really existing national-level socialist systems have been much less numerous. Apart from the Soviet Union and the countries that were more or less under its control, socialist systems (as defined above) have been relatively rare, with China, Vietnam, Laos, Cuba, and a handful of African states (including Tanzania, Angola, Zimbabwe, and Ethiopia) having been self-proclaimed socialist states.

In this context, the three tenets or principles of socialism described above can provide some guidance as to which states might (still), should or deserve to be labelled socialist. By itself, public ownership of most of the means of production is not, in my view, a sufficient criterion. As noted in Chapter 7, applying this as the *only* criterion would lead to misleading or even absurd assessments, as in the case of Saudi Arabia and several other Middle East countries whose economies are dominated by government-owned oil companies, apart from the fact that the governments of these countries do not profess a commitment to socialism. In the late 1970s, after Mao's death, China began to introduce a form of (state) capitalism in which private and semi-private ownership is combined with predominantly state-ownership of strategic sectors, and in which market forces *and* the state make economic decisions, although the latter is generally thought to have retained ultimate control. But although the

Chinese state has retained formal ownership of a wide range of businesses, the economy now operates based on capitalist principles in a (global) market environment in which profit, competition and economic growth have become the main drivers. This mix of features makes it debatable whether or to what extent China should still be regarded as having a socialist economic system or be considered as a kind of mixed or hybrid system. Arguably, the Chinese regime is no longer anti-capitalist and has allowed significant inequality to arise, thereby no longer adhering to two of the principles referred to above. And although the CCP still retains ultimate control over economic decisions, production is no longer subject to central, detailed planning. Yet, Chinese capitalism is unlike that which prevails in liberal-democratic countries and is often referred to as "capitalism with Chinese characteristics".⁹ Hence, I classify the Chinese political-economic system until the late 1970s (Mao's death) as an authoritarian-socialist system, and the system that evolved since that time as an authoritarian-hybrid system while recognising that there is scope for different interpretations.

As discussed in Chapter 6, economic systems develop in interaction with political systems, creating different political-economic systems in which economics is more or less embedded within the political system or vice versa, the political system is held more or less in the grip of economic actors based on the economic power (and other forms of power) that they have accumulated. Socialist systems are, almost by definition, systems that are embedded within states that exercise control over economic institutions, policies and the systems of production and consumption. In principle, the states that shape and control socialist economic systems can be more or less democratic. However, in practice, really existing socialist economic systems have virtually all been governed by more or less authoritarian states, making authoritarian-socialist political-economic systems the prevalent type of system under which socialism has been shaped and developed.

In the following section, I discuss the environmental (integration) record of some of the (previously) existing socialist systems as they developed within authoritarian-socialist systems.

Socialism and the environment

Whether socialism is compatible with, or perhaps even conducive to, environmental integration, as commonly claimed by its advocates, is a question to which answers can be sought at two levels: ideological and empirical. At the ideological level, the principles of socialism as described above do not seem to be inherently or logically incompatible with environmental protection and integration. On the contrary, the abolition of capitalism would, in principle, eliminate or control the major drivers and forces responsible for much of the social and environmental harm discussed above. Also, the promotion of more equal (or less unequal) societies fits well

⁹ Cai, Meina (2012), "Yasheng Huang, Capitalism with Chinese Characteristics: Entrepreneurship and the State", *Journal of Chinese Political Science*, Vol.17, No.2, 215-216; Shih, Victor (2010), "Review Of: Capitalism with Chinese Characteristics: Entrepreneurship and the State. By Yasheng Huang. New York: Cambridge University Press, 2008", *The Journal of Asian Studies*, Vol.69, No.2, 554-556.

with calls for environmental justice and the view that the world needs to move towards a more equitable sharing of environmental space and less unequal material, resource, and ecological footprints. Also, in a (rationally) planned and managed economy, provided the existence of robust and ongoing mechanisms for environmental input and feedback, environmental protection could be incorporated as a fundamental requirement or imperative for an environmentally sustainable economy.¹⁰

However, notwithstanding the compatibility at the theoretical or ideological level, in practice, really existing socialist systems have not demonstrated a strong record when it comes to environmental integration and protection, on the contrary. Although, in 1977, some Soviet scientists presented a very optimistic picture of the country's rational-scientific capacity to solve environmental problems by changing production and consumption based on closed-loop and renewal cycles, the design of "clean technology", moving towards ecological industrial and agricultural technology, and the regulation of population growth,¹¹ by most accounts, the environmental record of the Soviet Union has been abysmal. Although, in 1976, some authors opined that the environment in the Soviet Union had not reached crisis proportions on a nationwide scale (which arguably can be attributed at least in part to its size - being the biggest country in the world), they also noted that the promotion of economic growth was an overriding priority, that pro-environmental forces were weak and largely excluded from decision-making, and that environmental policies were mostly symbolic.¹² Yet, the scale of the environmental problems affecting the Soviet Union only started to come to light from around 1989, thanks to *Perestroika* and subsequent political changes that opened up access to public documents and data.¹³ Although the information and data available were far from complete and reliable, they indicated that pollution and environmental degradation in the Soviet Union was at least as bad as in the West and could be characterised as catastrophic in some areas.¹⁴ A similar assessment can be made of China's environmental record, although this is complicated by the fact that from the late 1970s, China started to introduce capitalism to the effect

¹⁰ Whether the criteria of "ecological rationality" (negative feedback, coordination, robustness, flexibility, and resilience (See Dryzek, John S., *Rational Ecology: Environment and Political Economy*.) can be incorporated into a socialist "social choice" mechanism (or system) is more a matter of design than a question of (in-) compatibility with the principles of socialism as described. Actual socialist systems have no doubt failed on most or all these criteria, but this does not mean *all* socialist systems *have* to fail. My argument is that, at the level of principle, socialist principles are compatible with these criteria. For a similar view, see Foster, John Bellamy, *The Vulnerable Planet: A Short Economic History of the Environment*, Loc 1343-1346.

¹¹ Federov, E. and I. Novik (1977), "Man, Science and Technology", in K. W. Deutsch (ed.) *Ecosocial Systems and Ecopolitics: A Reader on Human and Social Implications of Environmental Management in Developing Countries*, 45-58.

¹² Kelley, Donald R., et al. (1976), *The Economic Superpowers and the Environment: The United States, the Soviet Union, and Japan*. San Francisco: W. H. Freeman, 271-277.

¹³ Ziegler, Charles E. (1989), *Environmental Policy in the USSR*. London: Pinter; Demko, George J. (1990), "Two Reports on the Environment of the USSR", *Environment*, Vol.32, No.10, 25-26.

¹⁴ Peterson, D. J., *Troubled Lands: The Legacy of Soviet Environmental Destruction*; Sarkar, Saral, *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*, Chapter 2.

that, at the start of the 21st century, its economic system is better regarded as either a form of authoritarian state capitalism or a hybrid system (to be discussed in the following chapter).

As in the case of the Soviet Union, the Chinese experience under Mao provides little or no support for the view that (previously existing) socialist economic systems were predisposed towards integrating environmental imperatives. On the contrary, as Shapiro discusses in her book *Mao's War on Nature*, Mao saw nature as something to be conquered and subjected for human purposes, as reflected in a series of mass campaigns aimed at boosting production but with disastrous environmental and social consequences. Examples are the "Great Leap Forward", and the campaign to "Eliminate the Four Pests" (rats, sparrows, flies, mosquitoes), both undertaken in the late 1950s. Neither did Mao see any problems with China's population size and growth – as this was not regarded as a problem for socialism. Mao was also suspicious of science. Scientists who dared to raise questions about the wisdom of his projects (such as hydro dams) or who raised uncontrolled population growth as a problem, were accused of being "rightist" and were persecuted.¹⁵ That China did not treat its environment very well was also pointed out by Smil who, in 1984, provided an overview of environmental problems and pressures in China, based foremost on Chinese official data released at the end of the 1970s. These contradict the claims that were made by sympathisers of China during the 1970s that China took environmental issues seriously and was treating its environment with care and respect. Overall, Smil sketches a gloomy picture based on a broad range of problems related to deforestation, land reclamation, water management, pollution, and species decline, among others.¹⁶

Notwithstanding these critical assessments, it should be pointed out that, in the 1970s, the Chinese government, like many governments in the West, began to recognise the need for new ways to address environmental problems. The first national conference on environmental protection took place in 1973 and resulted in the introduction of some new environmental regulations. In 1974, the government established a "Leading Group of Environmental Protection" in the State Council. In 1979, the government promulgated a *Law for Environmental Protection* that has been described as "the most comprehensive environmental protection law ever adopted in China".¹⁷ However, most analysts agree that these measures, while looking good on paper, appeared to have had little effect and that environmental issues only started to be taken more seriously after Mao's death in 1978. As this coincides with the introduction of capitalist reforms and the gradual transformation of China from an authoritarian-socialist regime into an authoritarian-mixed regime, we will discuss the significance of these changes in the following chapter.

¹⁵ Shapiro, Judith (2001), *Mao's War against Nature: Politics and the Environment in Revolutionary China*. Cambridge, U.K.: Cambridge University Press.

¹⁶ Smil, Vaclav (1984), *The Bad Earth: Environmental Degradation in China*. Armonk, N.Y.: M.E.Sharpe.

¹⁷ Jan, George P. (1995), "Environmental Protection in China", in O. P. Dwivedi and V. D. K. (eds.), *Environmental Policies in the Third World. A Comparative Analysis*, 71-84, 75.

Similarly, the Soviet Union introduced a range of institutional and policy measures officially aimed at environmental protection. Already under Lenin, millions of hectares were officially set aside for protection,¹⁸ and it has been claimed that during the 1956-1985 period many environmental laws were passed, many of which aimed at nature conservation.¹⁹ The rate at which environmental legislation was introduced increased from the 1970s, covering a whole raft of specific environmental issues, as in many Western, capitalist countries.²⁰ However, the Soviet Union did not introduce a comprehensive and integrated institutional framework (rules and organisations) aimed at environmental integration. As in the West, the dominant approach to tackling environmental issues was predominantly incremental and issue-focused, although, impressively, in 1977, the citizens' right to a clean environment, as well as duties obligating them to adopt a responsible attitude towards the natural environment, was integrated into the Soviet Constitution.²¹ Yet, it has been argued that in the Soviet Union the function of legislation was largely idealistic or symbolic: "Soviet environmental law is not so much a mechanism for resolving conflicts among contending parties as a set of idealistic and often unattainable principles epitomizing the regime's professed commitment to environmental protection."²² In practice, implementation, mostly by departments that had other priorities than environmental protection, left much to be desired.

Based on these admittedly very brief summaries, one may conclude that the experiences in these two socialist countries do not support the claim that socialist systems are *more likely* to take environmental integration and protection seriously than capitalist systems. While, on paper, both the Soviet Union and socialist China introduced policies and institutions that suggested that their governments took environmental issues seriously, these official measures remained very much at the level of good intentions and were not backed up by the creation of the capacity (agencies, resources, power) needed to implement them. Arguably, they were largely symbolic exercises aimed at maintaining the legitimacy of the regimes. Nonetheless, theoretically or ideologically, there is no reason why socialism as defined above, is incompatible with environmental integration. The inherent incompatibility of capitalism with environmental integration, as explained in the preceding chapter, makes anti-capitalism a rational first step in overcoming major obstacles. The reduction of socio-economic inequality is increasingly seen by many as a precondition for effectively addressing environmental problems, notably by advocates of the environmental justice movement, rather than as incompatible with environmental protection. There is perhaps less agreement on the merits of economic planning (versus a "market-based" approach) in advancing environmental protection, in

¹⁸ Gare, Arran (2002), "The Environmental Record of the Soviet Union", *Capitalism Nature Socialism*, Vol.13, No.3, 52-72, 60.

¹⁹ Zaharchenko, Tatiana R. (Undated - 1990?), *Environmental Policy in the Soviet Union*, <https://pdfs.semanticscholar.org/25e4/a3d5d2ff2ada4111c1294619024bdc111004.pdf> (Accessed: 30 September 2019).

²⁰ Ziegler, Charles E., *Environmental Policy in the USSR*.

²¹ *Ibid.*, 95.

²² *Ibid.*, 79.

particular as top-down planning and a reliance on bureaucratic rationality are seen incompatible with an ecologically rational approach that is regarded as necessary for effective environmental management.²³ However, as discussed in Chapter 1, the core argument of this book is that effectively addressing the environmental challenge requires a comprehensive and integrated approach based on environmental principles across all three realms of collective action (the cognitive, policy and institutional realms), with green planning playing a key role in such an approach. The planning systems and approaches in the Soviet Union and socialist China definitely were not based on environmental principles. This suggests that factors were at play that prevented or posed obstacles to environmental integration in these countries.

Here, three factors are put forward that appear to have played a major role in preventing previously existing socialist regimes from adopting such an approach. These are:

First, the overriding importance of economic growth in the priorities of the governments and (most) citizens of these countries. This is not surprising given the political-economic and socio-cultural context in which socialism emerged as an ideology and was embraced by the political leaders of both countries. As noted above, socialist ideology was very much a response to the social exploitation and misery suffered by the working class and held up the promise of a good standard of living for all. The capitalist system was seen as standing in the way of a rational and equitable approach to the management of the industrial production system that had the potential to lead to the land of plenty in which communism ("to each based on needs" rather than effort) could be achieved and exploitation and inequality would come to an end. The main aim of socialist governments was to demonstrate the superiority of the socialist system in delivering a high standard of living for all people by achieving higher levels of economic growth than countries with capitalist economic systems. Economic growth was an overriding priority of governments in both countries while environmental considerations were ignored, treated as afterthoughts, and addressed symbolically.²⁴

However, we must also not forget that environmental concerns only started to reach public and political agendas in the late 1960s and early 1970s. In this respect, there is not much difference in the degree to which the environment was of no major concern to most governments before the environmental era, apart from some specific issues raised mostly by experts and by early conservationists. Economic growth was (and still is) of overriding concern in countries with socialist as well as capitalist

²³ Dryzek, John S., *Rational Ecology: Environment and Political Economy*; Paehlke, Robert and Douglas Torgerson (eds.) (1990), *Managing Leviathan: Environmental Politics and the Administrative State*. Peterborough, Ont.: Broadview Press.

²⁴ Kelley, Donald R., et al., *The Economic Superpowers and the Environment: The United States, the Soviet Union, and Japan*; Peterson, D. J., *Troubled Lands: The Legacy of Soviet Environmental Destruction*, 14; Jan, George P., "Environmental Protection in China"; Ryan, Megan and Christopher Flavin (1995), "Facing China's Limits", in L. R. Brown (ed.) *State of the World 1995*, 113-131; Shapiro, Judith, *Mao's War against Nature: Politics and the Environment in Revolutionary China*, Loc 1356; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Loc 7289; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 412-426.

systems. It is often argued that this is understandable and legitimate in the context of “developing” or low-income countries. Given that both the Soviet Union and socialist China were economically far behind the rich countries of the West, they were hardly exceptional in giving priority to economic growth and increasing living standards. But as the seriousness of environmental problems has become increasingly apparent, this attitude (“pollute first, clean up later”) has been challenged also in low-income countries.

At a deeper level, the commitment of socialist regimes to economic growth can also be linked to the modernist worldview that accompanied the rise of scientific rationality, technology, industrialism, and capitalism. Although early or utopian socialist thinkers did not have unqualified faith in science, technology, and industrial development, but put more emphasis on the social and political aspects of more desirable societies, Marxist-inspired socialism or communism looked at technological and industrial development, liberated from the contradictions and oppressive forces of capitalism, as the way towards achieving a better society. As both Russia in the early 20th century, and China in the 1940s, were predominantly agricultural societies (and therefore, according to Marx, less likely candidates for a successful socialist revolution), the socialist regimes in these countries emphasised to need for rapid industrialisation as a necessary step towards the socialist ideal. But the other side of the coin of buying wholeheartedly into industrialism was and is that the imperative of continuous expansion, which, as argued in Chapter 6, is inherent to the industrial production method, was also built into these socialist political-economic systems.

At the same time, the development of (notably heavy) industry in these countries was also considered to be essential for building the military capacity to deter or defeat the anti-revolutionary powers that were keen to restore capitalism. Rapid industrial development, therefore, became a major priority for fulfilling the security function of these socialist states, and for good reasons. In the early years after the 1917 revolution, the Soviet Union was attacked by the counter-revolutionary “White Army” supported by the capitalist countries of the West.²⁵ It is unlikely that the Soviet Union would have been able to defeat the Germans in World War II had it not given priority to strengthening its military capacity. These events constituted a lesson for the Chinese communist regime established in 1949, the more so as anti-communist forces continued to keep hold of Taiwan, supported by the United States. Also, Sino-Soviet relations turned sour when Khrushchev became the Soviet prime minister in 1956, which caused China to feel internationally isolated and led Mao to emphasise the need for greater self-reliance and strengthening of China’s military power.

Economic growth, therefore, notably based on rapid industrialisation, has been an overriding priority for both the socialist regimes of the Soviet Union and China from their beginning. Arguably, delivering a high rate of economic growth became a cornerstone of the legitimacy of the regimes in these countries. The failure of the Soviet government to deliver on that front when economic growth rates started to decline during the 1980s, in part because of growing resource limitations and the rising costs associated with their exploitation, was a key factor in the demise of the

²⁵ Wikipedia (2019), White Movement, https://en.wikipedia.org/wiki/White_movement (Accessed: 4 October 2019).

regime.²⁶ In China, despite the rise in living standards and the improvements in health care and life expectancy during the Mao era, internal Party differences about Mao's campaigns and about the way economic growth had been, and could best be, pursued, led to a political struggle that eventually opened the door to the introduction of capitalist experimentation after Mao's death.

A second reason why these socialist regimes failed to effectively address environmental issues relates to the links between economic and political power, in other words, to the political economy of socialism. In capitalist systems, economic and political power are strongly linked to the (very unequal) ownership of the means of production, giving big companies and their main owners a privileged position in the political arena and the public policy process. In socialist systems, characterised by collective ownership of the main means of production, the link between economic and political power is much less obvious. Theoretically, given the absence of private ownership of the main means of production, the scope for accumulating wealth (economic power) by individuals is much smaller than in capitalist systems. Consequently, one would expect access to and the use of political-institutional power to be less influenced by (unequal) economic power, and decision and policymaking in socialist regimes to be more responsive to the distribution of social power (the ability to mobilise the support of groups) and of cognitive power (the ability and capacity to influence and persuade people in their thinking and behaviour).

However, analysts of the political economy of the Soviet Union and China have pointed out that the distribution of economic power in these countries has been far from equal. Formally, private ownership of the main means of production did not exist in these countries (before the reforms in China), and the phenomenon of super-wealthy oligarchs was unknown in both the Soviet Union and China until the 1980s. Yet, it has been argued that in the Soviet Union much of the power commonly associated with private ownership was concentrated in the hands of a relatively small group of people, notably top communist party members, high-ranking bureaucrats in economic ministries, and the chief executives of enterprises. Peterson notes: "[...] although natural resources were in theory collectively owned (and collectively protected), the state in reality assigned extensive property rights to firms to allocate and use (and abuse) resources granted to them as long as they fulfilled the plan." He adds that "enterprise managers came to approximate 'czars' who controlled vast domains and who felled forests or fished out seas as they saw fit."²⁷ Although in the early days of the Russian revolution factories were run by committees of workers, these were soon abolished as they were said to create anarchy in production.²⁸ Instead, the principle of one-person management was introduced. Sarkar notes that "managers of enterprises were vested with almost dictatorial powers as far as discipline was concerned, and they were not subject to workers' control."²⁹ So, while the power

²⁶ Sarkar, Saral, *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*, Chapter 2.

²⁷ Peterson, D. J., *Troubled Lands: The Legacy of Soviet Environmental Destruction*, 13.

²⁸ Sarkar, Saral, *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*, 66.

²⁹ *Ibid.*, 67.

associated with economic planning was centralised in some of the ministries and the top echelon of the communist party, the powers vested in the managers of Soviet enterprises were similar to, if not even more draconian, than the powers assigned to chief executives of capitalist corporations.

As for China under Mao, it is less clear how economic power was distributed and exercised. Like in the Soviet Union, there were no billionaires or very rich people in China during the Mao era, and it was a highly egalitarian society. But although Mao was able to give general direction to economic decision-making, as reflected in the campaigns and projects aimed at boosting production and economic growth for which he is commonly held responsible, inevitably he was dependent on numerous officials at all levels of government for implementing his decisions. In a country the size of China, regional and local political-economic structures need to have and apply a degree of discretion to account for differences in geographical, demographic, environmental and other conditions to make decisions and policies (and a centrally planned economy) work. But the hierarchically structured Communist Party with branches reaching into the smallest communities will have provided a degree of integration and consistency in decision-making on economic and other matters that may have been counter-productive by discouraging local initiative, input, and flexibility. Given the political leadership's emphasis on economic development and growth, and the desire to lift masses of people out of poverty, those in positions of power, also in the economic area, had few if any incentives to assign much importance to environmental considerations. The introduction of capitalism, at first at the regional and local level, unlocked the potential for local initiative, but at a price, as we will discuss in the next chapter.

A third important factor that impeded environmental integration in the Soviet Union and socialist China was the authoritarian nature of their political-economic regimes. Given the formal and non-formal concentration of political and economic (decision-making) power in those regimes (at all levels), environmental advocates had very limited opportunities and power to bring about the kind of effective political change that is required to give real teeth to environmental institutions that looked good on paper but that fell far short of effective implementation and enforcement. Environmental advocates may have had some influence on shaping these institutions, but they were not given the means or a role in bringing about real environmental integration in non-environmental areas and sectors such as economics, science and technology, energy, agriculture and transport, urban planning and development, and the military. In all these areas and sectors, at most, environmental considerations continued to be added on in weak or symbolic ways that did not detrimentally affect the dominant interests and goals in these areas and sectors.

There appears to have been a difference between the Soviet Union and China in the extent to which the expression of environmental concerns and critique was allowed. In the Soviet Union, there was a long history of nature conservation inspired by early ecological scientists and a romantic view of nature that led to the creation of an extensive area of ecological reserves during the 1920s.³⁰ However, under Stalin,

³⁰ For a discussion of the ideas and influence of early ecological thinkers in the Soviet Union see Gare, Arran (1993), "Soviet Environmentalism: The Path Not Taken", *Capitalism Nature*

who took very instrumentalist view of nature, conservation advocates were marginalised and punished if they expressed criticism of grandiose but environmentally damaging development projects. However, a more or less autonomous conservation organisation survived the Stalinist era and became the nucleus of a broader environmental movement that raised concerns about the significant adverse effects of such developments, including those affecting Lake Baikal and the Aral Sea. But while environmental advocates and critiques were tolerated and even symbolically recognised in the form of the adoption of formal environmental legislation, they found their protection efforts frustrated by the lack of transparency and accountability of the government agencies that were responsible for these developments, by a lack of access to the mass media, and by their exclusion from decision-making and implementation processes. This meant that the opportunities for self-correction based on feedback about the real and perceived adverse environmental effects of development were largely closed off. It was only with the advent of *Glasnost* and *Perestroika* under Gorbachev that information about the state of the Soviet environment became publicly available and environmental groups were able to mobilise concerns in the wider society.

In China, as noted above, Mao's view on the environment led to the active pursuit of dominance over and exploitation of nature from the 1950s. Where and when environmental scientists or advocates publicly questioned the wisdom of developments or policies affecting the environment, they became a target of retaliation and oppression, at great personal cost.³¹ This meant that there was no political scope for the development of a more or less autonomous conservation or environmental movement in socialist China. Although, like in the Soviet Union, the regime created impressive formal institutions for environmental protection, arguably out of concern for its international image and to show its superiority to Western capitalist countries (also) in this area, in practice, these were toothless tigers. As a result, the authoritarian regime blundered from one environmentally disastrous decision and development to the next.

It should be kept in mind that such obstacles to environmental integration are not confined to socialist regimes: in liberal-democratic political systems, the power of environmental advocates to bring about effective environmental integration has also been weak and inadequate. The main difference lies in the fact that in socialist regimes environmental advocates have often been deliberately thwarted and actively suppressed or what has been euphemistically described as "circumscribed".³² While environmental advocates in liberal democracies are not formally constrained to raise any issues that they consider to be important, their opportunities and power to influence, let alone participate in, decisions affecting the environment (both by the

Socialism, Vol.4, No.4, 69-88; Gare, Arran (2002), "The Environmental Record of the Soviet Union"; Chattopadhyay, Kunal (2014), The Rise and Fall of Environmentalism in the Soviet Union, <https://climateandcapitalism.com/2014/11/03/rise-fall-environmentalism-early-soviet-union/> (Accessed: 8 November 2019).

³¹ Shapiro, Judith, *Mao's War against Nature: Politics and the Environment in Revolutionary China*, Chapter 1.

³² Shapiro, Judith, *China's Environmental Challenges*, location 1218.

government and the “private” sector) are also quite limited, notwithstanding the greater transparency and accountability of governments. However, in liberal-democratic regimes, environmental advocates are at least free to exert their communicative and social (mobilisation) power that provides at least *some* counterweight to the institutional and economic power of economic interests and that may, on occasions, lead to some environmental victories or gains (or less damage).

Although accounts of the developments in the Soviet Union and Maoist China do not offer much, if any, support for the view that socialist political-economic systems are *more likely* to pursue effective environmental integration, they should not be taken as definitive evidence that socialist economic systems could not evolve or be developed in a way or ways that they put environmental concerns centre stage alongside social values. However, both countries built their development on the adoption of an industrial system of production (first in agriculture, then heavy industry, and finally in the consumer industry sector), which, as noted above and discussed in Chapter 6, is inherently expansionist and hence incompatible with long-term environmental protection and sustainability.

It would be very interesting to analyse the developments in socialist countries that have not built their economies on industrial production systems (and that are still in existence) to see if their environmental (integration) records have been better than those of the Soviet Union and China. However, as noted already, the number of countries that established socialist economic systems has been relatively small, and the number that has survived since the demise of the Soviet Union is even smaller.³³ Arguably, the only country that still has a socialist economic system, and that pays more than lip service to the socialist principles that I mentioned, and that appears to have taken meaningful steps towards sustainability is Cuba. For this reason, I will expand a bit on the remarkable history and record of that country without suggesting that it provides a socialist model for sustainable development.

Cuba became a socialist political-economic system after the revolution led by Fidel Castro in 1959. Although initially more of a nationalist movement aimed at bringing an end to the Batista dictatorship and the exploitation of Cubans by foreign companies (which were nationalised), the hostile reaction of the Americans drove Cuba into the arms of the Soviet Union for protection (against U.S. invasion) and economic support. As Cuba became heavily dependent on the Soviet Union (for exports and imports), it also adopted the Soviet industrialist-developmental economic growth model, although large-scale agriculture already existed before the revolution. But the industrialisation of export-oriented agriculture (based on science and

³³ Wikipedia lists China, Vietnam, Cuba, and the Lao People’s Democratic Republic as the only Marxist-Leninist states left, and another 13 that are referred to as non-Marxist-Leninist states. These lists are based on the principle of self-identification, including in Constitutional statements. But to what extent these countries have socialist *economic* systems is unclear, and it is debatable whether China, along with probably many other states on these lists, meets the criteria that I formulated in the preceding section.

biotechnology) was firmly embraced by the Cuban government as a basis for boosting economic growth and further industrial development.³⁴

Although Cuba's economic growth has not been spectacular,³⁵ its success in improving the social conditions of the population has been impressive, especially in the areas of health, education, housing, and the elimination of poverty. Health care and access to education were recognised as fundamental human rights and provided (for free) by the state while state assistance with housing and income ensured that homelessness and poverty were minimised. The life expectancy of Cubans matches that of high-income countries.³⁶ Its educational and health systems are often held up as exemplary, demonstrating that excellent outcomes can be achieved with modest resources.³⁷ Despite several severe economic downturns triggered largely by external developments, Cuba's performance on these fronts brought it, and kept it, into the top ranks of the Human Development Index, despite its modest GDP. And because of its relatively low ecological footprint associated with the latter factor, it has also been touted to be the *only* country that can be said to be on the sustainable development path.³⁸

But as noted above, Cuba's initial (industrialist) development path meant that, like the Soviet Union and China, it largely neglected the environment.³⁹ Some of the environmental problems noted by observers were deforestation, desertification, erosion, soil degradation, water pollution, and the decline of biodiversity.⁴⁰ The

³⁴ Wright, Julia (2009), *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*. London: Earthscan, 56-59.

³⁵ Cuba's GDP *per capita* hardly rose throughout the 1960s, and it increased by about 50% until the end of the 1980s. Clio Infra (2021), Cuba (Republic of Cuba), <https://clio-infra.eu/Countries/Cuba.html> (Accessed: 26 January 2021).

³⁶ Jones, Sam (2016), "Castro's Legacy and the Envy of Many Nations: Social Care in Cuba", *The Guardian*, 27 November. Life expectancy in Cuba is on a par with that in the United States. Worldometer (2021), Life Expectancy of the World Population, <https://www.worldometers.info/demographics/life-expectancy/> (Accessed: 29 January 2021); World Bank, The (2021), Life Expectancy at Birth, Total (Years), <https://data.worldbank.org/indicator/SP.DYN.LE00.IN> (Accessed: 29 January 2021).

³⁷ Cuba's (free) education system has led to a literacy rate of close to 100%, and has produced a high number of scientists, especially in the field of agriculture (including biotechnology). Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 57; Baracca, Angelo and Rosella Franconi (2016), *Subalternity Vs. Hegemony, Cuba's Outstanding Achievements in Science and Biotechnology, 1959–2014*. Springer. Its capability in the medical sphere is world-renowned and is demonstrated by its ability to provide medical assistance to many countries around the world. Ospina, Hernando Calvo (2006), "Cuba Exports Health", *Le Monde Diplomatique (English edition)*, August, 11.

³⁸ Fanelli, Daniele (2007), "Cuba Flies Lone Flag for Sustainability", *New Scientist*, Vol.196, No.2624, 10; United Nations Development Programme (UNDP) (2020), Human Development Report 2020. Country Notes: Cuba, http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/CUB.pdf (Accessed: 26 January 2021).

³⁹ Maal-Bared, Rasha (2006), "Comparing Environmental Issues in Cuba before and after the Special Period: Balancing Sustainable Development and Survival", *Environment International*, Vol.32, No.3, 349-358.

⁴⁰ Skanavis, Constanstina and Evelina Sarri (2004), "Need for Sustainable Development Awareness Management in Cuba", *International Journal of Sustainable Development and World*

adverse environmental effects of industrial agriculture (based on fossil fuels and heavy use of fertiliser and pesticides), mining (for nickel), and energy production (oil exploitation) and distribution, among other, were significant and raised questions about the suitability of this approach for Cuba.⁴¹ But no doubt it was the collapse of the Soviet Union, which resulted in Cuba losing its main export market (notably for sugar, its main export crop), its main supply of oil, agrochemicals, and much of its food, that was an important catalyst in turning the Cuban development path around and into a more sustainable direction.⁴² Highly energy- and chemically-intensive agriculture was simply no longer an option while boosting the country's self-sufficiency, notably in the area of food (security), became a necessity. The crisis marked the beginning of what is referred to as the "Special Period" during which the government initiated a raft of reforms while retaining its formal commitment to socialism. Agriculture was partly deindustrialised and decentralised, with cooperatives and individual farmers being granted incentives to produce for local markets.⁴³ Organic growing, especially by urban farms, became increasingly important in meeting the food needs of urban populations. Although the crisis, aggravated by the American embargo, caused significant hardship and malnutrition for much of the population, these state-led initiatives aimed at boosting domestic food production and developing alternative ways of meeting individual and collective needs were remarkably successful and widely supported, to the extent that Cuba was held up by many foreign visitors and commentators as a model for moving towards a more self-reliant and sustainable society.⁴⁴

The government's increased commitment to environmental protection and sustainable development was also reflected in (formal) changes in environmental policy and institutions. In 1992, at the UNCED (Rio) conference, Castro declared Cuba's commitment to environmental protection and sustainability, and within the year this commitment was integrated into the country's Constitution.⁴⁵ In 1994, several government institutions were amalgamated into one central environmental authority, the Ministry of Science, Technology, and the Environment (CITMA). In 1997, the government's main environmental goals, straddling a range of policy areas and ministries, were laid down in a *National Environmental Strategy*, and in the same year,

Ecology, Vol.11, No.4, 356-363; Suárez, José Antonio, *et al.* (2012), "Energy, Environment and Development in Cuba", *Renewable and Sustainable Energy Reviews*, Vol.16, No.5, 2724-2731, 2730-2731; Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 67.

⁴¹ Ecological scientists played a key role in raising these issues. Ernesto (Che) Guevara was also said to be a serious critic of the Soviet model of development. Levins, Richard (1993), "The Ecological Transformation of Cuba", *Agriculture and Human Values*, No. Summer, 52-60, 56.

⁴² *Ibid.*; Martin, Edward J. and Matthew S. Pimentel (2011), "Incrementalism in Cuba: Democratic-Economic Reforms and Sustainable Management", *Public Administration and Management*, Vol.16, No.2, 206-237.

⁴³ Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, Chapter 6.

⁴⁴ *Ibid.*, 3, 6-7.

⁴⁵ Houck, Oliver A. (2000), "Environmental Law in Cuba", *Journal of Land Use and Environmental Law*, Vol.16, 1-81, 16.

the *Law of the Environment* ("Law 81") was passed, giving crucial powers to CITMA. The Ministry was granted a mandate for integrated decision making that provides for its participation in the development of planning and decision-making processes of other ministries and that gave it a credible role as a regulator, resource manager, coordinator and arbitrator.⁴⁶ Thus, it can be said to have been assigned a key role in both internal environmental integration (given its responsibility for the National Environmental Strategy – the overarching policy framework) and external environmental integration (the integration of the main goals across other government agencies and policies). Potentially, if backed up by political support and sufficient resources, CITMA could be a powerful institutional force for the advancement of environmental integration.

However, despite these promising moves on the ground and at the (institutional) top, one should be cautious about idealising Cuba's environmental performance. While the environmental commitment of the Cuban government(s) may be genuine, there is a significant gap between the official policies (and goals) and what is happening in reality. Although some of the environmental pressures associated with industrial agriculture diminished, others increased, notably, those linked to the expansion of the tourism industry (which became the main export sector), and the increased efforts to boost the domestic production of oil and the mining of nickel, other major export earners. Deforestation increased and so did illegal hunting, fishing, trade in wildlife, habitat fragmentation and loss, and illegal dumping.⁴⁷ The increases in environmental pressures from tourism, oil exploration and exploitation, and mining, all find their source in a common factor: the priority assigned by the government to restoring and boosting economic growth. While this is understandable given the precarious economic situation in which Cuba found itself largely because of political-economic developments and policies outside its control, it also highlights the problematic nature of a model and ideology of large-scale development that is largely dependent on foreign trade and investment, and therefore also subject to the vicissitudes of the world market, the imperatives of international capitalism, and the political-economic interests and policies pursued by other states, as well as unpredictable developments.⁴⁸

Cuba has always remained trapped in the export-led development paradigm, also after the revolution, and despite the state-led initiatives of the early 1990s to boost domestic food production and self-sufficiency. These initiatives were driven by necessity rather than by a deliberate government choice for transitioning towards a nation-based model of sustainable development. The deindustrialisation that occurred

⁴⁶ Whittle, Daniel and Orlando Rey Santos (2006), "Protecting Cuba's Environment: Efforts to Design and Implement Effective Environmental Laws and Policies in Cuba", *Cuban Studies*, Vol.37, 73-103, 81-82; Houck, Oliver A. (2000), "Environmental Law in Cuba", 23-24.

⁴⁷ Maal-Bared, Rasha (2006), "Comparing Environmental Issues in Cuba before and after the Special Period: Balancing Sustainable Development and Survival".

⁴⁸ Blas and Farchy provide a fascinating account of the role of commodity traders, arguably some of the most unscrupulous cowboys of capitalism, in helping out Cuba during this time. See Blas, Javier and Jack Farchy (2021), *The World for Sale. Money, Power, and the Traders Who Barter the Earth's Resources*. New York: Oxford University Press, Chapter 7 "Communism with Capitalist Influences".

during the "Special Period" was not by choice but because of a shortage of materials and capital,⁴⁹ and although the government supported the development of organic agriculture (notably by the urban farms), it never adopted a formal policy of transforming the whole sector in that direction. Its agricultural policy remained pragmatic and was aimed foremost at boosting production and yield.⁵⁰ The government actively sought to expand its domestic oil production and increased oil imports from Venezuela (based on a special relationship with that country)⁵¹ rather than investing in a large-scale transition towards sustainable energy sources. The contribution of the latter declined when the production of biomass from sugar cane dropped, while the generation of solar and wind power remained dismally low at less than 0.1%.⁵² Increasingly, the government sought to attract foreign investors in development projects, especially in the tourism industry, in which foreign capital has gained a significant foothold,⁵³ but also in the nickel industry (in which China has shown interest),⁵⁴ and in infrastructural projects, and even by creating a "Special Development Zone" and passing new laws.⁵⁵

In line with what is generally considered a key tenet of socialism, public or collective ownership of the means of production, there was hardly a place for private ownership and free markets in Cuba during the Fidel Castro era. All major industries were nationalised and most farmland was brought under a form of collective ownership and state control.⁵⁶ Economic decision-making was highly centralised and guided by a central plan. However, the severe economic crisis of the early 1990s triggered the adoption of a more pragmatic approach to boosting production by a shift towards decentralisation of economic decision-making and granting a greater role for private ownership and free markets, notably in the agricultural sector.⁵⁷ The scale of these reforms increased when, in 2008, Raúl Castro took over the reign of his brother Fidel. In 2011, the Communist Party introduced the "most comprehensive and deepest reforms carried out during the entire Revolution", introducing a degree of economic and social liberalisation, including a significant retreat of the state in

⁴⁹ Bye, Vegard (2020), *Cuba, from Fidel to Raúl and Beyond*. Cham, Switzerland: Springer, 10-11, 132. Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 68.

⁵⁰ Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 197-201.

⁵¹ Suárez, José Antonio, et al. (2012), "Energy, Environment and Development in Cuba", 2727.

⁵² Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 218, 231-232.

⁵³ Bye, Vegard, *Cuba, from Fidel to Raúl and Beyond*, 88-90.

⁵⁴ Ibid., 54, 128-129. Suárez, José Antonio, et al. (2012), "Energy, Environment and Development in Cuba", 2727.

⁵⁵ Bye, Vegard, *Cuba, from Fidel to Raúl and Beyond*, 50-54; Campbell, Al (2016), "Updating Cuba's Economic Model: Socialism, Human Development, Markets and Capitalism", *Socialism and Democracy*, 1-29, 18.

⁵⁶ Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 53-54, 59-62.

⁵⁷ Ibid., 112-114.

agriculture, the introduction of non-state wholesale markets, the leasing out of small-scale business, the permission to own mobile phones and the gradual opening of Internet access – de facto amounting to the end of the State’s information monopoly, and a new regime for Direct Foreign Investment.⁵⁸ These changes led to speculation, or even expectations, that Raúl, who appeared to be more sympathetic towards the “private” sector and increasing Foreign Direct Investment, would set Cuba on the path towards more fundamental reforms and the introduction of a “market economy” or capitalism, possibly as a precursor to transformation to liberal democracy.⁵⁹ However, it appeared that the Cuban leadership was unwilling to give up its monopoly over political (–institutional) power and/or concerned about the restoration of capitalism and the survival of socialism. In 2016, these concerns led to what Bye refers to as a “counter-reform” that put the clock back on some of the economic reforms and to the reaffirmation of state control over the economy.⁶⁰ Nonetheless, in 2019, a new constitution was approved by referendum that legalised private property but also reaffirmed that socialism on the island was “irrevocable”.⁶¹

What do the developments in Cuba mean for the claim that socialist political-economic systems offer a more promising basis for advancing environmental integration than capitalist systems? I think the following points need to be emphasised:

First, these developments demonstrate that also in Cuba economic growth and industry-based development have been an overriding priority for the socialist government, and arguably for most Cubans. Although the collapse of the Soviet Union brought about a move towards more sustainable production, notably in agriculture, this did not lead to a shift in the dominant development paradigm.⁶² Cuba remained addicted to oil, industrialisation, and economic growth, seeking to import resources (and increasingly capital) from other countries after the collapse of the Soviet Union. This confirms that, in line with the experiences in the Soviet Union and China, a socialist system is not a *sufficient* condition for a transformation towards a more sustainable society, even if this is (almost) forced upon a country. In large part, this can be attributed to the perceived need or desirability to improve the material standard of living of the population even when, on some social indicators (for instance, education, health, and life expectancy) Cuba had already done very well.

⁵⁸ Bye, Vegard, *Cuba, from Fidel to Raúl and Beyond*, 271.

⁵⁹ *Ibid.*, 3-5, 12-13.

⁶⁰ *Ibid.*, 13, 23-25, 37-38.

⁶¹ Augustin, Ed (2019), “Cuba Overwhelmingly Approves New Constitution Affirming ‘Irrevocable’ Socialism”, *The Guardian*, 25 February.

⁶² For instance, in the 1990s, a large majority of farmers indicated that they would use more artificial fertilisers and pesticides if they could get them, an attitude that was reflected in the sharp increases in imports of these things between 2001 and 2006 when the economy recovered. Food imports also rebounded (to around 70 to 80% of national food needs, the level it was before the Special Period), and so did the use of agricultural machinery when the availability of oil (from Venezuela) increased. Wright, Julia, *Sustainable Agriculture and Food Security in an Era of Oil Scarcity: Lessons from Cuba*, 24, 149-150, 230-231, 234. Bye, Vegard, *Cuba, from Fidel to Raúl and Beyond*, 27.

Second, the developments do not prove that capitalist systems (whether liberal-democratic or authoritarian) are a *better* basis for advancing environmental integration. As discussed in earlier chapters, if anything, capitalist systems guarantee the continuation of environmental degradation and an ever-deepening crisis. Therefore, the immense (external and to some extent internal) pressure exerted on the Cuban government to further liberalise the economy and restore capitalism does not offer a promising alternative. On the contrary, restoring capitalism in Cuba will simply speed up large-scale development (for instance, in the tourism sector) and its adverse environmental consequences as well as, of course, increasing inequality to levels not seen since before the Revolution, as in Russia and China.

Third, while, in line with the argument that democracy is more conducive to environmental protection than authoritarian political systems, one should advocate the democratisation of the Cuban political system, this is not as straightforward as it sounds. The assumption that commonly underlies this argument is that Cuba should move to a liberal-democratic system similar to those prevalent in the West and many other countries. But, apart from the fact that, in the past decades, the political developments in many of these countries can hardly be seen as advertisements for these systems (think of Brexit and the growing support for illiberal political leaders, including ex-US President Trump), the argument overlooks the strong link between liberal democracy and capitalism. Liberal democracy arose and has always served capitalism, even though capitalism does not require democracy, as the many authoritarian-capitalist political systems that have existed throughout history have shown. But if Cuba were to introduce liberal democracy, chances are this will provide a strong basis for the advocates of capitalism (from outside and within Cuba) to further advance capitalist interests and to restore capitalism as the dominant economic system. This seems exactly what many of the critics of the Cuban political-economic system are promoting and hoping for, and what the Cuban political leadership fears. It is highly unlikely that socialism will survive in a liberal democratic Cuba, and it is equally unlikely that such a transformation will do any good for the advancement of environmental protection and integration.

Implicitly, those who advocate the introduction of liberal democracy in Cuba assume that this is the best, or even only, type of political system that one can realistically hope for, and that such systems are capable of effectively addressing the environmental challenge. Both assumptions are highly problematic. The first because the strong link between liberal democracy and capitalism implies a very limited form of democracy, *de facto* allowing and enabling capitalist interests (including the very rich) to dominate and rule (most of the time) indirectly. Arguably one of the biggest holes in liberal democracy is that it has no regard for democracy in the realm of economic decision-making. The second assumption has been amply disproven during the 50 years or so since environmental problems entered the political agenda. But despite this failure, liberal democracy is still held up as the gold standard of democracy while its foremost role in the defence and promotion of capitalism is ignored. In principle, the Cuban political regime is correct in taking the stance that the economic system should be embedded within the political system rather than the other way around, as has been the case with liberal democracy, which has been embedded within

an evolving capitalist system from the beginning (and one might add even more obviously so since the rise of neoliberalism). One may argue about the extent to which the Cuban economic system has been embedded democratically, but the defenders of liberal democracy are hardly in a credible position for evaluating and critiquing this.

This raises, of course, the question whether *any* type of political-economic system offers hope for more effective environmental protection and integration whilst also maintaining or even improving democracy. If, as I have argued, capitalism is inherently incompatible with long-term environmental protection, and if liberal democracies serve foremost the interests of capitalism, then the idea that capitalism and liberal democracy can be greened, as many people think or assume, is fanciful. Moreover, if all past and present socialist systems have failed to adequately address the environmental challenge, is there any alternative(s) left?

A possibly even more daunting question is whether *any* future economic system can or will be established that is *not* based on large-scale industrial production, which is also inherently incompatible with long-term environmental protection. Thus far, all actual capitalist *and* socialist systems have been based on industrial systems of production as the way towards a "better" future. As noted before, the growth imperative inherent to such a production system fits well with capitalism, and both systems have developed in a symbiotic relationship. While all socialist systems that have existed (and still exist) are equally based on this mode of production, is it at least *thinkable* that a socialist system can be based on (a) different mode(s) of production, even though this is contestable from a historical and a Marxist perspective?

In the remainder of this chapter, I discuss whether democratic socialism, even though it has never existed at a national level, could be construed as an alternative political-economic system that is not based on industrialism and that offers better prospects for long-term environmental protection, social equality and justice, and democracy (including economic democracy).

Democratic socialism?

As discussed in Chapter 6, we can identify six types of political-economic systems based on the extent to which they are more or less democratic or authoritarian political systems, and have adopted capitalism, socialism, or a mix of both, as their economic system. Actual (existing) systems can be identified for five of these categories. The only kind of system that has, to my knowledge, and based on the criteria specified, never been put into practice at the national (state) level is that of democratic socialism. Neither the Soviet Union and China, nor any other country that was or is a self-proclaimed socialist state, has been (more or less) democratic. Here, I argue that the non-existence of democratic socialist systems can be interpreted in two main ways: first, at the level of ideology or principle it can be argued that there is a fundamental clash between socialism and the liberal view of democracy; second, at the political level, the hostility of capitalist forces (including governments) towards socialism has not been conducive towards the introduction of democratic institutions in socialist countries. However, this does not mean that, in principle, socialism cannot be democratic. On the contrary, given the limited nature of liberal democracy and the scope for interpreting and applying the idea of democracy much more broadly and meaningfully, it is possible to design socialist political-economic systems that are *more*

democratic than liberal-democratic systems. And whilst we are at it, let us not forget to also make them genuinely sustainable.

Ideologically, there is an obvious reason why socialism and liberal democracy are clashing and incompatible. As discussed before, one of the key tenets of liberal democracy is the belief in the sanctity of private property rights, while socialism rejects capitalism and the private ownership of the means of production. Although socialism does not necessarily imply the rejection of all private property (socialist systems have varied in the extent to which private ownership has been allowed), it advocates (some form of) public or collective ownership of those assets (including the means of production) that are used to exploit people for the sake of expanding capital. It is in this respect that socialism does not recognise private property as a core element of democracy or democratic rights. By contrast, such private property rights (of land and other means of production) were advanced by liberal thinkers as natural or inalienable *political* rights at the time of the rise of the capitalist class. Enshrining private property rights in law was aimed at providing protection against the power of monarchs to arbitrarily confiscate the wealth of citizens and civilian organisations, a practice which was not uncommon. Although the introduction and strengthening of liberal democratic institutions (including Parliaments, voting rights, and other rights) were also important means for putting checks on the arbitrary power of monarchs, it is the sanctity of private property rights that arguably is the ultimate rationale that underlies liberal democracy. By definition, capitalism does not and cannot exist without private property rights, but it can happily function, and even flourish, in undemocratic and highly oppressive regimes as long as private property rights are respected.

Given the threat that socialism poses to capitalism and the sanctity of private property (of the means of production) proclaimed by liberal democracies, it is understandable that capitalists and adherents of liberal democracy have been hostile to socialism and have declared it to be incompatible with democracy. Liberal democratic governments (especially of the United States) have done everything in their power to suppress, combat and eliminate support for socialism around the world, often under the banner of democracy.⁶³ Given the numerous ways and instances in which the governments of capitalist countries have (tried to) “neutralise(d)” socialist advocates and regimes, the leadership of socialist countries did not have to be paranoid to think that their regimes were targeted for elimination. Not surprisingly, this has led these leaders to develop a siege mentality which made them inclined to see plots and traitors (supported by foreign capitalists and governments) everywhere. It speaks for itself that such a situation and mentality are not conducive to (the promotion of) democracy and/or for allowing opposition. Marx, Lenin, Mao, and other socialists have always been keenly aware of the likelihood that counterrevolutionary and reactionary forces would do whatever they could to restore capitalism. Marx foresaw the need for a “dictatorship of the proletariat” and Lenin argued for concentrating power in the hands of a “vanguard party” to represent and defend the interests of the proletariat. From this point of view, establishing democracy in socialist

⁶³ Chomsky, Noam (1992), *Deterring Democracy*. London, New York: Verso; Huberman, Leo (1968), “The ABC of Socialism”, in L. Huberman and P. M. Sweezy (eds.), *Introduction to Socialism*, 21-81, 79.

political-economic systems is only possible if these systems are no longer under threat from reactionary capitalist forces, domestically and from abroad.

It is against the backdrop of this political struggle between capitalism and socialism that we should interpret the anti-democratic record of socialist systems. This is not to condone the atrocities committed under these regimes. There is always scope and a role for agency, especially at the level of political leadership, which can have enormous consequences for many, even millions of people. Yet, it is hard to deny that the creation of socialist systems in a significant number of countries, especially after WWII, led Western governments to actively seek regime change in those countries by all kinds of means, including military intervention.⁶⁴ Even if those efforts have not always been directly effective, they arguably contributed indirectly to the undermining of the political regimes in those countries as their repressive and undemocratic institutions and practices led to moral degeneration, corruption, the re-emergence of inequality, disillusionment, and cynicism about socialist ideals, and eventually to the erosion of legitimacy.⁶⁵

However, it is important to recognise that these obstacles to the introduction of democracy in socialist political-economic systems are not intrinsic to socialism but exist because of the ideological and political antagonism from capitalist-liberal circles. A priori there is no reason why socialist ideology would be incompatible with the idea and practice of democracy, as reflected in the writings of non-Marxist-Leninist socialists, even pre-Marx. The key issue here is how democracy is interpreted or defined. Apart from the clash between socialist ideology and the idea that private ownership of the means of production is a fundamental political (or even human) right, socialism is ideologically compatible with political and human rights, including the right to vote, to be elected, freedom of speech, and to justice and “positive” human rights (including a right to housing, education, and health care). Moreover, within the socialist school of thought, which is much less homogenous and rigid than the opponents of socialism commonly wish to portray, other and broader interpretations of democracy can be found that transcend the rather narrow and limited view of democracy propounded by liberal democrats. Here, I will just briefly discuss a few of those ideas as they have much to offer when aspiring to creating not only *more* democratic societies, but also to the introduction of institutional changes that can significantly advance environmental integration, protection, and sustainability. First, socialist thinkers have traditionally conceived of democracy as a collective, participatory, and collaborative process towards creating a better society, with an emphasis on common values, interests, and goals. Second, based on this broad interpretation, there is a long tradition in socialist thinking of applying the idea of democracy to the economic sphere.

⁶⁴ The reality of this threat was of course clearly illustrated in the case of Cuba, where an American-led invasion took place in 1962 (in the Bay of Pigs) but was defeated. The CIA also undertook several attempts to kill Fidel Castro, the Cuban leader, again to no avail.

⁶⁵ For powerful accounts on the degeneration of socialism in the Soviet Union, contributing to its ultimate demise, see Djilas, Milovan (1957), *The New Class. An Analysis of the Communist System*. New York: Praeger. Also Sarkar, Saral, *Eco-Socialism or Eco-Capitalism? A Critical Analysis of Humanity's Fundamental Choices*.

Early socialist thinkers, who are often referred to, following the label used by Marx and Engels, as utopian socialists,⁶⁶ generally shared a commitment to creating a better society, in response to what they perceived as the pernicious effects of industrial capitalism. Robert Owen, Charles Fourier, Henri de Saint-Simon, and others all shared the belief that it was desirable and possible to create more just and egalitarian societies in which all members would enjoy a good life. The path towards creating such an ideal society was commonly based on ideas (or even a specific design) of how such a society should look like, and on the creation of (intentional) communities that, if or when successful, could function as models and thus bring about social and political transformation. Hence they did not think that a revolution (by the working class) would be required to create a socialist society, which is why they were characterised as utopian by Marx and Engels, even though the latter shared the goal of creating a better (or ideal, communist) society and were influenced in this respect by the early socialists.

Although Marxist-Leninist socialists believed in the need for a political revolution to establish a socialist society, many other socialists did not and took the view that a better/socialist society could be brought about by a process of (mostly peaceful) reform.⁶⁷ But regardless of the differences in strategic thinking about how socialism can or must be established, socialists generally share the goal of creating a society based on cooperation, participation, equality, and solidarity as foundations for human and societal flourishing. Such a society, based on common values, must and will also be democratic but in a much broader sense than liberal democracy proclaims. Democracy implies the participation of all citizens in all matters and decisions that concern them (as determined by themselves), on an equal footing and by cooperation and deliberation rather than by competition based on their narrow self-interest. Thus, the socialist notion of democracy is based on self-governance by equal citizens, rather than one of competition between conflicting interests.⁶⁸

This does not mean, of course, that socialists agree on the specific form(s) that democracy should take. There is a wide range of views on this point, among other, about the level and scale of the polities within which socialism can or should be practised or aspired to. For instance, while anarcho-socialists argue that socialism can only be achieved in small communities in which the state and all other forms of hierarchy are abolished, those who seek to establish socialism at the national or even global level accept that indirect (representative) forms of participation, and elements of (reformed) liberal democracy, will need to be part of the architecture of democratic institutions alongside new forms, such as citizens' committees or councils. But a

⁶⁶ Engels, Friedrich, "Socialism: Utopian and Scientific".

⁶⁷ Apparently, Marx himself later changed his mind and thought that in some advanced capitalist countries where the socialist movement had built up considerable strength (like the Netherlands) a peaceful and legal transition to socialism was quite possible. Sweezy, Paul M., "Marxian Socialism", 85.

⁶⁸ Albert, Michael (2003), *Parecon: Life after Capitalism*. London: Verso; Fotopoulos, Takis (2009), "The Multidimensional Crisis and Inclusive Democracy", *The International Journal of Inclusive Democracy*; Lebowitz, Michael A. (2016), "What Is Socialism for the Twenty-First Century?", *Monthly Review*, Vol.68, No.5, 26-43.

common observation that can be found in many socialist writings on this topic is that, once power has been wrested from the dominant liberal-capitalist class, it is up to the people themselves to further develop and introduce the particular forms, institutions, and processes by which they wish to govern themselves. Most recognise that there is little merit in presenting blueprints for democratic socialist systems.

A second, equally important contribution of socialist thinkers to democratic theory relates to the idea of economic democracy. The idea that workers should have a say in the management of companies, or even collectively own and run businesses, also goes back to pre-Marxist utopian socialist thinkers, including Robert Owen, who created cooperative communes and became the inspirer of the cooperative movement, and Louis Blanc, who sought government support for the establishment of workers' associations.⁶⁹ Although these initiatives mostly failed, the idea of economic democracy has never gone away but has generated a considerable stream of ideas, literature and debate, as well as a variety of applications, some of which have been highly successful.

Broadly speaking, these discussions and efforts have focused on two levels: the (micro) level of individual enterprises and/or the (macro) level of the whole (national) economy. The ideas developed under the first focus are often referred to with the label of workers' or industrial democracy, whereas the ideas and applications of the notion of economic democracy at the national level are commonly referred to as such (economic democracy) although they are sometimes also discussed under the heading of social democracy. However, it must be acknowledged that the principle of economic democracy must be developed and applied together at both levels if it is to make sense and be viable.

Following in the footsteps of the early or utopian socialists, who believed that societies could be transformed from the bottom up without the need for a revolution, those who focus foremost on industrial democracy look at how workers can be given greater or even full control over the enterprises in which they are working. Ideas and practices on this front comprise, among other, the creation of workers' councils or committees that participate in decisions regarding a variable range of things (from working conditions and work practices to remuneration and investment), the creation of workers' cooperatives that collectively own and manage enterprises, and the expansion of (shareholding) ownership by workers of existing companies.

The establishment of workers' councils or committees that have a say in how companies are managed is not, on its own, a form of socialism. Such councils have been established in many social-democratic countries, including Sweden, Germany, and the Netherlands, with varied rights and powers, but without a transfer of formal ownership to workers. Thus, they imply a very limited notion of industrial democracy, mitigating the inherently hierarchical structure of capitalist enterprises. For the most part, such councils have no control over investment decisions, nor a final say or veto

⁶⁹ Wikipedia (2021), Louis Blanc, https://en.wikipedia.org/wiki/Louis_Blanc (Accessed: 9 February 2021). Brown, Archie (2013), "Pre-Marxian Communist Ideas", in M. Freedon, et al. (eds.), *The Oxford Handbook of Political Ideologies*; Engels, Friedrich, "Socialism: Utopian and Scientific"; Wikipedia (2021), Robert Owen, https://en.wikipedia.org/wiki/Robert_Owen (Accessed: 9 February 2021).

in employment decisions. Yet, it is remarkable that, in many countries, allowing even such a minimal degree of participation of workers in the decision-making processes of companies is often resisted and rejected by employers and hence considered controversial.⁷⁰ Nonetheless, the idea that workers must have a say in the management of companies is a fundamental element of the socialist conception of economic democracy. But it should not stand alone.

A more meaningful interpretation of economic democracy involves the transfer of ownership of capital to workers as well as the granting of control over the management of companies to the collective of workers. This idea, based on the view that it is the collective of workers, including those in management positions, who produce the output and value of a company, makes it only logical that they should also own the company. Even if external financial capital is needed to establish or run the company, this can be sourced from cooperative banks or raised through bonds without relinquishing ownership to external shareholders. Ultimately, it can be argued, the collective of workers should have the final say in all matters of importance to the company.

This idea of economic democracy has been applied in many countries and different contexts. Arguably the most well-known and frequently mentioned example is that of Mondragon in the Spanish Basque region. Founded in 1956 as a small producers' cooperative, Mondragon has grown into a collective of cooperatives involving the production of a broad range of products, including electrical goods, automobile components, machine tools, and furniture. It also operates a construction division, a retail chain, and its own bank.⁷¹ The organisation is based on worker ownership, with initially all workers being members of the co-operative owning personalised capital accounts on which a proportion (45%) of the company's profits is deposited (with another 45% being set aside for investment and 10% being allocated to charity and community projects). Management was accountable to all members and the wage differential was 3:1. Its financial management was conservative, with most investments financed from the co-operative's revenues and bank. Because of its principled approach, cooperative culture, internal democratic structure, and economic success (its companies achieved above-average levels of productivity), Mondragon has often been held up as a showcase for industrial democracy.⁷²

However, during the 1980s and 1990s, the organisation introduced several significant changes to respond to the growing competition arising from globalisation. Effectively, a choice was made to turn the cooperative into a multinational company, with subsidiaries being set up in many countries. In 2013, Mondragon, which changed

⁷⁰ It is indicative that in a fairly recent work on economic democracy, the author deems it necessary to spend a whole chapter on justifying even such a minimal degree of economic democracy. Malleon, Tom (2014), *After Occupy. Economic Democracy for the 21st Century*. Oxford: Oxford University Press. Chapter 2.

⁷¹ Blackburn, Robin (2007), "Economic Democracy: Meaningful, Desirable, Feasible?", *Daedalus*, Vol.136, No.3, 36-45; Hutchinson, Frances, et al., *The Politics of Money. Towards Sustainability and Economic Democracy*.

⁷² Malleon, Tom, *After Occupy. Economic Democracy for the 21st Century*; Whyte, William, F. (1999), "The Mondragon Cooperatives in 1976 and 1998", *Industrial & Labor Relations Review*, Vol.52, No.3, 478-481.

its name to Mondragon Corporation, operated more than 120 production plants in 16 countries, including two in India and 13 in China.⁷³ In 2019, the company employed more than 80,000 people worldwide.⁷⁴ Most foreign workers were not members of the co-operative group with the result that, in 2006, the percentage of worker-members fell to less than 40% compared to 80% in 1990.⁷⁵ Although foreign workers were paid slightly higher wages than those paid by competing multinationals in the same countries, and an effort was made to maintain the original principles, including a low wage differential (which rose to 6:1, still small compared to that of capitalist corporations), inevitably, the company's culture changed. As Malleon states, one can hardly escape the impression that Mondragon's minority of worker-members "have, in effect, become privileged quasi-capitalist employers of a larger body of nonmember workers."⁷⁶ While the economic success of Mondragon is often held up as evidence that cooperative enterprises can hold their own in the competitive struggle, it also shows that such companies do not fundamentally alter the (global) capitalist system if they are or become driven by the economic growth imperative necessitated by an industrial mode of production and competition in the national or global market. Invariably, this subjugates them to the same pressures to exploit people and the environment that are inherent to the capitalist-industrial system, even if they do so more efficiently and with the consent of the workers. The experience of Mondragon demonstrates that to effectively address the sources of exploitation of humans and the environment, socialism must be adopted at the national (and ultimately global) level.

This has been long recognised by many advocates of socialism. Yet, as noted above, thus far, no (nation-) state has succeeded in establishing a democratic-socialist system that has also proven to take the environmental challenge seriously. The only state that is sometimes referred to as a democratic socialist state (or a market-socialist state, which is not the same), was the former Yugoslavia. However, although the Yugoslav experience is very interesting, I do not elaborate on it here, for five main reasons.⁷⁷ First, although Yugoslavia, between 1949 and 1991 (when it fell apart), had a nationwide system of workers' councils that formally promoted workers' self-management, it constituted at most a very limited form of workers' democracy as, de facto, much of the decision-making power at the micro (enterprise) level remained in the hands of managers, while all the macro-economic decisions were made by the federal government with little or no input from below. Moreover, the Yugoslav political

⁷³ Murray, Robin (2012), "Co-Operatives and Global Growth: The Case of Mondragon", in M. Kaldor, et al. (eds.), *Global Civil Society 2012. Ten Years of Critical Reflection*, 146; Wikipedia (2021), Mondragon Corporation, https://en.wikipedia.org/wiki/Mondragon_Corporation (Accessed: 11 February 2021).

⁷⁴ Wikipedia, Mondragon Corporation.

⁷⁵ Malleon, Tom, *After Occupy. Economic Democracy for the 21st Century*, 64.

⁷⁶ *Ibid.*, 60.

⁷⁷ For useful brief discussions and assessment of the Yugoslav experience with workers' councils, see Singh, Parbudyal, et al. (2007), "The Yugoslav Experience with Workers' Councils: A Reexamination", *Labor Studies Journal*, Vol.32, No.3, 280-297; Marković, Goran (2011), "Workers' Councils in Yugoslavia: Successes and Failures", Vol.25, No.3, 107-129; Devine, Pat, *Democracy and Economic Planning*, 94-100.

system was not democratic but dominated by the Communist Party (and President Tito in particular).⁷⁸ Second, the workers' councils seemed primarily concerned with wage increases and the standard of living of the workers, effectively functioning as enterprise trade unions with little interest in broader issues and/or even the interests of workers of other companies. Third, the companies operated within a market economy and competed with each other, as well as with foreign companies. Unlike the Soviet Union, the Yugoslav economy was not based on central economic planning. Fourth, there is no evidence to suggest—the literature generally ignores this issue—that Yugoslav companies gave serious consideration to environmental matters. Fifth, the Yugoslav system was not aimed at creating a post-industrial mode of production – boosting production in all sectors was as much an overall priority of this regime as of socialist and capitalist systems. For all these reasons, and as the country disintegrated in the 1990s, and not much has been written about its environmental integration efforts, the Yugoslav (Tito) regime offers a poor basis for assessing the merits of democratic socialism, let alone of a democratic eco-socialist system. Rather, as suggested above, it was a form of market socialism, even though it is difficult to locate the socialist element in such a system.⁷⁹

Hence, we cannot point to a real-life example of a democratic socialist system at the national level, let alone a system that also integrates the environmental challenge in a fundamental way and that is oriented towards the development of a post-industrial production system. To determine whether it is possible to design such a system, what its main elements would be, and how it could be turned into reality are questions that can only be answered in tentative or even speculative, and different, ways. This challenge has been taken up by a considerable number of thinkers and authors, many of whom profess a commitment to eco-socialism. While many of the contributions on this front are interesting and important, quite a few seem to be aimed at proving that Marx was an environmentalist and/or that socialism is an ideology that is (most) compatible with, conducive to, or a necessary or even the only basis for creating a sustainable and socially just world. As discussed in this and the preceding chapter, I agree with the view that capitalism is incompatible with long-term environmental sustainability, and that socialism, in principle, is compatible with the need to give priority status to the protection of the environment (which has a social dimension) alongside social justice. The fact that actually existing socialist political-economic systems have mostly failed on the environmental front is not convincing evidence that socialist systems cannot integrate environmental concerns. Anyone who makes that argument will also need to write off capitalist political-economic systems. But whereas there is an internal logic in capitalism that makes it environmentally incompatible, this is not the case with socialism.

Given the limitations of space, I will not discuss the diversity of views on what an eco-socialist society can or should look like. Instead, I highlight several points that, in

⁷⁸ Djilas, Milovan, *The New Class. An Analysis of the Communist System*.

⁷⁹ Marković, Goran (2011), "Workers' Councils in Yugoslavia: Successes and Failures"; Bockman, Johanna (2011), *Markets in the Name of Socialism: The Left-Wing Origins of Neoliberalism*. Palo Alto, US: Stanford University Press, Chapter 3.

my view, are crucially important but that do not always receive the attention or weight that they deserve.

First, given the fact that socialist systems have also been hooked by a commitment to industrialism, which is environmentally incompatible, the question remains what kind of (post-industrial) production system advocates of socialism would put in place or work towards introducing. Given the importance that Marxists assign to the “forces of production” and “modes of production”, the relative neglect of this question is somewhat surprising. “Just” abolishing capitalism is not a sufficient condition for moving towards a sustainable world, and neither is an emphasis on reducing inequality and or arguing that capitalism needs to be replaced by rational economic planning or management. The challenge of creating environmentally sustainable production systems that do not require growth raises big issues related to how sustainability is defined, technology, the scale of production, what is produced (and not), how resources are allocated, the role of markets (which does not imply accepting capitalism), the role of finance (if any), the relations and organisation of work, living standards, income distribution, and many more questions, including how decisions are made on these questions and by whom. As the mode of production is fundamental to the social relations of a society, the technical, social, ethical, economic, environmental, and political issues that it raises all need to be considered together.

Second, although this may seem obvious, it is highly unlikely that the world will move towards adopting socialism at the global level, let alone via a global revolution. Apart from the fact that socialist ideology has been in retreat for much of the past fifty years, the highly fragmented and geopolitical nature of the global order makes it extremely difficult to convert the whole world, or even all the major countries, to socialism, and certainly not all at once. Moreover, it is hard to imagine what a global socialist order or system would (have to) look like, even if the whole world would choose to, or be forced into accepting, the creation of such an order. The idea of developing a global economic system that addresses all the questions referred to above (and more), and of adopting an economic plan that sets out the goals, objectives, and targets for each country or (geographical) region in the world, is likely to sprout a rationalistic, technocratic, social, and political nightmare. Even or especially if such efforts were to be assisted by artificial intelligence (AI) they are bound to lead to dystopia. Realistically, democratic socialism is only feasible at the national level as states remain vitally important for meeting the needs and demands of people, and for doing so in more or less democratic ways.

Third, to the extent that socialist ideology has been built on the assumption that socialism can only be achieved once a society has developed a substantial industry, and concomitantly an industrial workforce that provides the social (class) basis for bringing about change towards a socialist society, it can be regarded as being out of line with environmental imperatives. However, contrary to Marx’s expectations, the first socialist revolution occurred in a predominantly agricultural society (Russia), not in an advanced industrial society. This feat was repeated in all other countries that made the switch to socialism based on the efforts of home-based socio-political movements (rather than imposed by the Soviet Union, as in Eastern Europe), including Cuba, Vietnam, and several African countries. It appears, therefore, that being an

advanced industrial society has not been, in reality, a requirement for establishing a socialist economic system. Nonetheless, as illustrated by the Soviet Union and socialist China, the development of industry was seen as an essential priority to unlock the productive forces of these countries, and as a basis for achieving real socialism (or communism) at a later stage. Arguably, therefore, from a socialist perspective, the development of an industrial production system marks a transitional stage and may no longer be necessary once the industrial forces have reached a certain (sufficient) level. But this assumes that, somehow, the further expansion of industry can be brought to a halt which, as argued in Chapter 6, is counter to the logic of an industrial system.

Whether or to what extent an industrial production system can be transformed so that it loses its inherent expansionist logic and becomes fully or mostly ecologically rational as well as socially desirable (in terms of production relations and work conditions) is a big question facing both capitalist and socialist economic systems. This question also casts doubt on the possibility of greening socialist economic systems since they have become heavily dependent on industrial production (like most non-socialist countries in the world). Simply combining a socialist ideology with a pro-environmental or green stance is not a sufficient basis for creating a sustainable political-economic system. To achieve the latter, socialist economic systems will need to be based on an alternative (non- or post-) industrial production and consumption system that will significantly *reduce in absolute terms* the material and ecological footprint of existing systems and the world as a whole. Again, one would think that, in principle, designing, adopting, and implementing such an approach is more compatible with a rational and planned socialist approach than with capitalist rationality. However, a planning approach based on scientific rationality, even if circumscribed by socialist and environmental or ecological principles, may not lead to the kind of societies and world that most people want to live in. To achieve the latter, one ingredient that is missing and that needs to be added to the mix is democracy.

Conclusion

To summarise, although theoretically or ideologically most of the tenets or principles of socialism can be regarded as compatible with or even conducive to integrating environmental concerns, actual socialist systems have been prevented from doing so (effectively) because of a combination of factors. Foremost among these was their commitment to economic growth and industrialisation, both of which are inherently incompatible with long-term environmental sustainability. Moreover, in the Soviet Union, the concentration of power (including economic power) in relatively few hands made it possible for a new and privileged new ruling class to emerge that had a personal stake in continued economic growth and industrial development while ignoring environmental and human costs. Although in socialist (pre-1980s) China, no such a privileged elite emerged, the hierarchical structure of political-economic power, combined with an official doctrine aimed at the “conquest of nature”, left little if any room for environmental concerns to be given attention, let alone weight, by the regime. In addition, the absence of democracy has made it very difficult for more or less autonomous environmental advocates and organisations to gain the influence and power needed to give consequence to the largely symbolic environmental policies

and institutions that both the Soviet Union and China adopted, and/or to push for further meaningful institutional reforms aimed at protecting the environment. Although Cuba is one of the few socialist countries that has moved towards the adoption of more sustainable environmental practices, this occurred more out of necessity than because of a strong domestic environmental movement, and the regime has remained committed to an export-led model of economic development based on local resources. Increasingly under pressure from the demands for a higher material standard of living and the introduction of liberal democracy, the future of Cuba as a socialist country, let alone a country with a truly sustainable socialist economic system combined with a more meaningful democratic system, is in doubt.

Notwithstanding the experiences in actual socialist countries discussed in this chapter, at the theoretical or ideological level, there is no reason why socialism would be inherently incompatible with the approach to environmental integration described in Chapter 1. Rather, it seems, the principles are not only compatible with but appear more conducive to giving a high priority to environmental protection, certainly compared with the key tenets and characteristics of capitalism. In this respect, socialism as an ideology is far from a spent force when it comes to offering ideas on what can be considered desirable and sustainable societies, in contrast to (neoliberal) capitalist ideology, which has nothing to offer on this front. The main reasons why the environment has not been incorporated into the practice of actual socialist systems lie, first, in the overriding importance that they assigned to industrially based economic growth and the absence of democratic institutions that might have enabled the incorporation of environmental concerns and demands in the design of economic institutions (including the production system) from the very beginning. However, seen in the context of the time (the pre-environmental era) and the fact that the survival of socialist regimes has always been under threat from hostile foreign governments and capitalist interests and ideologies, it is not surprising that democratic socialism never got off the ground.

To conclude, for really existing socialistic systems to capitalise on the environmentally conducive nature of socialist principles they will need to renounce their commitment to economic growth and industrialism *and* adopt democracy, including in the economic sphere, to overcome or eliminate obstacles to environmental advocacy and integration.

Chapter 9 – Mixed Economic Systems and the Environment

Introduction

In Chapter 7, it was concluded that capitalism is inherently incompatible with long-term environmental protection. Chapter 8 concluded that, at a theoretical or ideological level, there are no reasons for thinking that socialism, as defined in that chapter, is inherently or logically incompatible with environmental imperatives. However, in practice, most countries which have (had) socialist economic systems have not incorporated environmental concerns into their political-economic system and have had abysmal environmental records. While plausible reasons can be identified for why this has been the case, it remains to be seen whether democratic socialism could provide a realistic alternative as a sustainable political-economic system, in large part because, thus far, no such system has been in existence (at a national level). Moreover, whether democratic socialism can or will be adopted even at the level of any particular country, let alone many or most countries in the world, remains a big question, despite growing support for democratic socialism, even in the United States.

For this reason, it is important to look at the possibility of other alternatives to capitalism and socialism that could provide a basis for advancing sustainability. In that context, it seems imperative to look at two types of political-economic systems that also have had actual counterparts and that are often held up as models for moving the world towards sustainability. Both can be referred to as mixed economic systems in the sense that they combine elements of capitalism and socialism. The first type (democratic-mixed) is commonly referred to as social democracy, the second type (authoritarian-mixed) has no label but is often associated with (post-Mao) China.

Social democracy has often been credited with bringing about an unprecedented improvement in the living standards and social welfare of most people in predominantly Western societies in the three decades following WWII. Post-Mao China (from the end of the 1970s) is similarly credited with lifting millions of people out of poverty. Moreover, both systems are often held up as models of successful economic systems that are green or can be greened, and thus able to achieve two important goals: economic prosperity and environmental protection. The main difference between the two types of system lies in the political realm: an adherence to liberal-democratic principles in the case of social-democratic systems, and the alleged superiority of an authoritarian political system in terms of its ability to adopt the necessary policies and measures to achieve the transition towards sustainability.

Arguably, a key issue in this contest is whether either or both of these systems have been able to transform capitalism in a way that it is no longer inherently incompatible with long-term environmental protection. If capitalism is inherently incompatible with environmental imperatives, as I have argued, the economic systems under consideration here must have abandoned or changed some or all of its key features so that infinite economic growth is no longer an imperative. Arguably, this might have been (or be) achieved by the adoption of (some of) the features of a socialist system (such as rational planning), that have made that capitalist imperative redundant and unnecessary. Moreover, to be able to claim that it is environmentally

sustainable, such a hybrid system must *also* have fundamentally altered the system of *industrial production* that is inherently unsustainable.

Perhaps not surprisingly, the analysis of these two alternative systems in this chapter demonstrates that both hybrid systems have fundamental shortcomings that make such claims unwarranted. As such, while realistic, they are not models for a sustainable political-economic system.

Social democracy & the environment

As noted above, after WWII, capitalism in many Western countries took on the nature of a mixed economic system in which public ownership was extended to a range of industries as well as most infrastructural assets. Moreover, governments adopted a form of planning (indicative planning) in their efforts to stimulate economic growth and the development of science and technology, increase the standard of living and enhance social protection and well-being (welfare), and to expand opportunities for education and employment. In general terms, such measures were said to be aimed at the creation of better societies. The management of the economy by governments, in consultation with employers and trade unions, was, following Keynesian teachings, widely regarded as legitimate or even necessary to “tame” capitalism and to prevent a repeat of the (1929) economic crisis that caused the social, economic, and political disintegration during the 1930s (notably in Germany) that had led to WWII, as well as to increase economic prosperity.

The label commonly used to refer to these political-economic regimes is social-democracy. Social-democracies combine a liberal-democratic political system and a mixed economic system with variable degrees of public ownership and economic steering. It has been argued that the ideology associated with social democracy assigns primacy to politics and community over economics, rejecting unbridled capitalism but also Marxism.¹ As such, it has been sometimes portrayed as a “Third Way” approach² between economic liberalism and socialism based on the claim that capitalism can be reformed to serve broader interests rather than those of the few, including a more egalitarian society, full employment and job security, rising standards of living and social welfare. As Berman notes, social democracy “creates a capitalism tempered and limited by political power and often made subservient to the needs of

¹ Berman, Sheri (2006), *The Primacy of Politics: Social Democracy and the Making of Europe's Twentieth Century*. Cambridge: Cambridge University Press.

² It must be noted that this label has become more closely associated with Tony Blair's and Anthony Giddens's views of the future of social democracy based on an acceptance of neoliberal principles and reality. Giddens, Anthony (1988), *The Third Way. The Renewal of Social Democracy*. Cambridge: Polity Press; Clift, Ben (2002), “Social Democracy and Globalization: The Cases of France and the UK”, *Government and Opposition*, Vol.37, No.4, 466-500. Historically and more broadly, the concept depicts the idea that *socialist* ideals can be achieved via a non-revolutionary way within a (liberal-) democratic context, a view that was most effectively promulgated by Edward Bernstein. Steger, Manfred B. (1997), *The Quest for Evolutionary Socialism. Eduard Bernstein and Social Democracy*. Cambridge: Cambridge University Press; Berman, Sheri, *The Primacy of Politics: Social Democracy and the Making of Europe's Twentieth Century*.

society.”³

In this context, it is important to distinguish between social-democratic and democratic-socialist regimes, especially as these labels are often used interchangeably. Based on the classification criteria put forward in Chapter 6, a democratic-socialist regime combines a (more or less) democratic political system with a socialist economic system. In a democratic-socialist regime most of the means of production are owned publicly/collectively rather than privately, governments play a dominant role in the management of the economy through central planning and are formally committed to socialism and to reducing inequality, while the political system is (more or less) democratic. While social democratic regimes may share a commitment to socialist goals or ideals, they seek to advance these within a capitalist framework. Thus, they do not reject capitalism and assume that the goals of socialism can be advanced within liberal-democratic capitalist systems.

Many Western European countries before the rise of neoliberalism in the 1970s and 1980s, including the Scandinavian countries, Germany, the Netherlands, France, and Italy, fell into this category, and so did Australia, New Zealand, Canada and arguably even the United States. However, it must be emphasised that despite the more or less extensive public ownership in these countries, most of their economies (means of production, finance) remained in private hands. Moreover, social democratic parties in many of these countries gave up on the goal or commitment to create a socialist system. In fact, following the revisionist turn in socialism that began in the 1890s but that became mainstream after WWII when the social-democratic parties in many European countries forged (coalition) governments, social-democratic parties officially dropped their historical commitment to Marxism, communism and/or even to socialism and adopted the general aim of improving societies within a capitalist system.⁴ In line with this, they also continued to accept that most economic decision-making (such as regarding production and investments) was to remain in the hands of “private” actors and “the market” rather than based on a central plan. Thus, while a significant part of the means of production in these countries was publicly (state-) owned, and governments played a major role in the management of the economic systems, these political-economic regimes were not (democratic) socialist.

Social-democratic regimes are commonly regarded as having been relatively more receptive to integrating environmental concerns than more authoritarian, socialist and more purely free market capitalist regimes. As discussed in Chapter 2 some of these regimes, including Sweden and the Netherlands, have often been referred to as environmental leaders. However, in large part, this has been attributed to the cooperative or consensual style of policy-making that is seen as characteristic of corporatist regimes.⁵ Such regimes have developed a tradition of cooperation between government, business, and labour in the management of the economy,

³ Berman, Sheri, *The Primacy of Politics: Social Democracy and the Making of Europe's Twentieth Century*, 2.

⁴ Ibid.

⁵ Lijphart, Arend and Markus M. L. Crepaz (1991), “Corporatism and Consensus Democracy in Eighteen Countries: Conceptual and Empirical Linkages”; Lijphart, Arend, *Patterns of Democracy*, 275-287.

notably regarding wages and the control of inflation. It has been argued that this policy style has been conducive to incorporating environmental advocates into public policy development, giving them a say in particular in decisions that are considered to have a major environmental impact.⁶ Therefore, the superior environmental performance attributed to countries like Sweden and the Netherlands should perhaps be attributed more to their inclusive and consensual (or corporatist) policy style or tradition than to the influence of social democracy, although in some countries corporatism and social democracy were strongly intertwined. But, as Jahn's research found, the electoral strength of social democratic parties correlated with higher environmental performance only when they were in opposition, not when they were in government.⁷

Thus, as argued in Chapter 2, it is questionable to what extent social democracies have seriously integrated environmental imperatives into their policies and institutions as well as into the overarching cognitive frameworks or worldviews that gave direction to their policies.⁸ The participation of environmental advocates in corporatist regimes (which are not necessarily dominated by social democrats) requires a willingness to compromise and to work within the prevailing system and political-economic paradigm. This creates the risk that the participating environmental advocates and groups lose their independence and their critical edge.⁹ On the other hand, groups that are perceived as radical and irresponsible are often excluded from such corporatist institutions and processes, condemning them to continue to operate mainly from outside the formal political system, thus limiting their ability to influence government policies and decisions affecting the environment. Both courses and risks create an ongoing dilemma for environmental advocates and for that matter all advocates who aspire to fundamental political-economic change which is by definition very difficult to achieve. In practice, in many liberal democratic regimes, this dilemma is "resolved" by the diversity within the environmental movement, with some groups willing to compromise to achieve (very) modest gains while other, more radical groups, choose to remain independent and keep their hands clean. Thus, in many cases, both strategies coexist.

More fundamentally, it is very doubtful that even if environmental advocates had been given a greater say in social-democratic regimes, they would have been able to

⁶ Crepaz, Markus M.L. (1995), "Explaining National Variations of Air Pollution Levels: Political Institutions and Their Impact on Environmental Policy-Making"; Scruggs, Lyle (2001), "Is There Really a Link between Neo-Corporatism and Environmental Performance? Updated Evidence and New Data for the 1980s and 1990s"; Jahn, Detlef (1998), "Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries".

⁷ Jahn, Detlef (1998), "Environmental Performance and Policy Regimes: Explaining Variations in 18 OECD-Countries", 123.

⁸ Interestingly, Berman's sympathetic account of social democracy, written in 2006, totally ignores environmental issues and the need for social democratic parties to green themselves.

⁹ Dryzek, John S., et al., *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany, and Norway*. On the trend towards the de-radicalisation of Green Parties participating in governments, see Rihoux, Benoît and Wolfgang Rüdig (2006), "Analyzing Greens in Power: Setting the Agenda"; Bomberg, Elizabeth and Neil Carter (2006), "The Greens in Brussels: Shaping or Shaped?".

address the root causes of environmental pressures and problems. The main priorities of social democracies were to promote economic growth, full employment, social welfare, and to raise the standard of living of the working class. In these respects, they have indeed been very successful in the decades following WWII. The high economic growth rates achieved in most Western European countries after 1945 until the early 1970s¹⁰ provided a basis for low unemployment levels, rising wages, improved social welfare and higher living standards. But the higher levels of production and consumption also led to increased environmental pressures and problems that became increasingly apparent in the late 1960s and early 1970s, and which gave rise to the first wave of environmentalism. However, these rising problems did not cause governments to assign a lower priority to economic growth. If anything, the economic stagnation that arose in the 1970s made the restoration of higher growth levels even more important. Whatever the intentions behind the Keynesian model, limiting let alone putting an end to economic growth for environmental reasons was not one of them. As soon as the limits to growth discourse arose on the global agenda in the early 1970s, governments have consistently denied the incompatibility between economic growth and environmental protection.

Hence, notwithstanding the seemingly promising moves towards environmental integration made by social democratic and corporatist regimes during the 1970s and 1980s (such as the adoption of green planning), the fundamental contradiction between economic and environmental imperatives remained. The capitalist economic systems of social democracies, despite their mixed ownership feature, were fundamentally left untouched. Government-owned businesses continued to operate within a predominantly capitalist system, and government policies were aimed foremost at making that system run more smoothly (mitigating economic downturns, keeping unemployment low and placating the labour movement with rising wages). This does not diminish the positive socio-economic achievements of social democracies. Social democratic policies did bring about a significant decline in income inequality in the 1960s and 1970s, albeit more so in some countries (notably Sweden) than others.¹¹ Housing conditions, health care and education opportunities for many (notably working-class) people improved significantly. In many countries, wealth inequality decreased between 1910 and 1970, in large part because of the destruction of capital during both world wars, but it bottomed out in the 1970s.¹² But the self-perpetuating nature of economic inequality and the mechanisms by which it reproduces itself were not rooted out in any liberal-democratic country with a mixed economy. As such, these regimes can be said to have saved capitalism from its demise which seemed not unlikely in the wake of the major economic crisis that began in 1929 and that resulted in World War II.

¹⁰ Gill, Indermit S. and Martin Raiser (2012), *Golden Growth. Restoring the Luster of the European Economic Model. Overview* Washington: The World Bank, 3; Crafts, Nicholas (2003), *Fifty Years of Economic Growth in Western Europe: No Longer Catching up but Falling Behind?* Stanford, CA: Stanford Institute for Economic Policy Research, Table 1.

¹¹ Piketty, Thomas, *Capital in the Twenty-First Century*, Loc 5579.

¹² *Ibid.*, Chapter 10.

Anyway, the question to what extent really existing social democracies offer more promising prospects for meaningful environmental integration than other regimes to a large extent has been overtaken by developments. During the 1970s, governments were confronted with growing inflation and sluggish economic growth (stagflation). In response, many if not most liberal democracies can be said to have adopted a purer form of capitalism in which government ownership of the means of production (including infrastructure) was significantly diminished through privatisation and changes in government management and regulation in favour of decision-making by the free market. Responsibility for monetary policy, a keystone area of neoliberal policies, was taken out of government hands and assigned to independent central banks. This neoliberal turn, however, was not simply a rational response to a growing economic problem. Rather, it was inspired and driven by an ideological and political agenda to push through political-economic reforms that would tilt the institutions of the state ("once and for all") towards capitalist interests while gutting the power of the labour movement.¹³ Policies were adopted that severely weakened the power of trade unions and created greater "labour market flexibility" with adverse effects on job security, working conditions and wages. Tax reforms were introduced that favoured the owners of capital (the wealthy) and the higher incomes, worsening inequality in wealth and income.¹⁴ Although the social welfare policies and institutions (including free education and health care) created by social democratic governments were not totally dismantled, they were severely clipped. The neoliberal reforms were nothing but revolutionary and tilted the political-economic battlefield, including that of the state, so much in favour of the owners of capital that, from a Marxist perspective, this amounted to a major victory for capital in its war on labour.

Although structural socio-economic changes, notably the expansion of the (private) service industry and the decline of large-scale industries may have contributed to a weakening of the (working class) support basis of social democracy,¹⁵ social democratic parties and governments appeared to be unable or even unwilling to block these developments. In several countries, including Sweden, New Zealand, and the Netherlands, these parties have been instrumental in initiating and pushing through neoliberal reforms,¹⁶ even though these served foremost the (accumulation and profit maximising) imperatives of capitalism and rolled back the power of the labour movement. Many if not most social democratic parties have come to accept

¹³ MacLean, Nancy, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America*; Harvey, David, *A Brief History of Neoliberalism*.

¹⁴ Piketty, Thomas, *Capital in the Twenty-First Century*, Chapters 9 and 10.

¹⁵ Pontusson, J. (1995), "Explaining the Decline of Europe in Social Democracy", *World Politics*, Vol.47, 495-533.

¹⁶ Steinmo, Sven (2005), "The Evolution of the Swedish Model", in S. Soederberg, et al. (eds.), *Internalizing Globalization: The Rise of Neoliberalism and the Decline of National Varieties of Capitalism*, 149-164; Mitchell, William and Thomas Fazi (2017, e-book ed.), *Reclaiming the State: A Progressive Vision of Sovereignty for a Post-Neoliberal World*. London: Pluto Press, 6-7; Kelsey, Jane (1995, 1997), *The New Zealand Experiment: A World Model for Structural Adjustment?* Auckland: Auckland University Press; de Jong, Alex (2013), "The Netherlands: Neoliberal Dreams in Times of Austerity", *New Politics*. Vol.XIV, No.2, https://newpol.org/issue_post/netherlands-neoliberal-dreams-times-austerity/.

neoliberalism and its prescriptions, although governments have differed in the ways and extent to which they have continued to pursue traditional social democratic principles, including a commitment to greater equality (of outcomes) and full employment, and continued to assign a role to the state in pursuing these goals.¹⁷ But where governments tried to resist such policies and/or continued to follow the Keynesian approach, as in France, they were virtually forced into adopting neoliberal policies (austerity, "labour market flexibility") by international market forces.¹⁸ To the extent that governments (including social democratic governments) accepted the need for, or desirability of, opening up the economy to international competition to promote economic growth, and have become heavily dependent on exports, imports and foreign investment, their ability to pursue independent policies has been more or less diminished.¹⁹

Concurrently, the acceptance of neoliberal prescriptions implied that social democrats also bought into the idea that governments should take a less prescriptive approach to address environmental problems and rely more on the use of "market instruments" and voluntary agreements. For instance, as discussed in Chapter 2, the green planning system of the Netherlands, once held up as a model to other countries, was quietly abandoned in favour of an approach in which businesses were granted responsibility for setting their environmental targets, while the Ministry for the Environment (VROM) was dismantled. Euphemistically, this was referred to by Dutch governments as a "lowering of environmental ambitions", largely for economic reasons.²⁰ In Sweden, political commitment to environmental integration was weakened with the adoption of neoliberal policies based on voluntary agreements, privatisation and market-based policies inspired by the "Dutch governance model".²¹ While these two countries have often been held up as environmental leaders, and arguably took the environmental integration challenge more seriously than many others, their efforts and performance on this front, as pointed out in Chapter 2, suffered a major setback since the neoliberal turn taken by their governments.

The neoliberal turn taken by social democratic parties and governments led to a loss of their credibility as advocates of political-economic reform aimed at the creation of better and more egalitarian societies. Not surprisingly, in many countries, it led to a crumbling of their social, political and electoral support basis after 2000, albeit more

¹⁷ Clift, Ben (2002), "Social Democracy and Globalization: The Cases of France and the UK"; Merkel, Wolfgang, *et al.* (2008), *Social Democracy in Power. The Capacity to Reform*. London and New York: Routledge.

¹⁸ Chandrasekhar, C. P. (1982), "Social Democracy and the Capitalist Crisis: Mitterand's New Austerity Drive", *Social Scientist*, Vol.10, No.9, 40-43.

¹⁹ The susceptibility of Swedish governments to neoliberal policies was also increased by the heavy dependence of the economy on big "private" corporations, whose interests required boosting international competitiveness in the face of growing competition from Japan and other "Asian tigers". See Steinmo, Sven (2010), *The Evolution of Modern States: Sweden, Japan, and the United States*. Cambridge, U.K: Cambridge University Press.

²⁰ Hoogervorst, N. J. P. and F. J. Dietz, *Ambitions in Het Nederlandse Milieubeleid: Toen En Nu*.

²¹ Persson, Åsa, *et al.* (2016), "Institutionalization or Wither Away? Twenty-Five Years of Environmental Policy Integration under Shifting Governance Models in Sweden".

so in some countries, even to the point where social democratic parties have become politically marginal and ran the risk of annihilation, like in the Netherlands and France.²² Although views differ on whether social democracy is still alive (if not well),²³ it is no exaggeration to say that social democracy as an ideology and programme aimed at reforming (rather than abolishing) capitalism to create a more egalitarian society that puts the well-being of people first, is in crisis.²⁴ While analysts may disagree on the factors that have contributed to this decline, with some emphasising external factors like social changes (a shrinking working class) and/or material factors (economic constraints imposed by globalisation), and others emphasising internal ideological and institutional factors (linked to choices made by social democratic parties themselves),²⁵ it remains doubtful that social democracy can make a come-

²² The Dutch Labour Party (PvdA) began to adopt neoliberal policies during the 1990s, but it was only after the departure of its charismatic leader, Wim Kok, in 2002, that the party, which had commonly won between 25 and 30% of the parliamentary vote, began to slip in popularity. In the elections of 2017, its share of the vote dropped to below 6%, and it remained at that level in 2021. The slide in electoral support for the Swedish and German Social Democrats has been less dramatic, but in Sweden, in 2018, it reached 28% of the vote, the lowest level since the early 20th century, and in Germany, in 2017, it was less than half the level received during the heydays in the 1970s. Wikipedia (2021), Swedish Social Democratic Party, https://en.wikipedia.org/wiki/Swedish_Social_Democratic_Party (Accessed: 7 April 2021); Wikipedia (2021), Social Democratic Party of Germany, https://en.wikipedia.org/wiki/Social_Democratic_Party_of_Germany (Accessed: 7 April 2021); Wikipedia (2021), Labour Party (Netherlands), [https://en.wikipedia.org/wiki/Labour_Party_\(Netherlands\)](https://en.wikipedia.org/wiki/Labour_Party_(Netherlands)) (Accessed: 7 April 2021); Bandau, Frank (2019), "Was Erklärt Die Krise Der Sozialdemokratie? Ein Literaturüberblick", *Politische Vierteljahresschrift*, Vol.60, 587-609. Loxbo *et al.* link the decline in electoral support for social democratic parties to the level of generosity and security provided by a welfare state, with lower levels making parties more vulnerable. Loxbo, Karl, *et al.* (2019), "The Decline of Western European Social Democracy: Exploring the Transformed Link between Welfare State Generosity and the Electoral Strength of Social Democratic Parties, 1975-2014", *Party Politics*, Vol.20, No.10, 1-12.

²³ Consider, for instance, the different takes on Sweden on this point. Steinmo takes the view that the Swedes still adhere to egalitarian values and the welfare state, Lindvall and Sebring argue that corporatism has been seriously eroded, while Therborn notes that Swedish politics and society have changed fundamentally, that the welfare state is being dismantled and that wealth inequality in Sweden has become even greater than in the United States. Steinmo, Sven, "The Evolution of the Swedish Model"; Lindvall, Johannes and Joakim Sebring (2005), "Policy Reform and the Decline of Corporatism in Sweden", *West European Politics*, Vol.28, No.5, 1057-1074; Therborn, Göran (2017), "The "People's Home" Is Falling Down, Time to Update Your View of Sweden", *Sociologisk forskning*, Vol.54, No.4, 275-278.

²⁴ Bandau, Frank (2019), "Was Erklärt Die Krise Der Sozialdemokratie? Ein Literaturüberblick"; Ryner, J. Magnus (1999), "Neoliberal Globalization and the Crisis of Swedish Social Democracy", *Economic and Industrial Democracy*, Vol.20, 39-79.

²⁵ For an emphasis on the importance of the former factors, see Pontusson, J. (1995), "Explaining the Decline of Europe in Social Democracy". And for a leading proponent of the latter view, see Kitschelt, Herbert (1994), *The Transformation of European Social Democracy*. Cambridge: Cambridge University Press. Benedetto, Hix and Mastroiocco link the decline foremost to two factors: the decline of industry and support from industrial workers, and public-sector spending. Benedetto, Giacomo, *et al.* (2020), "The Rise and Fall of Social Democracy 1918 - 2017", *American Political Science Review*, Vol.114, No.3, 928-939. For a broader discussion of the literature on this

back as a credible alternative to neoliberalism, despite the efforts of social democrats to revive Keynesianism with Green New Deal programmes.²⁶

The decline or demise of social democracy and its replacement by neoliberal political-economic regimes demonstrates the limitations and vulnerability of efforts to reform capitalism. During the first two decades after WWII, it appeared that there was a virtual consensus about the need for governments to play a major role in economic management, and there was widely shared optimism that major economic crises could be avoided and belonged to the past. Government ownership of key sectors and industries was broadly accepted as rational. There was a growing belief that economic policies could and should serve the public good and interest and that it was desirable to extend democracy into the economic realm by increasing worker participation and industrial democracy. The need for a socialist revolution seemed less than ever before as the ideal of a better and more egalitarian society was considered to be well on its way to being realised through a path of gradual reform. Yet, what was overlooked in these reveries was that the fundamental contradictions of capitalism, its dependence on continuous expansion, its competitive nature and need to prioritise profit and squeeze the costs (and power) of labour, and its proneness to crises, were not eliminated by giving governments a greater role in its management. These contradictions were masked by the favourable conditions for economic growth that resulted from the large-scale destruction of capital by the economic crisis of the 1930s and WWII, but they were bound to reappear. When they did, during the 1970s, they provided an opportunity for the capitalist class, which had been on the defensive during the decades following WWII, to regain its power and grip on these political-economic regimes, in large part by boosting, financing, and deploying the cognitive power of neoliberal advocates.²⁷ Social democracy became the subject of reform based on a redefinition of capitalist imperatives.

These developments offer three crucial lessons:

First, efforts aimed at reforming capitalism for social, environmental and/or any other public interest purposes are doomed to fail as capitalism, with its inherent contradictions and imperatives, and its capitalist class, cannot be reformed away.

Second, linked to this, as long as social-democratic political-economic systems continue to operate in, and remain heavily dependent on, an international or global economic system (for imports and exports as well as capital), their policies (and their effectiveness) will be severely constrained and compromised ("disciplined") by international market forces and the capitalist competition imperative.

Third, it is possible to fundamentally change a political-economic regime through powerful and well-orchestrated agency. Neither the creation and rise of social democracies nor their substitution by neoliberal capitalist political-economic regimes

topic, see Bandau, Frank (2019), "Was Erklärt Die Krise Der Sozialdemokratie? Ein Literaturüberblick".

²⁶ Aşıcı, Ahmet Atıl and Zeynep Bünül (2012), "Green New Deal: A Green Way out of the Crisis?"; Willis, Rebecca, *Green New Deal: The UK Edition*.

²⁷ MacLean, Nancy, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America*; Mayer, Jane, *Dark Money. The Hidden History of the Billionaires Behind the Rise of the Radical Right*; Harvey, David, *A Brief History of Neoliberalism*.

with less democratic features did just happen. They were the result of deliberate, purposeful, and powerful agency that was able to have its way by mobilising its power resources *and* because of conditions that created favourable opportunities. A priori, there is no reason why capitalism could not be abolished and replaced by a different economic system through a similar exercise of agency when the time is ripe. These lessons must be heeded when thinking about the fundamental change that will be required to advance environmental integration.

An authoritarian hybrid: China after Mao

After Mao died in 1976 and a subsequent power struggle, Deng Xiaoping emerged as the de facto supreme leader in 1978, marking the beginning of a new era in China's development. Deng set China on a path towards the gradual introduction of economic reforms involving market liberalisation and privatisation. Beginning in rural areas, farmers were allowed to sell crops above production quota for personal gain, while local collectively owned township and village enterprises (TVEs) were enticed with market incentives to increase production, especially of light industrial goods.²⁸ The approach proved very effective in boosting economic growth, on average by 8.4% between 1978 and 1992.²⁹ Its success opened the door for further reforms involving the part-privatisation of Chinese companies and for foreign investments by many multinationals attracted by cheap Chinese labour, integrating China into increasingly global production chains and making it the largest recipient of foreign direct investment in the so-called developing world.³⁰ Although questions have been raised about the precision and reliability of data on China's reported growth rate of close to 10% over 30 years,³¹ it is widely agreed to have been impressive. Between 1978 and 2015, the real consumption of rural and urban Chinese households is said to have increased, on average, 16 times³² and 5 times for the bottom 50%.³³ The World Bank claims that, over the same period, some 850 million people have lifted themselves out of poverty.³⁴

However, it has also been noted that these developments have been accompanied by a significant increase in inequality in both income and wealth, making

²⁸ Yueh, Linda (2011), *Enterprising China: Business, Economic, and Legal Developments since 1979*. Oxford, UK: Oxford University Press, 161-177.

²⁹ Ryan, Megan and Christopher Flavin, "Facing China's Limits", 116.

³⁰ Yueh, Linda, *Enterprising China: Business, Economic, and Legal Developments since 1979*, 26; Harvey, David, *A Brief History of Neoliberalism*, 135.

³¹ Wikipedia (2019), Economy of China, https://en.wikipedia.org/wiki/Economy_of_China#GDP_by_Administrative_Division (Accessed: 19 November 2019); World Bank, The (2019), The World Bank in China, <https://www.worldbank.org/en/country/china/overview> (Accessed: 19 November 2019).

³² Fang, Cai, *et al.* (2018), "40 Years of China's Reform and Development: How Reform Captured China's Demographic Dividend", in R. Garnaut, *et al.* (eds.), *China's 40 Years of Reform and Development 1978 - 2018*, 5-24, 17.

³³ Piketty, Thomas, *et al.* (2018), *Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015 HKUST Working Paper Series*. St. Louis HKUST Institute for Emerging Market Studies, 31.

³⁴ World Bank, The, *The World Bank in China*.

China one of the most unequal societies in the world. Piketty notes that the top 10% income share rose from 27% to 41% of national income between 1978 and 2015, while the bottom 50% share dropped from 27% to 15%. Wealth inequality is even greater as "67% is owned by the top 10%, and the top 10,653 richest adults (0.001%) own 5.6% of total wealth, about as much as the bottom 50% (531 million adults)."³⁵ In 2021, China had 698 billionaires, second only to the United States with 724.³⁶ Yet, it has been argued that the rise in living standards does not seem to have led to a decline in feelings of "relative deprivation" among many Chinese.³⁷ Also, the state's social welfare system was largely dismantled and what remained was piecemeal and regressive, and workers were practically denied any protection.³⁸ Many analysts have noted that the extent of inequality in China, along with the level of corruption that has fuelled it, has given rise to so much public concern that it threatens to undermine the legitimacy of the regime that officially still claims to be committed to socialism.³⁹

These claims can be regarded as hollow rhetoric. Labour, land and other natural resources have been commodified largely to the benefit of a new class or elite that includes "red capitalists" and state and party officials (at the local and the national level) in what has been referred to as a form of "kinship capitalism", "network capitalism", "power-elite capitalism" or "crony communism".⁴⁰ Despite the government's formal commitment to socialism, as noted above, it allowed or even promoted the emergence of a class of super-wealthy and a sharp rise in inequality in income and wealth, in conflict with socialist principles. It has been argued that the Chinese economy is "functionally" capitalist and that "the point has long since passed where China can be considered to be functionally socialist."⁴¹ Hence, it is highly debatable (and in my view unjustified) to still call China a socialist country. As the dominant Chinese ideology guiding the economic system is certainly not anti-

³⁵ Piketty, Thomas, *et al.*, *Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015*, 30-32.

³⁶ Dolan, Kerry A., *et al.* (2022), Forbes World's Billionaires List. The Richest in 2021, Forbes, <https://www.forbes.com/billionaires/#34b4aba8251c> (Accessed: 18 January 2022).

³⁷ Knight, John (2013), "Inequality in China: An Overview", *The World Bank Research Observer*, Vol.29, No.1, 1-19.

³⁸ Smith, Richard A. (2015), "China's Communist-Capitalist Ecological Apocalypse", 19-63; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 358; Paradise, James F. (2016), "The Role of "Parallel Institutions" in China's Growing Participation in Global Economic Governance", *Journal of Chinese Political Science*, Vol.21, No.2, 149-175, 169; Jacques, Martin (2009), *When China Rules the World: The End of the Western World and the Birth of a New Global Order*. New York: Allen Lane, 197-198.

³⁹ Jacques, Martin, *When China Rules the World: The End of the Western World and the Birth of a New Global Order*, 194-195; Shapiro, Judith, *China's Environmental Challenges*, Loc 1801; Peck, Jamie and Jun Zhang (2013), "A Variety of Capitalism ... with Chinese Characteristics?", *Journal of Economic Geography*, Vol.13, No.3, 357-396, 379-380; Smith, Richard A. (2015), "China's Communist-Capitalist Ecological Apocalypse", 49, 57-58; Knight, John (2013), "Inequality in China: An Overview"; Ni, Vincent (2021), "'Poverty Divides Us': Gap between Rich and Poor Poses Threat to China", *The Guardian*, 1 July.

⁴⁰ Peck, Jamie and Jun Zhang (2013), "A Variety of Capitalism ... with Chinese Characteristics?", 381-383.

⁴¹ *Ibid.*, 368-369.

capitalist, the CCP seems indifferent towards extreme inequality, and as production and consumption are no longer based on central planning but on “the market”, China clearly has departed from the three key principles of socialism identified in Chapter 8. The main reason why it is classified here as a hybrid economic system is that the Chinese state continues to formally own a significant proportion of the means of production and that the regime seems determined to retain control over the economy while relying on the capitalist sector (“market economy”) as a growth engine. In that respect, the Chinese regime shares similarities with the Keynesian regimes that prevailed in the Western world in the decades following WWII, emphasising the important role of the state in preventing or softening economic volatility and in promoting full employment, economic growth, and rising standards of living, but minus the commitment to reducing inequality, upholding (liberal) democracy, and without reliance on corporatism to keep the peace. Also, compared to Western governments in the Keynesian era, the Chinese government seems more determined and capable to retain ultimate control over the economy, as it still owns around 60% of the corporate sector, including strategic industries, and thus has more control over crucial investment decisions.⁴²

When it comes to the environmental consequences of China’s “economic miracle” these have been nothing but calamitous. The rapid rate and scale of development have come at the expense of all three dimensions of the environment (ecological, resource and human-modified). The scale and seriousness of China’s environmental problems have been extensively reported by many observers and analysts and need not be elaborated upon here.⁴³ But the huge scale of resource exploitation and use, industrialisation, and consumption, and the associated levels of pollution of air, water and soils and their adverse effects on human health, ecosystems, and biodiversity, have produced a state of the environment that is highly disconcerting. While many of these problems have been apparent for years, over time, the situation has only become worse. That the present course is unsustainable has been admitted by some Chinese officials. Already in 2005, a Vice-minister of China’s

⁴² Meyer, Marshall W. (2014), China’s Mixed-Ownership Enterprise Model: Can the State Let Go?, K@W Network, Wharton University of Pennsylvania, <https://knowledge.wharton.upenn.edu/article/will-chinas-mixed-ownership-enterprise-model-work/> (Accessed: 23 April 2019); Piketty, Thomas, *et al.*, *Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015*; Duncan, Andrew Allen (2015), *Semi-Private: Exploring the Deployment of Mixed-Ownership Enterprises in China’s Capitalism*. Doctor of Philosophy. Irvine: University of California; Yueh, Linda, *Enterprising China: Business, Economic, and Legal Developments since 1979*.

⁴³ For a few relatively recent sketches of the disastrous state of the Chinese environment, see Organisation for Economic Co-operation and Development (2007), *OECD Environmental Performance Reviews: China*. Paris: OECD; Shapiro, Judith, *China’s Environmental Challenges*; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*; Smith, Richard A. (2015), “China’s Communist-Capitalist Ecological Apocalypse”; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China’s Future*.

State Environmental Protection Agency stated that the “Chinese miracle will end soon because the environment can no longer keep pace”.⁴⁴

However, this view overlooks that China, like many other countries, increasingly makes up for the shortfall in its ability to provide for the insatiable wants (not just needs) of its population and economic system by exploiting and importing the resources of other countries. As the Chinese economy is expected to continue to grow, even if at a more modest rate of 4% or 5% per annum, the environmental repercussions are increasingly felt around the world. For one, it is already the largest emitter of greenhouse gases, and as it will continue to rely heavily on fossil fuels to meet its energy needs until at least 2030 or 2040, its emissions are also expected to increase until around that time.⁴⁵ In large part, this comes down to its dependence on coal. In 2016, coal provided close to 62% of the country’s energy use, and since 2011 China has consumed more coal than the rest of the world combined.⁴⁶ Still, in 2018, it started the construction of 28 GW of new coal-fired capacity. Although coal’s share in the energy mix is expected to decline to around 45% by 2040, coal consumption in absolute terms will still *increase* over the same period, albeit by different estimates.⁴⁷ In 2009, China became a net importer of coal. In 2017, it also became the largest importer of oil in the world, and this dependence on foreign sources is likely to increase to around 80% of its demand in 2040.⁴⁸ China is also a significant source of transboundary pollution and remains the world’s largest producer of ozone-depleting substances.⁴⁹ There are also growing concerns about the social and environmental impacts associated with China’s foreign investments in mineral and coal extraction, agriculture and forestry, primarily to meet its own demands, and the large infrastructural projects (notably related to the Belt and Road Initiative) that provide an outlet for the overcapacity that it has built up in that sector.⁵⁰ Given the global

⁴⁴ Quoted in Smith, Richard A. (2015), “China’s Communist-Capitalist Ecological Apocalypse”, 21.

⁴⁵ Climate Action Tracker (2019), China, <https://climateactiontracker.org/countries/china/> (Accessed: 27 November 2019); Flavin, Christopher and Gary Gardner (2006), “China, India and the New World Order”, in L. Starke (ed.) *State of the World 2006*, 3-23, 8-11; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*.

⁴⁶ China Power Team (2019), How Is China’s Energy Footprint Changing?, China Power, <https://chinapower.csis.org/energy-footprint/> (Accessed: 27 November 2019).

⁴⁷ International Energy Agency (IEA) (2019), *World Energy Outlook 2017: China*. Smith, Richard A. (2015), “China’s Communist-Capitalist Ecological Apocalypse”, 37.

⁴⁸ China Power Team, How Is China’s Energy Footprint Changing?

⁴⁹ Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: China*, 274-276, 292.

⁵⁰ Ray, Rebecca, et al. (2015), *China in Latin America: Lessons for South-South Cooperation and Sustainable Development* Boston: Global Economic Governance Initiative (CEGI) Boston University, Centre for Transformation Research (CENIT), Research Centre of the University of the Pacific (CIUP), Global Development and environment institute, Tufts University; Teese, Patrick (2018), Exploring the Environmental Repercussions of China’s Belt and Road Initiative, EESI (Environmental and Energy Study Institute), <https://www.eesi.org/articles/view/exploring-the-environmental-repercussions-of-chinas-belt-and-road-initiative> (Accessed: 27 November 2019); Watts, Jonathan (2019), “Belt and Road Summit Puts Spotlight on Chinese Coal Funding”, *The*

environmental impacts of China's economy, and its increasing dependence on the rest of the world to meet its demands, the future of China and that of the world are strongly intertwined.

Chinese governments have not been completely oblivious to the mounting environmental pressures and problems. Their existence has long been acknowledged and over time, the Chinese government has introduced a raft of institutions, policies, and actions to tackle them. In 1979, the Law for Environmental Protection was promulgated, as "the most comprehensive environmental protection law ever adopted in China".⁵¹ In 1986, an Environmental Protection Agency was established, which became the State Environmental Protection Agency in 1998 and was upgraded to a Ministry in 2008. Environmental protection was incorporated into the Constitution as early as 1978 and 1982.⁵² Environmental damage was criminalised in the mid-1990s and Environmental Impact Assessment (EIA), allowing citizens to participate in the assessment of major projects, was institutionalised in 2003.⁵³ As Shapiro noted: "China has a reputation for having some of the most thorough environmental laws in the world".⁵⁴ Moreover, China's Five-Year Planning (FYP) system has integrated increasingly ambitious environmental goals and targets, which could be seen as a move towards (internal and external) environmental policy integration.⁵⁵ This is also reflected in the adoption by the Chinese government of overarching concepts like the "harmonious society", "scientific development" and the "circular economy",⁵⁶ which are interpreted in ways akin to the notion of sustainable development in the sense that they combine social, economic and environmental concerns and goals.

Observers also often note China's record in the development of renewable energy as evidence of its commitment to and capacity for advancing sustainability. In 2005, China passed an ambitious renewable energy law and went on to become the world's biggest producer of wind turbines and solar panels.⁵⁷ However, although the share of renewable energy sources in the production of electricity increased to more than 25% in 2016, hydropower accounted for more than three-quarters of this, and for 19% of total electricity production. Wind energy contributed close to 4%, and solar (PV) energy for 1.2% of total production in 2016, and 1.84% in 2017.⁵⁸ In absolute

Guardian, 25 April; Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: China*, 302.

⁵¹ Jan, George P., "Environmental Protection in China", 74-75, 78.

⁵² Mao, Yu-shi (1997), "China", in M. Jänicke and H. Weidner (eds.), *National Environmental Policies. A Comparative Study of Capacity-Building*, 237-255, 246-247.

⁵³ Shapiro, Judith, *China's Environmental Challenges*, Loc 1355.

⁵⁴ *Ibid.*, Loc 1356.

⁵⁵ Jan, George P., "Environmental Protection in China", 76-77; Shapiro, Judith, *China's Environmental Challenges*, Loc 1320.

⁵⁶ Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: China*, 15; Yuan, Zengwei, et al. (2006), "The Circular Economy: A New Development Strategy in China", *Journal of Industrial Ecology*, Vol.10, No.1-2, 4-8.

⁵⁷ Flavin, Christopher and Gary Gardner, "China, India and the New World Order", 11; China Power Team, *How Is China's Energy Footprint Changing?*

⁵⁸ Wikipedia (2019), *Renewable Energy in China*, https://en.wikipedia.org/wiki/Renewable_energy_in_China (Accessed: 29 November 2019).

figures, from 2015 to 2016, coal-generated electricity capacity was expanded by 132,792 GW while that of wind and solar combined increased by 81,336 GW, which put the rapid rise of these renewables (often presented in percentages) in perspective.⁵⁹ Moreover, the expansion of production from solar and wind seems to have encountered a bottleneck because of grid constraints and a saturated domestic market for solar panels, which in 2018 led the government to halt new solar projects.⁶⁰ China's efforts in promoting renewable energy may indeed have been significant, but they look much less impressive when put into perspective. And then we have not yet even considered the environmental and social costs associated with their expansion, which have been very considerable, especially those associated with the construction of hydro dams, although those linked with the production of solar panels should also not be neglected.⁶¹

A common theme in analyses of China's environmental policies and integration efforts has been the existence of a large implementation gap. On paper, China's institutions and policies look good or even impressive. In practice, the results and achievements fall far short of the expectations that they create. The OECD concluded that "Overall, environmental efforts have lacked effectiveness and efficiency, largely as a result of an *implementation gap*" [original emphasis], a finding that one finds repeated consistently in other assessments,⁶² and that led one observer to conclude that "China's environmental official policies are little more than slogans".⁶³

This raises the question of what accounts for the discrepancy between China's official environmental policies and commitments and their implementation. Here, I will identify and briefly discuss four factors that can help explain that discrepancy and that pour more cold water over the argument that authoritarian regimes, and China in particular, are more effective in dealing with the environmental challenge than (liberal-) democratic government systems. Some of these factors have already been discussed in Chapters 5 and 8, but they need revisiting here in the context of this claim. These factors are the overriding priority of economic growth and development; the degree to which political-economic power has been devolved and decentralised; the role of networks in the distribution and exercise of power; and the weakness of civil society,

⁵⁹ Ibid.

⁶⁰ Wikipedia (2019), Wind Power in China, https://en.wikipedia.org/wiki/Wind_power_in_China (Accessed: 29 November 2019); China Power Team, How Is China's Energy Footprint Changing; Wikipedia (2019), Solar Power in China, https://en.wikipedia.org/wiki/Solar_power_in_China (Accessed: 29 November 2019).

⁶¹ Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 3935-4007; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Loc 1177, 1218, 1336-1353; Wikipedia, Solar Power in China; Union of Concerned Scientists (2013), Environmental Impacts of Solar Power, <https://www.ucsusa.org/resources/environmental-impacts-solar-power> (Accessed: 29 November 2019).

⁶² Organisation for Economic Co-operation and Development, *OECD Environmental Performance Reviews: China*, 178; Shapiro, Judith, *China's Environmental Challenges*, Loc 412-426, 1379-1391, 1956-2179; Ryan, Megan and Christopher Flavin, "Facing China's Limits"; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 2068.

⁶³ Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Loc 7289.

including the environmental movement, linked to the authoritarian nature of the regime.

As discussed in Chapters 7 and 8, the overriding priority of economic growth and development has been a common feature of both capitalist and socialist systems. In this respect, it is no surprise that this is also the case in China's hybrid economic system. If anything, the introduction of capitalist features from the late 1970s has only served to entrench economic growth as an imperative whereas, at least theoretically, this does not *have* to be the case in a socialist economic system. But there is no doubt that economic development has been a foremost priority for Chinese authorities at all levels as well as for the Chinese population. Economic growth and development and getting rich have become the dominant (materialist) values in Chinese society, substituting socialism even though this is still the official ideology, as reflected in the hollow rhetoric of party documents and statements by political leaders. The dominant importance of economic growth is such that, as many analysts have argued, the legitimacy of the political-economic regime has come to depend on it. That the level of economic development already achieved is not regarded by Chinese leaders as sufficient is reflected in the target of 6.5% average annual GDP growth put forward in China's 13th Five-year Plan, and the expressed commitment "to [take care] avoid falling into the middle-income trap", which would prevent it from achieving rich country status.⁶⁴ Even a slowdown in economic growth may threaten the very existence of the Communist Party. The recent emphasis by Chinese leaders on China's long history and culture can be seen as an effort to buffet the regime's legitimacy in the context of slowing economic growth, along with a return to stronger political suppression of dissent.⁶⁵

Although environmental problems have been increasingly recognised as important, they have been addressed only to the extent that this is compatible with, or even conducive to, the economic growth imperative, even though, inevitably, environmental pressures continue to mount in the process. For that reason, authorities are not even interested in the effective implementation of environmental policies and regulations if this overriding priority risks being adversely affected. Chinese authorities also seem to have bought into the misleading idea based on the Kuznets curve that economic growth must come first before environmental problems can be addressed, more popularly known as the "pollute first, clean up later" philosophy.⁶⁶ This applies, in particular, to pollution control measures and equipment that increase costs and/or potentially affect output. By contrast, the development of solar and wind energy has

⁶⁴ Central Committee of the Communist Party of China (2016), *The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016-2020)* Beijing, Chapter 1; McKinney, Jared (2018), "How Stalled Global Reform Is Fuelling Regionalism: China's Engagement with the G20", *Third World Quarterly*, Vol.39, No.4, 709-726, 713-714.

⁶⁵ Johnson, Ian (2016), "Ghosts of Chinese History", *Guardian Weekly*, Vol.195, No.3, 26-29; Huang, Yasheng (2013), "Democratize or Die: Why China's Communists Face Reform or Revolution", *Foreign Affairs*, Vol.92, No.47-54.

⁶⁶ Mao, Yu-shi, "China", 244; Jan, George P., "Environmental Protection in China", 82; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 4495-4555.

offered new opportunities for economic growth, and it is therefore not surprising that this has received full support from the government.⁶⁷

A second factor that helps to explain the failure of Chinese governments to convert national-level environmental policies into reality is the extent to which, notably with the reforms introduced since the late 1970s, economic power has been decentralised to the regional and local levels and devolved to the managers of private, part-privatised, and state-owned enterprises. Regional governments were granted significant taxation powers and, with the introduction of market reforms, regional and local (township) enterprises were given discretionary powers in decisions over production, investment, and incomes.⁶⁸ The process of marketisation and (semi-) privatisation devolved much economic power to managers for whom profit-making became the prime concern largely at the expense of workers' rights.⁶⁹ Despite the official concentration of ownership and power at the national level, in practice, much of the power over economic decision-making now lies with political and industry elites at the regional and local levels that have a stake in continuous development regardless of the social and environmental costs.

The vested interests of these groups constitute a significant obstacle to the effective implementation of national-level environmental policies, and the integration of environmental concerns more generally.⁷⁰ The power of development interests combined with toothless environmental agencies that are even formally subordinate to local authorities has ensured a process of continuous environmental degradation that has made a mockery of the central government's environmental rhetoric and policies. From time to time, especially after major environmental accidents that have led to large and strong local protests, the central government has clamped down on some major polluting industries to reassert its commitment to environmental protection. But what these actions amount to are at most environmental (clean-up) campaigns that leave the sources of pollution and environmental degradation untouched.⁷¹ As one author concludes: "Despite its dictatorial reputation, the Chinese government seems less able to prevent an environmental meltdown than leaders in democratic nations because it is more addicted to growth. When it comes to protecting the environment, the authority of the authoritarian state looks distinctly shaky."⁷²

A third and related factor is how power is exercised. Power in China is exercised in informal networks (*guanxi*) and in a culture of mutual favouritism and expectations

⁶⁷ Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 3455; Wikipedia, Solar Power in China.

⁶⁸ Yueh, Linda, *Enterprising China: Business, Economic, and Legal Developments since 1979*, 88-89.

⁶⁹ Harvey, David, *A Brief History of Neoliberalism*, Chapter 5.

⁷⁰ Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 124-125; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Loc 7263-7265.

⁷¹ Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 371; Shapiro, Judith, *China's Environmental Challenges*, Loc 1368.

⁷² Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Loc 7328-7330.

that affect who gets what, when and how, including positions, privileges, and opportunities for advancement. This makes environmental policy implementation far from straightforward, especially when political leaders and business executives, and even environmental officials, belong to the same networks. It also makes corruption an inherent element of the political-economic system, from top to bottom.⁷³ The reforms introduced from the late 1970s created new and considerable opportunities for personal enrichment that took corruption, cronyism and rent-seeking, and inequality in income and wealth, to such levels level that they began to taint the nominally socialist political system and erode the legitimacy of the Party.⁷⁴ Fear for this loss of legitimacy and the socially destabilising effects thereof, especially if combined with slowing economic growth, are likely to have played a role in President Xi's moves towards clamping down on corruption as well as on dissidents, while at the same time trying to boost Chinese nationalism and public feelings of pride in China's history and culture.

However, as Smith and others have pointed out, corruption is an endemic feature of the political system in the sense that it affects the power and support of officials and factions at all levels of government. The government may clamp down on some blatant cases of corruption to set an example and to retain its legitimacy, but if it were to address corruption full-scale, it would risk compromising the party and the political system as a whole. Corruption is prevalent at the highest levels, including the circle of "princelings", the descendants of eight first-generation CCP veterans, and President Xi is said to be "as corrupt as all the rest".⁷⁵ Many of the new rich have transferred their wealth to foreign accounts. Anti-corruption campaigns are therefore mostly symbolic and undertaken strategically to bring down political rivals. Meanwhile, behind the facade of "Socialism with Chinese characteristics", the all-important goal is to preserve the supremacy of the Chinese Communist Party.

A fourth factor adversely affecting the implementation of environmental policy, and the effectiveness of these policies, in general, is the weak and limited role of civil society in the process of addressing the environmental challenge. Generally speaking, civil society plays a key role in identifying and raising social and environmental issues and feeding these into the political system as demands. How authorities deal with those demands affects the degree of political support for and the legitimacy of a political regime, and hence its stability. Civil society, through all kinds of organisations, also plays an important role in monitoring the effects of, and the implementation of policies, as policies work (or don't work) depending on the people involved. Moreover, the self-organisation and activities of civilians are crucial for protecting the social fabric and functioning of society through numerous (voluntary) activities based on shared

⁷³ Peck, Jamie and Jun Zhang (2013), "A Variety of Capitalism ... with Chinese Characteristics?"; Smith, Richard A. (2015), "China's Communist-Capitalist Ecological Apocalypse", 48-51.

⁷⁴ Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, 283; Jacques, Martin, *When China Rules the World: The End of the Western World and the Birth of a New Global Order*, 283-285; Knight, John (2013), "Inequality in China: An Overview".

⁷⁵ Smith, Richard A. (2015), "China's Communist-Capitalist Ecological Apocalypse", 49, 57-59.

values, solidarity, and humanity, sometimes referred to as social capital. In short, a flourishing civil society has the capacity to deal with many problems itself and is crucial to identifying issues that can only be dealt with by collective action (policies) through the political system.

In China, civil society has been severely stifled in fulfilling these functions because of the authoritarian nature of its political system. Under the banner of "proletarian dictatorship", the Communist Party, but de facto its supreme leadership, has tried to control all realms of social action and intercourse, formally justified based on the threats posed by anti-revolutionary elements and the need for, and the existence of, a revolutionary vanguard. This is also reflected in the way the government has reacted to the emergence of environmental concerns and organisations (NGOs). Still, in 1995, it was noted that no environmental movement worth mentioning existed, that citizens had to petition for the right to organise and that until then no application for the setting up of an environmental group had been approved.⁷⁶ Although this has significantly changed since then, and a large number of NGOs estimated in the thousands have emerged addressing all kinds of issues on all levels, their existence remains regulated and their activities circumscribed. The imposition of constraints is based on the fear that groups use environmental causes to pursue political change, challenging the political system and vested interests, as happened in Eastern European countries.⁷⁷ Although many (formally illegal) NGOs have not bothered about applying for formal approval and registration,⁷⁸ the Chinese authorities keep control over what kinds of issues can be raised and how, including by regulating the role of and funding provided by foreign NGOs, through internet surveillance and control, and by arresting and locking up those who are considered to have gone too far or who are perceived as a threat or a potential source of social and political unrest.⁷⁹ Ironically, it is the stifling of NGOs that has fuelled the widespread mass protests (referred to as "mass incidents" by the authorities) that undermine the political stability and legitimacy of the regime, all the more so when they are brutally repressed. As Watts notes: "With no democracy, China's government was being held accountable by riot".⁸⁰

⁷⁶ Tuinstra, Fons (1995), "China Wil Blijven Ademhalen", *Milieudefensie*, Vol.24, No.4, 6-9; Ryan, Megan and Christopher Flavin, "Facing China's Limits".

⁷⁷ Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*, Loc 452; Shapiro, Judith, *China's Environmental Challenges*, Loc 1218.

⁷⁸ Shapiro notes that, in 2010, around 440,000 were registered and another 3 million or so unregistered, but admits that such data are unreliable. Shapiro, Judith, *China's Environmental Challenges*, Loc 2003.

⁷⁹ Phillips, Tom (2016), "China Imposes NGO Controls", *The Guardian Weekly*, Vol.194, No.22, 8; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*; Duggan, Jennifer (2015), Green China: Why Beijing Fears a Nascent Environmental Protest Movement, <http://www.takepart.com/feature/2015/10/09/china-environmental-protest/> (Accessed: 3 December 2019).

⁸⁰ Peck, Jamie and Jun Zhang (2013), "A Variety of Capitalism ... with Chinese Characteristics?", 384; Economy, Elizabeth, *The River Runs Black: The Environmental Challenge to China's Future*; Shapiro, Judith, *China's Environmental Challenges*; Watts, Jonathan, *When a Billion Chinese Jump: How China Will Save Mankind--or Destroy It*, Loc 2826-2827.

Although it has been argued that the environmental movement in China is evolving into a sophisticated branch of civil society that the government can no longer ignore,⁸¹ it appears that under President Xi Jinping the trend towards liberalisation has been reversed.⁸² If anything, the Chinese political regime has become more repressive and totalitarian, as reflected in its suppression of ethnic groups (such as the Uyghurs), the creation of an all-encompassing surveillance state that makes "Big Brother" look like an amateur, and the introduction of a "social credit" system that rewards and punishes every individual citizen for "desirable" and "undesirable" behaviour.⁸³ The dominant role of the state in controlling societal groups can be seen as a case of Gramscian penetration of society by the state, aiming to keep a grip on thinking and developments in society.⁸⁴

At the same time, economic growth has been accompanied by the evolution of an increasingly materialist society that treats the environment as an afterthought. It has been said that China has become a Western-style consumerist society in which getting rich has become the dominant value.⁸⁵ The signal for abandoning socialist ideals and embracing materialism was given by Deng Xiaoping who proclaimed that "to get rich is glorious".⁸⁶ As the public has come to expect a continuing rise in living standards, this feeds back into an ongoing commitment by the regime to economic growth, confirming it as a political-economic priority. Maintaining social and political stability (harmony), and overcoming divisiveness, out of fear of political disintegration, is frequently referred to by analysts as a top priority of the Chinese state, motivating its reliance on a strong authoritarian state and a dominant leader.⁸⁷ Yet, the social fragmentation that has accompanied China's development will be hard to counter. Hua sketches China's social situation in gloomy terms as characterised by individualism, competition, materialism, inequality, pollution, corruption, waves of suicide among party officials, political nihilism - "only money counts".⁸⁸

⁸¹ Hilton, Isabel (2013), "The Return of Chinese Civil Society", in S. Geall (ed.) *China and the Environment: The Green Revolution*, 1-14; Zhang, Joy Y. and Michael Barr (2013), *Green Politics in China - Environmental Governance and State-Society Relations*, Pluto Press.

⁸² Tisdall, Simon (2018), "The Chinese Export We Really Should Be Worried About: Repression", *The Guardian*, 23 November 2018; Zhao, Suisheng (2016), "Xi Jinping's Maoist Revival", *Journal of Democracy*, Vol.27, No.3, 83-97; Economy, Elizabeth (2018), "China's New Revolution: The Reign of Xi Jinping", *Foreign Affairs*, Vol.97, No.3, 60-74.

⁸³ Munro, Kelsey (2018), "China's Social Credit System 'Could Interfere in Other Nations' Sovereignty'", *The Guardian*, 27 June; Verdelli, Andrea (2018), World Report. China - Events of 2018, Human Rights Watch, <https://www.hrw.org/world-report/2019/country-chapters/china-and-tibet> (Accessed: 3 December 2019); Sudworth, John (2018), "China's Hidden Camps. What Happened to the Vanished Uighurs of Xinjiang?", 24 October; Liang, Fan, et al. (2018), "Constructing a Data-Driven Society: China's Social Credit System as a State Surveillance Infrastructure".

⁸⁴ Shapiro, Judith, *China's Environmental Challenges*, Loc 1981.

⁸⁵ Ibid., Loc 457, 1450.

⁸⁶ Ibid., Loc 1092.

⁸⁷ Nathan, Andrew J. (2019), "The New Tiananmen Papers. Inside the Secret Meeting That Changed China", *Foreign Affairs*, Vol.98, No.4, 80-91.

⁸⁸ Hua, Yu (Translated by Allan H. Barr) (2018), "Human Impulses Run Riot: China's Shocking Pace of Change", *The Guardian*, 6 September.

To summarise, China's authoritarian mixed political-economic regime combines several features that make it very unlikely that it will, or even can, address the environmental challenge effectively. Its socialist system has been transformed into a mixed economic system in which economic growth and industrialism have become as dominant as in capitalist systems, in part because of the legacy of the preceding socialist system, in which economic growth based on industrialisation was already defined as a priority, and in part, because the regime's legitimacy has increasingly come to rely on the delivery of rising standards of living. Also, (semi-) privatisation, corporatisation and marketisation have introduced capitalist imperatives, even if the state retains ultimate control over the economy. But the *de facto* departure from a planned economy implies that even the theoretical possibility of moving towards an environmentally sustainable socialist economic system, away from the dependence on industrialism, has been discarded, notwithstanding the continued use of socialist rhetoric by Chinese leaders. At the same time, the authoritarian features of the regime, at all levels, make it very difficult if not impossible for civil society, including environmental advocates, to change and adapt the political-economic system and its policies to advance environmental integration. Arguably, rather than offering an example or model for environmental integration to the rest of the world, the Chinese political-economic regime, of all political-economic systems, combines all the biggest obstacles to addressing the environmental challenge effectively. As an authoritarian form of state capitalism, China's political-economic regime might be considered the worst of all worlds, combining the worst features of capitalism with the absence of the limited freedoms associated with liberal democratic political systems. Its growing industrial-technological prowess combined with the totalitarian ambitions of the regime does not imply that it will or can address the environmental challenge more effectively than any other system. Rather, it offers an insight into the kind of dystopian political, social, and environmental future that, as argued in Chapter 6, awaits the whole world if it were to follow in its path.

Conclusion

This chapter has focused on the question whether mixed economic systems, combining elements of capitalism and socialism, are more capable of addressing the environmental challenge than "pure" capitalist or socialist systems. Moreover, as such hybrid systems have (had) actual counterparts in (more or less) liberal democratic and authoritarian political systems, the discussion of this question has differentiated between liberal-democratic mixed regimes and authoritarian mixed regimes. To assess the extent to which the former type appears to be conducive to, or pose fundamental obstacles to, environmental integration, the chapter has looked broadly at developments in social democratic countries, in particular in Western Europe, as these have often been held up as models for the integration of broad, collective interests and values into the political-economic frameworks through which collective policies and decisions are made. The chapter has also looked at post-Mao China as an instance of an authoritarian hybrid system, a country that is also sometimes held up as a model for addressing the environmental challenge (more) effectively. Given the strong links between politics and economics, as discussed in Chapter 6, these two types of

political-economic regimes are likely to offer different opportunities, and/or pose different obstacles, to advancing environmental integration.

The discussion indicates that both types of mixed systems do not appear to be capable of addressing the environmental challenge effectively. Social democracy is based on the belief that better societies (notably for the working class) can be achieved within the context of a capitalist economic system. For some 30 years, it managed (or assisted in the management of) capitalism very successfully, delivering high rates of economic growth, economic stability, (near) full employment, rising standards of living, and building expansive welfare states. Arguably, the main achievement of social democracy was that it created public faith in the role and importance of the state as a protector and promoter of the common interest. While this could be taken as an indication that social democracy would or should also be able to assign high priority to environmental protection, this did not bear out. When the inherent contradictions of capitalism reasserted themselves, social-democratic parties and leaders were among the first to embrace neoliberalism with the idea of restoring economic growth, even at great social and environmental costs. Thus, social democracy has lost much of its credibility as an alternative political-economic system, having allowed or even facilitated a sharp increase in inequality in societies and the social hardships and misery that this has caused. Having accepted the primacy of capitalist imperatives over common social and environmental interests, and not questioning industrialism as the dominant system of production and consumption, it does not offer a programme for fundamental change aimed at rooting out the causes and sources of the inexorable process of environmental destruction.

Similarly, China's "successful" embrace of capitalism, arguably managed even more effectively by the Chinese state than by social democratic governments, is predicated on the primacy of economic growth and industrialism as the keys towards a better society. But this has come at even greater environmental costs, in part because of the sheer scale of development and its effects in China and the rest of the world, but also because of the authoritarian nature of the political system, which does not allow for environmental advocates to press effectively for the mitigation of those costs and effects, as has been the case in liberal-democratic capitalist and social-democratic systems. China is trapped in an authoritarian semi-capitalist system in which only technical solutions that do not upset the existing political-economic structures (notably the sovereignty of the CCP and its role in the management of capitalism) are deemed to be acceptable.

To conclude, fundamentally changing existing political-economic systems, of whatever type, to institutionalise environmental integration and assign it the priority that it requires appears to face insurmountable obstacles. With very few exceptions, all existing systems have adopted capitalism and industrialism and their imperatives, including continuous expansion, as economic pillars, pillars that are fundamentally incompatible with long-term environmental protection. While these systems differ in their political dimension, with more or less democratic or authoritarian institutions playing a role in the interpretation and management of the state's functions, none has created powerful environmental institutions to give consequence, let alone priority, to environmental protection as a fifth core function of the state. Economic and security

interests (as defined by the most powerful in society), demand and conflict management, and social integration (maintaining legitimacy and socio-political stability) have remained the most important functions of the state. At most, environmental concerns have been (reversely) integrated into these functions where this seemed useful or desirable from the point of view of the vested (institutionalised) dominant interests.

Since the 1990s, with the rapid rate of globalisation (concomitant with the spread of neoliberal ideology), it has become increasingly common to argue that, anyway, states have become outdated and dysfunctional political institutions that stand in the way of solving the world's problems. Support for reducing or even eliminating borders and barriers between states to allow for the free movement of trade and people, while strengthening global (and perhaps local) institutions for (more) effectively addressing social and environmental problems and advancing the common interests of humankind (including global security) has steadily grown, including among environmental advocates. The conclusion above seems to provide a plausible or even logical ground for supporting this argument. If states, no matter what their political-economic systems are like, are incapable and/or unwilling to take the environmental challenge seriously, in part because of the extent to which globalisation has eroded their capacity to fulfil their basic functions, it makes eminent sense to explore and promote opportunities for enhancing international and global cooperation. This arguably applies even more so to the environmental challenge which, one must admit, is ultimately a global challenge.

Therefore, one may argue, the failure of all extant political-economic systems and states to effectively address the environmental challenge is not necessarily fatal. Perhaps this challenge should or must be tackled internationally and globally *for a start*, and those who have put their hopes and expectations on states have been looking in the wrong place or direction. Advancing (effective) environmental integration, from this point of view, needs to focus on how international cooperation, agreement and action on the environmental front have and can be pursued. This is what I will do in the following two chapters. Chapter 10 will provide an overview of environmental integration efforts at the international and global levels and assess their effectiveness. Chapter 11 looks at a range of perspectives on international relations and globalisation that may help explain the obstacles to more effective global collective action.

Chapter 10 – Swimming or Sinking Together: The Environmental Challenge in the Global Context

Introduction

In the preceding chapters, we looked mainly at the efforts and obstacles to environmental integration at the level of (nation-) states. It has by now become increasingly apparent that, although states have taken a wide range of steps to address environmental concerns, these have largely failed to stem the ongoing environmental decline. The main reasons that I have put forward for that failure, discussed in the foregoing chapters, lie in three realms: the cognitive realm - the failure to see the interconnected nature of the environmental challenge, linked to dominant socio-cultural beliefs; the political-institutional realm – the main functions of states, which make environmental integration a subsidiary concern at best; the political-economic realm – the incompatibility between the dominant economic systems (based on capitalism and industrialism) and long-term environmental protection and the grip that these systems hold over states, governments, and the prevailing values and beliefs. As discussed in Chapter 3, these (categories) of factors are interrelated and linked to an even more fundamental factor: the distribution and structures of power in societies. Addressing the obstacles to effective environmental integration requires nothing less than a fundamental change in the distribution and structures of power that presently keep the advocates of environmental protection and integration (and their agency) relatively powerless. Thus far, none of the alternative political-economic systems that have emerged, including authoritarian socialism, social democracies, and the Chinese authoritarian hybrid system, have shown to be capable of addressing the roots of the environmental challenge.

This raises the question of whether environmental integration is better or best approached at the international or global level. Could the obstacles inherent to national-level political-economic systems possibly be overcome at a higher level of collective decision-making? That it has become increasingly difficult if not impossible for states to fulfil their basic functions on their own is now a widely held view. While there is considerable debate about the extent to which states are still important or have become impediments to meeting the needs of their citizens, it is widely agreed that the environmental challenge is a global one. Although some environmental problems may be effectively addressed at the local or national level, no state can, by itself, ensure that the environmental conditions that are essential to human well-being or even survival, as well as of numerous other species, will *not* be eroded and fundamentally compromised. Effective collective action encompassing most if not all states is required to address many environmental problems. This has now become most obvious and pressing with the issue of global heating, but in a world that has also become increasingly interwoven economically, and in which the effects of technological developments and environmental mismanagement do not respect national borders, the need for global coordination is essential.

However, coordinated action at the international and global level raises the challenges that have already been discussed in this book to an even higher level and introduces additional ones. Changing dominant worldviews to integrate

environmental needs is no easy task even in a small and/or culturally homogeneous state, let alone a mega-plural world of close to 8 billion people. Meeting economic and security needs in a global state system based on the principle of sovereignty and the desire of peoples to (re-) assert their independence (“taking back control”) poses major contradictions and challenges. International and global policies and institutions face issues regarding their (relative) power, legitimacy, and effectiveness, giving them weak and uncertain foundations. All in all, there is much reason for doubt, and to be sceptical about, the effectiveness of international efforts aimed at tackling environmental (and many other) problems.

This chapter discusses environmental integration efforts at the international and global level, based on the classification of domains and dimensions of environmental integration presented in Chapter 2. The main purpose is to illustrate the broad range of efforts that have been undertaken, mirroring those of states, but also to recognise their weaknesses and inadequacy as pointed out in much of the literature. The next chapter will discuss some of the main obstacles to effective collective action at the international and global level, seen from a variety of perspectives.

Environmental integration efforts at the international and global level

That environmental considerations need to be integrated into policies, decisions, and institutions at all levels of governance, from the local to the global, has been widely recognised from at least the early 1970s. The first global environmental conference was held in Stockholm in 1972 and led to the creation of the United Nations Environment Programme (UNEP). Internationally, efforts gained momentum in the late 1980s and early 1990s. This is reflected, among other, in the growing number of multilateral environmental agreements (MEAs) that address a wide range of environmental issues. More recently, climate change has risen on the global agenda as arguably the biggest environmental threat facing humankind, now receiving almost continuous attention worldwide.

Rather than describing the international responses to a raft of environmental problems, I will discuss these efforts based on the environmental integration matrix presented in Chapter 1. This classification is based on the argument or assumption that environmental concerns (or imperatives) need to be integrated within and across the full spectrum of everything that humans collectively think and do that has (potentially) a significant impact on the environment. This means, first, integrating environmental considerations into all areas of knowledge, views and ideas that guide human action, behaviour, and practice, in mutually consistent and compatible ways based on a collectively agreed overarching cognitive environmental framework. Second, it also means integrating those considerations into all forms of collective choices (policies) and their implementation, guided by an overarching *policy* framework (a green plan). And third, it requires integrating these same considerations into all institutions (rules and organisations) that guide human behaviour, actions, and practices and the creation of overarching environmental institutions to guide, coordinate, and enforce that integration. As discussed in Chapter 1, the approach depicted by the environmental integration matrix may seem too rational-

comprehensive and ambitious to be implementable, but it is not. In fact, in most societies, at any one time, some cognitive framework (like capitalism or neo-liberalism) dominates and functions as a basis for integrating ideas and imperatives into (virtually all) policies and institutions. The question is not whether it is theoretically possible to create an overarching and coherent framework for environmental integration, but why and how a particular framework dominates, which raises questions about the relative power of groups and interests in societies. Ultimately, whether and how environmental integration occurs depends on the power relations in societies and the world at large.

The following three sections provide a brief overview of the state of environmental integration at the international and global levels in the cognitive, policy, and institutional realms.

Cognitive environmental integration

As discussed in Chapter 1, cognitive environmental integration has two dimensions: the internal dimension refers to the existence or creation of an overarching cognitive framework that can provide guidance on what environmental processes, limits, principles or imperatives need to be respected to preserve the environmental systems on which life, including human life, depends; the external dimension refers to the integration of those parameters as *core* elements into the cognitive frameworks (ideologies; theories, management frameworks and other) that guide human behaviour, actions and practices in what are usually regarded non-environmental areas, such as economic thinking, ideas, theories or models guiding the development of energy systems, technology, agriculture, transport, the production and consumption of goods and services, the design and construction of buildings and the built-up environment, and any other areas that have (potentially) a significant impact on the environment.

It may come as a surprise to those who think that the creation and adoption of such an overarching cognitive environmental framework at the global level are impossible and an instance of utopian thinking that, in practice, this is an area of environmental integration in which global efforts have been relatively successful. I am referring here, in particular, to the rise of the notion of sustainable development and the extent to which it has been adopted by governments around the world as well as by international organisations.

As discussed in Chapter 1, the concept (or discourse) of sustainability was advanced by several widely distributed reports, notably the World Conservation Strategy, published by several international nature conservation organisations in 1980, and especially *Our Common Future* (the *Brundtland Report*), a report produced by the World Commission on Environment and Development in 1987. Whilst the World Conservation Strategy promoted the integration of nature conservation concerns into sectoral policies, *Our Common Future* went further and put forward a broader interpretation of sustainability and sustainable development that encompassed environmental, social and economic needs or imperatives that were seen as (potentially) mutually compatible. This idea of compatibility constituted a departure from the view that economic and environmental needs or imperatives were incompatible, a view that had prevailed among environmental advocates until then. This compatibility claim made the notion of sustainable development attractive to

governments and businesses, as well as in academic and environmental circles. Arguably, from the late 1980s sustainable development became a globally dominant cognitive framework, discourse, or paradigm. As Dryzek noted in 1997: “[...] sustainable development is emerging as the main game (though not quite the only game) when it comes to environmental affairs, at least the global ones.”¹ As a principle, it was endorsed by the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 and enshrined in international conventions and multilateral agreements. In global discourse it has taken a place alongside justice, equity, freedom, and human rights as an almost universally accepted moral principle.

However, as pointed out in Chapter 1, the notion of sustainability can and has been interpreted in many different ways and has been the subject of considerable critique and debate about the ways that it has been used by governments, businesses, and status quo advocates. The core assumptions on which the concept as advanced by the Brundtland Commission have been built can and have been fiercely contested. One assumption is that there are no *fixed* environmental limits. Environmental limits may exist, but they are flexible and can be stretched by improved knowledge and technology that reduce environmental impacts and resource use. But while it is plausible that the environmental impacts of technology and practices can be reduced, this does not mean that environmental limits do not exist – it simply means that it may take (a bit) longer for them to be breached. Another contestable assumption, related to the faith in human ingenuity and technology, is that economic growth and environmental protection can be (made) compatible. As production systems (can) become increasingly resource-efficient, a view advanced by adherents of *Natural Capitalism* and ecological modernisation², production and consumption can continue to grow while resource use and environmental impacts are reduced. Thus, capitalism, which inherently requires economic growth, is made compatible with environmental protection.

As discussed in Chapter 7, these assumptions are flawed and have proven to be untenable in the real world. In practice, the notion of sustainable development has been used by governments and businesses to justify their continued pursuit of economic growth while paying lip service to environmental considerations, a practice commonly referred to as greenwashing. The sustainable development strategies adopted by many governments have commonly been mainly symbolic exercises that have faded away without much, if any, impact on non-environmental policies and institutions. Not surprisingly, there have been calls by environmental advocates for the concept of sustainable development to be abandoned. Yet, although the discourse has lost much of its shine and appears to have been overshadowed by climate change as the most pressing environmental issue, it has become so entrenched that it cannot simply be removed from public discourse. Neither, in my view, should it be.

Whether sustainability and sustainable development can function as a collective global cognitive framework for meaningful and effective environmental integration remains open to debate. Some argue that these concepts must be interpreted in

¹ Dryzek, John S., *The Politics of the Earth: Environmental Discourses*, 125.

² Hawken, Paul, et al., *Natural Capitalism: Creating the Next Industrial Revolution*; Simonis, Udo E., *Ecological Modernisation: New Perspectives for Industrial Societies*.

specific, different contexts and hence implemented through a de-centred approach, which would make a globally agreed framework only possible in the most general terms. However, while what is sustainable surely depends on local or regional conditions, one cannot ignore that the Earth system is by definition also global by nature. There are globally interdependent processes that need to be known and respected if humans are to maintain conditions that are conducive to their well-being or even survival as well as that of other species. Knowledge of these global, planetary processes, interactions and boundaries has steadily increased over the past five decades, not only related to climatic conditions but also to other processes that are vital to keeping the Earth habitable. Some of the boundaries can be specified and quantified based on plausible models, assumptions, knowledge, and data. For instance, most scientists agree that global warming needs to be kept below 1.5 degrees Celsius to prevent highly damaging or disastrous consequences. Hence, a global limit and budget for greenhouse gas emissions have been specified that humanity as a whole must respect. In principle, this limit can be translated into commensurable decisions, targets, actions, and practices at all levels of government and governance. Similarly, specific global limits can be formulated for, for instance, the emissions of ozone-depleting substances, phosphorous and nitrogen, and for deforestation, to keep humanity within a "safe operating space".³

As discussed in Chapter 1, several other concepts can assist in translating the concept of sustainability into more specific ecological, resource and socio-economic conditions and requirements, such as the notions of environmental space, ecological footprint, materials consumption and footprint, and social equity. It deserves repeating that specifying such limits or boundaries is not just a matter of science. It implies making judgements given the assumptions, uncertainties, and values that are unavoidably involved in this process and that relate, among other, to the assessment of the seriousness and distribution of risks and to views on what is equitable. Hence, decisions on limits or boundaries, and their translation into specific national, regional, and local implications and obligations must involve public debate and participation and not be left to technocrats. Again, there is no reason for thinking that this is technically and/or politically impossible. Already, global decisions on many issues are made based on very selective (and more or less discrete or secretive) processes involving the most powerful non-state actors. How global decisions are made is not God-given but depends on economic and political-institutional power structures. These decision-making institutions have been shaped and can be reshaped through (collective) human action.

Meanwhile, it is worth hanging on to the notion of sustainability and its derivatives (such as sustainable development and management) as the core of a cognitive framework that can guide environmental integration efforts at all levels, from the global to the local. Apart from the fact that no other cognitive framework has achieved the same level of global prominence, its integration of environmental, social, and economic principles or considerations is an important strength even if existing dominant interpretations are biased towards the latter. While acknowledging the

³ Rockström, J. et al. (2009), "A Safe Operating Space for Humanity"; Steffen, Will, *et al.* (2015), "Planetary Boundaries: Guiding Human Development on a Changing Planet".

scope for using and abusing the concept for self-serving purposes by governments and businesses, its potential to be translated into meaningful and specific limits and terms must also be recognised. Some moves in this direction have already been made, notably related to global warming and a range of global sustainable development goals (to be discussed below). The case for setting and respecting specific limits and targets is likely to attract growing support when environmental conditions further deteriorate, notwithstanding the formidable opposition of vested interests.

We cannot say that global efforts aimed at the integration of environmental principles and concerns into what are commonly regarded as non-environmental cognitive frameworks have been as prominent or significant as those associated with the notion of sustainability. As discussed in Chapter 4, from the 1980s, in the economic realm, global thinking (theories, ideas and beliefs) has shifted from Keynesianism to neoliberalism. Although both frameworks are based on the assumption that continuous economic growth is necessary (a capitalist imperative) and desirable, it is fair to say that neoliberalism leaves even less scope for integrating environmental principles than Keynesianism. Keynesianism at least acknowledged the crucial role of the state in protecting and advancing collective goods and interests, which from the 1970s began to include environmental protection. The deregulatory, hands-off, free-market ideology that came to dominate government thinking across the world has done nothing for greening economic theories and ideas. On the contrary, it has led to a kind of reverse integration by which environmental values have been converted into economic commodities that could be privatised and traded to help increase economic growth and profits, for instance, by creating emissions and carbon trading as new opportunities for capital accumulation. Globally, the ideology of free trade came to dominate international relations and agreements, often to the detriment of social and environmental protection, especially in low-income countries.

Similarly, the development of science and technology, energy, agriculture, transport, and other industry sectors has continued to be driven by the capitalist economic imperatives of those sectors and, increasingly, of the globalised financial sector. Although environmental advocates, international NGOs, and United Nations organisations have produced a variety of publications revealing the environmental failings of these sectors and have put forward ideas on how these could or should be addressed to move them towards sustainable practices, sectoral environmental integration initiatives remain voluntary and under the control of the leading business organisations based on what they regard feasible and realistic (not impinging on the profit imperative). Frameworks like Corporate Social Responsibility (CSR) and standards for “best practice” are, at best, voluntary and modest moves towards mitigating the worst social and environmental practices and effects, especially if this creates a competitive advantage and produces economic benefits.⁴ They may help to legitimise a company’s practices and enhance its image, but they do not present

⁴ Rowe, James K (2005), “Corporate Social Responsibility as Business Strategy”, in R. D. Lipschutz and J. K. Rowe (eds.), *Globalization, Governmentality and Global Politics: Regulation for the Rest of Us?*, 130-170; Prakash, Aseem (2007), “Corporate Environmentalism: Problems and Prospects”, *Global Environmental Politics*, Vol.7, No.3, 130-135; Clapp, Jennifer, “The Privatization of Global Governance: ISO 14000 and the Developing World”.

cognitive frameworks for the fundamental transformation of sectors based on environmental limits and imperatives and towards truly sustainable technologies and practices. Moreover, as discussed above, while perhaps inspired or framed by the discourse on sustainability, these initiatives are not based on a globally agreed overarching cognitive framework that specifies targets (let alone binding obligations) for reducing the environmental effects of each sector to bring their collective impact within global or planetary boundaries.

Although, in the wake of the 2008 financial crisis, faith in neoliberal economic ideology was shaken and its shortcomings have come to be more widely recognised even in leading global financial circles,⁵ it has not been replaced by an alternative economic framework. While governments have introduced some measures aimed at enhancing financial stability and this has become a key topic of discussion in international fora like the G20, fundamentally, the global and increasingly interdependent financial-economic system remains largely out of the control of governments and in the hands of the free market, making a repeat of a financial crisis, or even collapse, likely.⁶ The main concern and priority on the global political-economic agenda, in line with capitalist imperatives, remains economic growth even if governments may adopt different strategies, linked to national political priorities, to pursue it. As yet, no economic theory or cognitive framework has emerged that can provide guidance on how the global economic system can and should be managed within broader social and environmental imperatives and the overarching framework of sustainability. Although some alternative economic perspectives, such as those around the concept of the "circular economy"⁷ and "doughnut economics"⁸ have been put forward and gained popularity in international discourse, these are still some way off from becoming the dominant economic paradigm at the global level.

In summary, in the late 1980s, the sustainability discourse gained global prominence as an overarching cognitive framework for integrating social, environmental, and economic concerns. However, in political and economic circles it has been interpreted in ways that have done little if anything to green economic thinking and/or to move away from an emphasis on economic growth as a global (and national) priority. Neoliberal capitalist ideology is still the dominant paradigm, providing the cognitive framework for interpreting and defining social and environmental needs and policies, also at the global level.

⁵ Ostry, Jonathan D., *et al.*, "Neoliberalism: Oversold?"

⁶ Keen, Steve, *Debunking Economics. The Naked Emperor Dethroned?*, Chapter 15; Inman, Phillip (2018), "World Economy at Risk of Another Financial Crash, Says IMF", *The Guardian*, 3 October; Roubini, Nouriel and Brunella Rosa (2018), "We Are Due a Recession in 2020 - and We Will Lack the Tools to Fight It", *The Guardian*, 13 September.

⁷ Korhonen, Jouni, *et al.* (2018), "Circular Economy as an Essentially Contested Concept", *Journal of Cleaner Production*, Vol.175, 544-552; European Environment Agency (2019), *Paving the Way for a Circular Economy: Insights on Status and Potentials* Luxembourg: Publications of the European Union; de Wit, Mart *et al.* (2020), *The Circularity Gap Report 2020* Platform for Accelerating the Circular Economy (PACE).

⁸ Raworth, K., *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*.

Policy integration

As discussed in Chapter 1, environmental policy integration also has internal and external dimensions. The internal dimension refers to the development of an overarching policy based on a cognitive framework that recognises environmental limits, boundaries and ecological processes that are essential to humans and other life. Such a policy includes environmental goals and targets that governments aim to achieve within a particular timeframe. As discussed in Chapter 1, the environment has ecological, social and resource dimensions. Even if lexical priority is given to ecological limits or boundaries in recognition of their fundamental importance for sustaining life on Earth, this does not imply that human or societal needs or goals are less important. Rather, it means that the ways by which these needs or goals are met must be (made) compatible with specified ecological and resource limits. Resource limits are ultimately determined by ecological limits and should lie at the heart of economic thinking, theory, and decision-making, as recognised by the field of ecological economics. The external dimension refers to the translation of these overarching goals or targets into goals and targets for what are commonly regarded as non-environmental sectors or policy areas like economics, energy, transport, and agriculture, but that have significant impacts on the environment. This conversion must ensure that the policies pursued in these sectors are at least compatible but preferably mutually supportive to achieve the goals specified in the overarching policy. This admittedly hierarchical (top-down) approach is needed to prevent that the policies adopted in these sectors are in conflict with each other or even negate the overarching (sustainability) goals. Ecological and resource protection are not incompatible with the pursuit of social well-being, on the contrary, genuine, and long-term human and social well-being can and will be advanced *only* if ecosystems are protected and the long-term availability of resources is ensured.

At the international and global level, some significant moves have been made towards the adoption of an overarching policy framework to guide the integration of environmental concerns into non-environmental sector policies. The most notable example was the adoption, at the UNCED conference in Rio de Janeiro in 1992, of *Agenda 21*, an action plan aimed at promoting sustainable development around the world. Given its broad coverage of environmental, social and resource (economic) issues, as well as its recommendations for policy development and institutional reform, *Agenda 21* can be regarded as a first step towards the adoption of a global green plan aimed at advancing sustainable development in the world at large. For each of its 40 chapters, *Agenda 21* specified objectives and actions within and across a broad range of issues that need to be addressed to globally advance and implement sustainable development.⁹ Combined with the Rio Declaration on Environment and Development, which proclaimed 27 Principles, the Framework Convention on Climate Change, the Convention on Biological Diversity, and a statement on the management, conservation and sustainable development of all types of forests, the Rio conference may well be

⁹ United Nations Conference on Environment and Development (1992), *Agenda 21 - Programme of Action for Sustainable Development* New York: United Nations Department of Public Information.

regarded as a global milestone in the promotion of sustainable development. The conference called upon all member states to embrace sustainable development as a cornerstone of policy development, including by adopting national sustainable development strategies.

However, *Agenda 21* was non-binding, and much doubt has been raised about its effectiveness. In terms of implementation and positive outcomes, the direct results are generally perceived to have been limited, disappointing, or even insignificant.¹⁰ Analysts have commented on the apparent lack of commitment on the part of most governments towards translating sustainable development into specific policies, actions, and outputs. Only a small fraction of the \$600 billion per year that was considered to be needed to assist governments to move towards sustainable development was generated.¹¹ Also, *Agenda 21*, following the example of the Brundtland Commission, did not acknowledge the existence of hard ecological and resource boundaries or limits to economic growth. It has been argued that decision-making at the Rio conference was strongly influenced by multinational corporations that were set on warding off any threats to their interests, and on promoting free trade, as reflected in Principle 12 of the Rio Declaration and Chapter 2 of *Agenda 21*.¹²

In 2000, following the *Millennium Summit* of world leaders in New York, the UN General Assembly adopted the *Millennium Declaration* from which eight *Millennium Development Goals* (MDGs) were derived for 2015. These goals included the eradication of extreme poverty and hunger, achieving universal primary education, reducing child mortality and various other social goals aimed at improving human well-being, especially in poor countries. The *Declaration* also reaffirmed support for

¹⁰ Buck, M., et al. (2000), *International Environmental Policymaking and Transatlantic Co-Operation*. Berlin: Centre for International and European Environmental Research; Gutman, Pablo (2003), "What Did WSSD Accomplish?", *Environment*, Vol.45, No.2, 21-28; Najam, Adil, et al. (2002), "From Rio to Johannesburg. Progress and Prospects", *Environment*, Vol.44, No.7, 26-28; Stakeholder Forum for a Sustainable Future (2012), *Review of Implementation of Agenda 21 and the Rio Principles. Synthesis* United Nations Department of Economic and Social Affairs, Division for Sustainable Development; Stakeholder Forum for a Sustainable Future (2012), *Review of Implementation of Agenda 21* United Nations Department of Economic and Social Affairs, Division for Sustainable Development.

¹¹ French, Hilary (2002), "Reshaping Global Governance", in L. Starke (ed.) *State of the World 2002*, 174-198, 183-184.

¹² Chatterjee, Pratap and Matthias Finger (1994), *The Earth Brokers: Power, Politics, and World Development*. London: Routledge. Principle 12 stated that: "States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus." United Nations General Assembly (1992), *Rio Declaration on Environment and Development* New York: United Nations General Assembly.

the principles of sustainable development “including those set out in *Agenda 21*.”¹³ These were converted into three goals: to “ensure sustainability”, with “targets” for the integration of “the principles of sustainable development into country policies and programs”; to “reverse loss of environmental resources”; and to reduce biodiversity loss.¹⁴ But it would be fair to say that the MDGs were foremost about lifting the standard of living, living conditions, health and well-being of the poorest in the world, with environmental concerns taking a back seat. Moreover, despite a reference to integration in Goal 7, there was no discussion about the need for greening policies that have a significant environmental impact, for instance, in the areas of agriculture, energy, transport and urban development. Rather, the MDGs relied foremost on “partnerships” and networks involving the “private” sector¹⁵ to develop a pathway based on “an open, rule-based, predictable, non-discriminatory trading and financial system” that would promote trade and investment and thus lift people out of poverty.¹⁶

To what extent the adoption of the MDGs has led to significant improvements in the life of the poorest in the world is debatable. On the one hand, in quantitative terms, progress on the goals has been significant, even if most targets have not been achieved and there have been large variations in results between regions and countries. For instance, the target of reducing extreme poverty (defined as income lower than US\$1.25 a day) by half between 1990 and 2015, was achieved for the world as a whole. But much of this can be attributed to a large drop in China (from 61% to 4%), while in sub-Saharan Africa more than 40% of the population still lived in extreme poverty in 2015.¹⁷ The goal of halving hunger (the proportion of undernourished people) by 2015 was nearly achieved in most “developing” regions, but not in sub-Saharan Africa, the Caribbean, Southern Asia and Oceania.¹⁸ China alone accounted for almost two-thirds of the total reduction of undernourished people while the absolute number of undernourished people in Africa *increased* by 44 million since 1990. Substantial progress was achieved on the goal of “universal primary education”, the reduction of child mortality, and the improvement of maternal health, combatting HIV/AIDS, malaria, and other diseases. However, it is debatable whether or to what extent these improvements can be attributed to the adoption of the MDGs, not just in the light of China’s dominance in the figures, but also because, in itself, the adoption of goals does not mean much if anything. Given the many political, economic, and socio-cultural factors that impinge on implementation and outcomes in all such policy areas, from the local to the national and global level, explaining the (relative) success

¹³ United Nations General Assembly (2000), *Resolution Adopted by the General Assembly. 55/2. United Nations Millennium Declaration* United Nations General Assembly, Fifty-fifth session Section IV/2.

¹⁴ ITU (2020), Millennium Development Goals (MDGs). Goal, Targets and Indicators, <https://www.itu.int/en/ITU-D/Statistics/Pages/intlcoop/mdg/goals.aspx> (Accessed: 13 February 2020).

¹⁵ Ruggie, John Gerard (2003), “The United Nations and Globalization: Patterns and Limits of Institutional Adaptation”, *Global Governance*, Vol.9, No.3, 301-320.

¹⁶ United Nations (2015), *The Millennium Development Goals Report 2015* New York: United Nations, 64.

¹⁷ *Ibid.*, 4-5.

¹⁸ *Ibid.*, 21.

or failure of the MDGs is a complex matter that the formal UN assessment hardly enters into. Nonetheless, their adoption and implementation were based on certain assumptions or parameters, as I will discuss below.

The same can be said about the *2030 Agenda for Sustainable Development* which was adopted in 2015 and builds on the two preceding global policy efforts. The difference between the MDGs and the Social Development Goals (SDGs) formulated in the *2030 Agenda* lies not just in the larger number of goals put forth in the latter (17), but also in their broader coverage, both in terms of the three dimensions of sustainability (ecological, social, and resource/economic), and in their explicitly stated applicability to all countries. In this sense, the *2030 Agenda* is more akin to *Agenda 21*, although the latter was far more comprehensive but less specific in target setting. The adoption of the SDGs has been heralded as a new and even historic shift towards global governance through goal setting, and as “the most ambitious effort yet to place goal setting at the center of global governance and policy”¹⁹ even though the goals are solely aspirational and have not been followed up by any formal commitments or obligations. This rather upbeat characterisation of the *Agenda* seems odd and misplaced. It is odd because *all* policy initiatives, including *Agenda 21*, the MDGs and the many multilateral environmental agreements (MEAs) that have been adopted from the 1970s, are inherently intentional and based on principles and goals. This is nothing new. It is also misplaced as an emphasis on goals, objectives or even targets does not, by itself, produce meaningful change or results, the more so because the SDGs relate to symptoms rather than to the causes or drivers of problems.

It gets worse. The *2030 Agenda*, even more explicitly so than the preceding two global policy initiatives, also contains goals and objectives that are fundamentally at odds with environmental protection and prescribes so-called sustainable economic growth and the expansion of free international trade and investment. The prescriptions are inherent to the neoliberal rule-based framework within which the SDGs should be advanced. The *Agenda* refers to the main role of the free market and the private (business) sector in advancing the goals (albeit in partnership with governments and NGOs) as reflected in an emphasis on the privatisation of resources (like water, communal land, forests) and the participation of the business sector in the provision of health services, finance, and infrastructure.²⁰ This approach can be seen as an example of what I have referred to as reverse environmental integration, the redefinition of environmental problems based on an economic framework and its associated goals and interests. The dominant economic paradigm functions de facto as the overarching framework within which environmental goals are interpreted to serve economic goals and interests.

Thus, the three global policy initiatives discussed above provide little if any guidance to the greening of policy areas or sectors from which most environmental pressures arise, including economic policy, energy, industry, transport, and agricultural

¹⁹ Kanie, Norichika, *et al.* (2017), "Introduction: Global Governance through Goal Setting", in N. Kanie and F. Biermann (eds.), *Governing through Goals. Sustainable Development Goals as Governance Innovation*, 1-27, 1.

²⁰ Weber, Heloise (2017), "Politics of 'Leaving No One Behind': Contesting the 2030 Sustainable Development Goals Agenda", *Globalizations*, Vol.14, No.3, 399-414.

policy. *Agenda 21* contained no chapters on these areas or sectors, and the MDGs also have nothing to say about them. The *2030 Agenda* refers to the promotion of “sustainable agriculture” (under Goal 2), “sustainable energy for all” (under Goal 6), and to “sustainable consumption and production patterns” (under Goal 12), but, as noted above, these are discussed in the context of the need for “sustainable economic growth” (in Goal 8). The need for economic growth is not questioned and its compatibility with environmental protection is simply assumed.

Apart from this lack of guidance by the overarching global policy initiatives discussed above for the greening of non-environmental sectors or policy areas, there are also no global multilateral agreements (MEAs) on sustainable agriculture, energy, transport, or other non-environmental sectoral policies. Although some research has been undertaken on the environmental issues and challenges in these sectors in a global context, we still seem a long way off from the adoption of international (let alone legally binding) agreements aimed at the transformation of these sectors based on globally agreed environmental boundaries, imperatives, principles or goals.²¹ Rather, politics and policies in these sectors remain firmly dominated by economic, sectoral and security interests embedded in national (state) and international institutions.²²

Arguably, some of the most important developments towards international environmental policy integration have occurred at a regional rather than global level. The European Union, in particular, has been a promoter of environmental policy integration in internal and external forms. In terms of internal integration, the EU has adopted a series of Environmental Action Plans based on a comprehensive view of environmental problems at the European level, supported by regular state of the environment reports produced by the European Environment Agency. The Action Plans contain (aspirational) environmental goals and objectives covering a broad range of issues. External environmental policy integration (the greening of non-

²¹ For instance, for a report on the global environmental issues and challenges linked to agriculture, see McIntyre, Beverly D. et al. (ed.) (2009), *Agriculture at a Crossroads. International Assessment of Agricultural Knowledge, Science and Technology for Development: Synthesis Report*. Washington: Island Press. For a report on such issues related to transport, see Organisation for Economic Co-operation and Development (2010), *Globalisation, Transport and the Environment*. Paris: OECD. Global energy policy has only recently emerged as a topic of research. Goldthau, A. (2016, e-book ed.), *The Handbook of Global Energy Policy*. Wiley.

²² For instance, the little-known *International Energy Charter* is a binding international convention signed by some 50 countries that has WTO-like features and is aimed at the promotion and protection of foreign investment in the energy sector. It frames environmental and sustainability goals within a market-based paradigm and thus provides another example of reverse environmental integration. Energy Charter Secretariat (2015), *International Energy Charter. Agreed Text for Adoption in the Hague at the Ministerial Conference on the International Energy Charter on 20 May 2015* Brussels: Energy Charter Secretariat. The International Energy Agency (IEA), although a useful source of information on global energy developments (including in renewables), is an arm of (30) OECD countries aimed foremost at enhancing energy security (for which it was set up in 1974). Although it has increased its engagement with non-OECD countries (including China and India), it is not a *global* organisation set up for developing global energy policy. International Energy Agency (IEA) (2021), About, <https://www.iea.org/about> (Accessed: 20 January 2022).

environmental policy sectors) has been an explicit policy goal in the EU since the Third Environmental Action Plan Programme (EAP 1982-1986). It was made a legal requirement in (Article 6 of) the Amsterdam Treaty in 1997 and reaffirmed in the Sixth Environmental Action Plan.²³

However, progress on this front, both at the national and sectoral levels, has been "extremely slow",²⁴ revealing a considerable gap between rhetoric and practice.²⁵ In 2015, the European Environment Agency stated that "Although some progress has been made on integration (e.g. climate and energy), policy measures still tend to be compartmentalised [...]."²⁶ Analysts have blamed a variety of reasons for this, including weak political commitment, institutional structures, regulatory styles, and political culture.²⁷ The European Environment Agency also commented on the weak political commitment to environmental integration, even on the part of the European Commission, and noted the lack of a strong institutional framework and authority that is needed to advance it.²⁸ At a more fundamental level, it has been argued that, although outwardly the EU projects itself as a strong advocate for environmental interests and integration (for instance, in negotiations on climate change), environmental concerns "remain marginal to the central project of deepening the integration process."²⁹ One of the main reasons why the European Union has promoted environmental integration is to eliminate trade barriers arising from differences in environmental regulation and to create and maintain a level playing field for member countries. The EU's concern has been foremost about the *harmonisation* of environmental regulation. But the harmonisation of environmental regulation across the EU, although it may have lifted standards in some countries, does not necessarily imply that the policies and practices within sectors have become more environmentally sustainable. Arguably, this has become even more difficult as it has brought about a convergence of policies, practices, and economic interests that makes

²³ European Environment Agency (2003), *Europe's Environment: The Third Assessment. Environmental assessment report no.10*. Copenhagen: EEA; European Commission (2020), *Environmental Integration*, European Commission, <https://ec.europa.eu/environment/integration/integration.htm> (Accessed: 26 March 2020).

²⁴ Liefferink, Duncan and Mikael Skou Andersen (1997), "The Innovation of EU Environmental Policy. Introduction", in D. Liefferink and M. S. Andersen (eds.), *The Innovation of EU Environmental Policy*, 9-37.

²⁵ Lenschow, Andrea (2002), *Environmental Policy Integration: Greening Sectoral Policies in Europe*. London and Sterling, VA: Earthscan Publications; Lenschow, Andrea (2002), "Conclusion: What Are the Bottlenecks and Where Are the Opportunities for Greening the EU?", in A. Lenschow (ed.) *Environmental Policy Integration: Greening Sectoral Policies in Europe*, 219-233.

²⁶ European Environment Agency (2015), *The European Environment — State and Outlook 2015: Synthesis Report* Copenhagen: EEA, 145.

²⁷ Lenschow, Andrea (2002), "Greening the European Union: An Introduction", in A. Lenschow (ed.) *Environmental Policy Integration: Greening Sectoral Policies in Europe*, 1-21.

²⁸ European Environment Agency (2005), *Environmental Policy Integration in Europe. State of Play and an Evaluation Framework* Copenhagen: EEA.

²⁹ Baker, Susan (2000), "The European Union: Integration, Competition, Growth - and Sustainability", in W. M. Lafferty and J. Meadowcroft (eds.), *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*, 303-336, 335.

it difficult for individual member countries to adopt more ambitious environmental integration efforts aimed at greening their own sectors.

Thus, international commitments towards environmental policy integration, regionally and globally, have been half-hearted at best and not backed up by the provision of adequate means to significantly advance it in practice. At the regional level, arguably, the most comprehensive (internal integration) effort has been undertaken by the European Union, accompanied by a strong official commitment to sector (external policy) integration, but the results have been meagre. At the global level, there have been three successive major initiatives involving the adoption of comprehensive global sets of goals aimed at balancing social, economic, and environmental interests, but again their effectiveness has been questionable in large part because of the failure to collectively allocate and create adequate means for their realisation, including the institutional frameworks (and power) necessary for the implementation of these policies.

Moreover, by far, most international environmental policy efforts have been and remain focused on particular problems (symptoms) like climate change, ozone depletion, biodiversity decline, and hazardous waste. Efforts have been highly fragmented, as reflected in the large number (around 500) of MEAs that have been adopted, the effectiveness of which has also been questioned given the "huge gap between agreed goals and implementation".³⁰ Thus, most global environmental policy efforts mirror the reactive, ad hoc, and fragmented approach that has been characteristic also of environmental policy development within countries. At both levels, environmental policy efforts have been focused on symptoms rather than on the sources, causes or drivers of problems contained in non-environmental sectors.

Institutional integration

Where global or international policies have taken the form of rules or norms, like formal agreements, they are also institutions. As pointed out before, interpretations, policies and institutions flow over into each other, as interpretation is an inevitable facet of policy, and as policies often take the form of rules or norms that guide or channel behaviour. The rationale for analysing environmental integration efforts in each of these realms is to find out whether and to what extent they are complementary or mutually supportive. Approaches to environmental integration often differ in the degree of emphasis on only one or two of these dimensions, thus limiting their effectiveness. In this section, the focus will be on global environmental integration efforts in the institutional realm. Again, we will look at the internal and external dimensions. In the institutional sphere, the internal dimension relates to the creation of overarching institutions (rules and organisations) that have the role of coherently advancing environmental integration across all institutions that have a major impact

³⁰ Stakeholder Forum for a Sustainable Future, *Review of Implementation of Agenda 21*, 262-264; Bryner, Gary C. (2004), "Global Interdependence", in R. F. Durant, et al. (eds.), *Environmental Governance Reconsidered: Challenges, Choices, and Opportunities*, 69-104; Wapner, Paul (2003), "World Summit on Sustainable Development: Toward a Post-Jo'burg Environmentalism", *Global Environmental Politics*, Vol.3, No.1, 1-10; French, Hilary, "Reshaping Global Governance".

on the environment. The external dimension relates to the greening of what are commonly regarded as non-environmental institutions, for instance, the organisations and rules that guide decision- and policymaking in the areas of economics, energy, transport, industry, agriculture, and science and technology. Given the crucial role and importance of institutions in guiding, channelling or even prescribing behaviour and practices, and the relative durability of institutions, environmental integration in the institutional realm is arguably *the* most important but also the most difficult to achieve.

At the global level, on the internal dimension, this difficulty is most apparent in the absence of a global environmental organisation with the task of advancing environmental integration in coherent and complementary ways across all other global institutions and all nation-states.

From its establishment at the Stockholm Conference in 1972, the United Nations Environment Programme (UNEP) arguably has been the world's central agency for environmental policy development and coordination. However, formally, the UNEP is not a stand-alone or specialist organisation like the World Trade Organisation or the World Health Organisation, but a "programme" operating under the direction of a Governing Council elected by the General Assembly. The UNEP's main functions have been to collect and disseminate environmental data and information and report on environmental trends, act as a catalyst for global environmental policy development, and play a coordination role within the UN system regarding the environmental dimension of sustainable development. It has virtually no operational implementation responsibilities, in contrast, for instance, to the United Nations Development Programme (UNDP), which has a significant on-the-ground presence in many low-income countries.

In practice, however, the UNEP has functioned primarily as an agenda-setting and policy initiation agency while it has had great difficulty fulfilling its coordination role. It has played a crucial part in the initiation and formation of many multilateral environmental agreements (MEAs), including those on the protection of the ozone layer (the *Vienna Convention* and the *Montreal Protocol*), and the *Convention on Biological Diversity*. It has also been relatively successful in its environmental monitoring and reporting role as reflected, for instance, in the publication of the *Global Environmental Outlook* series.³¹ But it has been much less effective in the coordination of UN institutions and policies even within what is commonly considered the environmental dimension of sustainable development.³² In large part, this can be attributed to the existence of multiple other agencies with significant environmental responsibilities, creating "bureaucratic turf" issues and rivalry. Among these are the United Nations Development Programme (UNDP), with which the UNEP has had an

³¹ Ivanova, Maria (2009), "UNEP as Anchor Organization for the Global Environment", in F. Biermann and B. Siebenhüner (eds.), *International Organizations in Global Environmental Governance*, 152-173; Najam, Adil (2003), "The Case against a New International Environmental Organisation", *Governance*, Vol.9, 367-384.

³² Ivanova, Maria, "UNEP as Anchor Organization for the Global Environment"; Tarakofsky, Richard G. (2005), "Strengthening International Environmental Governance by Strengthening UNEP", in B. Chambers and J. F. Green (eds.), *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms*, 66-92.

uneasy relationship, and the Commission on Sustainable Development (CSD) which was created in 1992 to monitor progress made by countries in the implementation of *Agenda 21*, and the Global Environment Facility (GEF) that was set up to financially support low-income countries with tackling environmental issues and the implementation of environmental agreements. Coordination efforts by the UNEP, through a variety of mechanisms such as the Environmental Management Group and the Global Ministerial Environmental Forum, were also hampered by a lack of focus and consistency, ineffective leadership, and generally by its weak mandate, status, and funding basis. Moreover, the growing number of MEAs, partly due to the UNEP's initiatives, many of which with their independent secretariats, further added to the coordination challenge. The location of the UNEP's headquarters in Nairobi, remote from the UN's more powerful organisations, also has not helped.³³

Arguably even more important than the UNEP's difficulty to effectively coordinate the activities within the UN system on the environmental dimension of sustainable development are the enormous obstacles to what I have referred to as external environmental integration, the greening of non-environmental institutions within that system. For a start, the UNEP's coordination role was defined *only* in terms of the environmental dimension, so formally it had no mandate or role in the greening of institutions like the WTO and the UNDP and their role in the promotion of economic development, trade, and investment. As Ruggie has noted, the UN system has been built as a structure of largely independent organisational silos that pursue their own interests.³⁴ This applies even more so to the Bretton Woods Institutions (the IMF and the World Bank) that are formally independent of the UN system.

Virtually all the most powerful and well-resourced international institutions, within and outside the UN system, have been created to promote economic growth and development, and have opposed more effective environmental coordination that could have impinged on their mandates and power, which have remained untouched by the UNEP.³⁵ Whatever recognition these institutions (like the World Bank and the WTO) have given to environmental matters has sprouted from their non-environmental mandates and interests and concerns about upholding their legitimacy in the face of rising environmental pressures, critique, and demands. Their environmental integration efforts have been little more than greenwashing exercises and have occurred without any guidance from the UNEP or any other overarching environmental-institutional framework. Rather than adapting non-environmental institutions to environmental imperatives and goals, these efforts usually take place

³³ Chambers, Bradnee (2005), "From Environmental to Sustainable Development Governance: Thirty Years of Coordination within the United Nations", in B. Chambers and J. Green (eds.), *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms*, 13-39; Ivanova, Maria, "UNEP as Anchor Organization for the Global Environment"; Bauer, Steffen (2013), "Strengthening the United Nations", in *The Handbook of Global Climate and Environment Policy*, 320-338.

³⁴ Ruggie, John Gerard (2003), "The United Nations and Globalization: Patterns and Limits of Institutional Adaptation".

³⁵ Henry, Reg (1996), "Adapting United Nations Agencies for Agenda 21: Programme Coordination and Organisational Reform", *Environmental Politics*, Vol.5, No.1, 1-24; Bauer, Steffen, "Strengthening the United Nations".

under the standard slogan of “balancing” environmental, social, and economic concerns, and within institutional frameworks that are heavily tilted towards the latter.³⁶

It is no wonder then that many calls have been made for strengthening the UNEP or for its replacement by a more powerful body such as a World Environment Organisation (WEO). Views differ on whether it is desirable, possible, or even necessary to create a new and more powerful global environmental organisation or whether the UNEP should and can be strengthened to make it more effective. While advocates of creating a new organisation emphasise the need for a powerful environmental institution to provide a counterweight to the WTO and other IOs that promote economic and development interests,³⁷ others argue that the UNEP could be made more effective by allocating it more (secure) resources and by bolstering its formal mandate.³⁸ Moreover, most analysts agree that the political reality makes it unlikely that the creation of a much stronger and independent environmental organisation will be supported by the major powers and even by most low-income countries that are afraid that strengthening environmental power will put in place more hurdles to their development. Simply changing the name of the UNEP to WEO does not address the underlying causes of the relative weakness of the world’s top environmental agencies, which are considered to lie in the weak political support for strong international environmental policies on the part of most governments in the world.³⁹

Apart from identifying the political-economic obstacles to the creation of a more powerful global environmental organisation one also needs to carefully consider what role and powers such an agency would need to be equipped with to effectively advance environmental integration. As Ivanova rightly points out, this requires foremost paying attention to function before determining form, and assessing what is

³⁶ Guilhot, Nicolas (2000), “Repackaging the World Bank. Where Economics Meets Politics”, *Le Monde Diplomatique (English edition)*, October, 10-11; Rich, Bruce (1994), *Mortgaging the Earth. The World Bank, Environmental Impoverishment and the Crisis of Development*. Boston: Beacon Press; Rich, Bruce (2013), *Foreclosing the Future. The World Bank and the Politics of Environmental Destruction*. Washington, DC: Island Press; Eckersley, Robyn (2004), “The Big Chill: The WTO and Multilateral Environmental Agreements”; Zelli, Fariborz (2007), “The World Trade Organization: Free Trade and Its Environmental Impacts”, in K. V. Thai, et al. (eds.), *Handbook of Globalization and the Environment*, 177-216; Sampson, Gary P. (2005), “The World Trade Organization and Global Environmental Governance”, in W. B. Chambers and J. Green (eds.), *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms*, 124-149.

³⁷ Biermann, Frank (2000), “The Case for a World Environment Organization”, *Environment: Science and Policy for Sustainable Development*, Vol.42, No.9, 22-31; Chambers, Bradnee, “From Environmental to Sustainable Development Governance: Thirty Years of Coordination within the United Nations”; Charnovitz, Steve (2005), “A World Environment Organization”, in W. B. Chambers and J. F. Green (eds.), *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms*, 93-123.

³⁸ Najam, Adil (2003), “The Case against a New International Environmental Organisation”; Young, Oran R. (2008), “The Architecture of Global Environmental Governance: Bringing Science to Bear on Policy”, *Global Environmental Politics*, Vol.8, No.1, 14-32.

³⁹ Najam, Adil (2003), “The Case against a New International Environmental Organisation”.

needed – and what stands in the way – to fulfil these functions.⁴⁰ She argues that, in 1972, there were good reasons for giving the UNEP the institutional form that it got, based on its functions as an agenda-setter and initiator, a coordinator of environmental programmes and their implementation, and as a reviewer of the state of the environment and the effectiveness of programmes. It was deliberately designed to be a small and nimble agency, not a large bureaucratic organisation combining the environmental roles and activities undertaken by other UN institutions. Hence, if the original role of the organisation is still considered to be valid, it seems more appropriate to strengthen the agency by addressing the root causes that have hampered it to play that role effectively than to change it to a stand-alone or specialist organisation. Ivanova identifies these main factors as insufficient funding and the location of the UNEP headquarters (in Nairobi), both of which affected the organisation's ability to effectively fulfil its functions.

There is indeed much to be said for *not* creating a big, stand-alone, specialist environment agency with heavy (on the ground) implementation responsibilities. Given the virtually all-encompassing nature of the environment and the multitude of environmental issues, such an organisation could easily become a bureaucratic monster that would be virtually impossible to manage. Equally problematic would be the presumption that it would somehow know best how to implement policies and programmes on the ground, notwithstanding the enormous contextual differences between countries, regions, and localities. Rather than getting bogged down in implementation and operational matters, it would be more appropriate for a global environmental organisation to preoccupy itself with institutional and policy frameworks that guide and oversee the integration of global environmental imperatives. The foremost priority at the global level is to green the dominant non-environmental institutions (rules and organisations), notably those in the financial-economic, trade, investment and development areas, and the policy paradigms with which they are intertwined.

For a global environmental organisation to fulfil such a task, more is needed than simply allocating more funding to the UNEP and relocating it to New York or Geneva. Such a task goes well beyond awareness-raising and coordination based on communication and persuasion. As noted above, most International Organisations regard demands for environmental protection as a nuisance or threat. These organisations are, euphemistically stated, rather unenthusiastic about being coordinated by a global environmental agency, let alone having their mandates subordinated to environmental imperatives. Breaking through these barriers requires more than creating a specialist IO focused on the coordination of the *environmental* dimension of sustainable development. It will require the creation of an organisation that is *much more powerful* than other environmental *and* non-environmental IOs. To be effective, it would need to be at the apex of the UN bureaucracy based on a recognition of the lexical priority of environmental protection. It would make sense to label it the Global Sustainability Organisation, reflecting the broad nature of its task.

⁴⁰ Ivanova, Maria, "UNEP as Anchor Organization for the Global Environment"; Ivanova, Maria (2012), "Institutional Design and UNEP Reform: Historical Insights on Form, Function and Financing", *International Affairs*, Vol.88, No.3, 565-584.

Most environmental analysts seem to be blinded by political pragmatism in their thinking about institutional change at the global level and unable or unwilling to state what is *needed* to address the environmental challenge more effectively at that level, perhaps out of fear of being accused of political naivety or idealism. But the reality of environmental failure requires abandoning the practice of wrapping ideas into political reality packaging. It demands spelling out the big changes that are needed to bring under control the root causes of environmental destruction.

Conclusion

As this brief survey of international and global environmental integration efforts indicates, most progress has been made in the cognitive-internal domain, specifically in the promotion of sustainable development as *the* overarching framework for integrating environmental, economic, and social interests and concerns. Although essentially contested and subject to manipulation, sustainable development has become a globally dominant concept that *can* provide a meaningful basis for embedding global social and economic policies within defined environmental parameters. However, the prevailing interpretation of sustainable development (as a “balance” between economic, social, and environmental dimensions) has prevented it from being applied and implemented in ways that assign priority to environmental imperatives. Therefore, the concept has failed to function as a meaningful basis for integrating environmental imperatives into non-environmental cognitive frameworks (for instance, dominant economic ideology, theory and models) and overarching policy frameworks.

Agenda 21, adopted at UNCED in 1992, constituted the most comprehensive global action plan for implementing sustainable development that the world has seen thus far. But its lack of clearly identified planetary boundaries and environmental imperatives within which development must remain (or return), meant that it could not function as a basis for the greening of policies that have a significant impact on the environment, including economic, science and technology, energy, agriculture, and transport policies. The successors of *Agenda 21* – the Millennium Development Goals and the *2030 Agenda for Sustainable Development* – both narrowed the scope of the environmental integration challenge and reversed it by putting it within a dominant neoliberal economic framework.

Furthermore, the adoption of *Agenda 21* and its follow-up policy frameworks has not been accompanied by reforms that put environmental interests at the apex of the global institutional framework. Attempts at reform even failed to significantly strengthen the institutional power of environmental advocates vis-à-vis non-environmental institutions. Consequently, all the most important and powerful global institutions continue to give precedence to non-environmental interests, in particular to economic growth, at best paying lip service to environmental concerns.

To conclude, like in the national context, the main challenge to environmental integration internationally and globally lies in the institutional frameworks (rules and organisations) that promote goals and actions that cause environmental problems, not those that are directed at addressing them (environmental institutions). The rules and organisations that appear to be the hardest to change are those geared towards the promotion of economic growth and development. Prominent among these are the

World Bank, the International Monetary Fund, and the WTO, and the rules under which they operate.

Whether such institutions can be fundamentally changed requires looking at the factors that underlie or drive political decision-making at the global level. As noted before, the ability of individual states to effectively address the environmental challenge has become increasingly circumscribed by what is commonly referred to as the process (or processes) of globalisation. In the next chapter, I will discuss some of the main perspectives on international relations and globalisation and assess their implications for the prospects of environmental integration at the global level.

Chapter 11 – Making Sense of International Relations and Globalisation

Introduction

As mentioned in the foregoing chapters, states are increasingly struggling to fulfil their core functions in large part because of their increased economic interdependence with other countries, a process commonly referred to as economic globalisation. Although international (or inter-polity) trade is nothing new and has taken place for thousands of years, the extent to which countries have become dependent on imports and exports, and international investments and money flows, has reached levels that have led many analysts to argue that the ability of states to fulfil their functions and to meet the needs of their citizens, has eroded to the extent that they have become outdated political institutions, and must be replaced by other governance institutions. The need to address the environmental challenge at the global level is often seen as an additional and crucial reason to advocate the supersession of states. As discussed in the preceding chapter, significant efforts have been undertaken to strengthen international and global policies and institutions to address the environmental challenge. Similarly, the calls for strong(er) international and global regulation and institutions to tackle (financial-) economic instability and risks, fight international crime and terrorism, pandemics, and contain the risks of major international conflict, war, all add to the case for strengthening global governance and for reining in what is increasingly perceived as the irrational, irresponsible and damaging behaviour and actions of states that continue to pursue misguided notions of their national interest.

At face value, this interpretation of the existing international (dis-) order seems plausible. Surely, humanity has reached a point where it needs to collectively address these global challenges if it is to have a decent future, if at all. Yet, as the discussion in the preceding chapter indicates, the international efforts on the environmental front have been, and still are, tentative, weak, and mostly ineffective. Here, too, factors stand in the way of creating effective international and global governance regimes. This chapter aims to identify some of the most important factors. I do so by drawing on a range of different perspectives from the fields of International Relations and Globalisation. Although there are significant differences in interpretation between the main schools of thought within these fields, some of which may be conflicting or incompatible, I argue that there is significant merit in each of these, largely because the international and global reality is too complex and messy for it to be captured by a single school of thought.

Table 8 offers a schematic overview of four schools of thought in the fields of International Relations (IR) and globalisation that I elaborate upon in this chapter. The first two, Realism and Institutionalism, have been mainstream but competing perspectives within the field of international relations. The third, International Political Economy (IPE) has also been around for a long time but has developed (and been kept) largely outside of the field of IR mainly because of its Marxist roots and critical stance. The fourth, Cosmopolitanism, has also long historical roots but has been marginalised because of its perceived idealism. Although within each of these schools

of thought there is a variety of streams that come under a raft of different labels (sometimes with a "neo" prefix), the discussion here will be confined to what I perceive to be the core or shared characteristics. The reasons for this are both economy of space and the aim to identify some of the main factors that can be held responsible

Table 8 – International Relations and Globalisation: Four Main Perspectives

	Realism	Institutionalism	International Political Economy	Cosmopolitanism
Main actors/ agency	States as self-interested sovereign & unitary actors	States, international organisations, NGOs, epistemic communities	States and social classes, TNCs, labour organisations, international organisations	Global citizens, global (civil) society, social & environmental movements, INGOs
Nature of relations	Adversarial, conflicting national interests, bargaining, ad hoc coalitions	Inter-dependence, mutual interests, co-operation, but also conflict	Hierarchical & exploitative, imperialism, centre-periphery, resistance	Co-operative, based on recognition of common humanity and one Earth
Focus of study/main concerns	Security, conflict-management, relative capability, geopolitics, hegemony, civilisational conflict	Governance systems, institutions and international organisations, regimes, problem-solving	Dynamics of capitalism, economic globalisation and concentration of capital, inequality, and social injustice	Moral principles, human rights and duties, social justice, global interdependence, international and global institutions
Metaphors & methodology	Billiard balls, geopolitical analysis; game theory	Analysis of negotiations, treaties, regime effectiveness, the role of epistemic communities	Analysis of capital and capital flows, TNCs, role of governments, international institutions, critical theory	One ("Blue") Earth, constructivist, normative designs for a new world order; green critical theory
Environmental integration solutions	Environmental security based on state interests	Strengthening of environmental regimes and institutions	Structural political-economic change	Creating global institutions, enhancing democracy

for the low status of environmental protection at the global level. As noted above, all four schools of thought offer valuable insights into what is going on in the world and why, based on differences in emphasis on aspects of global reality, especially those associated with the different forms of power discussed in Chapter 3. They also, therefore, offer largely complementary views on the obstacles to environmental integration at the global level.

This assessment leads us to re-appreciate the crucial role of states. Contrary to the depiction of the (future) role of the state sketched in the opening paragraph of this chapter, I argue that states, despite their failings and shortcomings, are still, and arguably even more so than in the past, the most crucial political institutions for meeting people's and societies' needs, and that restoring their capacity or capacities offers the most realistic pathway to address the world's problems more effectively, including the environmental challenge. But this implies that states will *have to* take on board environmental integration as a prime core function and are (further) democratised and transformed to acquire the capacity to fulfil all five functions in cooperation with other states. This argument will be elaborated upon in Chapters 12 to 14.

Realism

The Realist perspective has been referred to as the oldest school of thought in international affairs¹ and still has strong support in academic as well as political circles. The four core elements of this perspective are: the world consists of a system of sovereign states (recognising no higher authority); states are driven by self-interest; the most important interest pursued by states is security (defined in the first instance as the protection of their territorial integrity); linked to the previous point, another main concern of states is their relative power in the international arena. A state's relative power depends not just on its military might, but also its economic power (command over resources) as this provides a crucial basis for military power. So, security and economic strength are first-order priorities of the state. However, although economic power is important, the state's decisions and actions are not dominated or captured by particular economic interests – security interests carry the highest priority and will trump particular economic interests if deemed necessary.

The state is seen as a rational unitary actor whose decisions are based on the interests mentioned rather than on moral or ethical considerations, even though some classical Realists like Hans Morgenthau and E. H. Carr took the view that morality should also have a place in Realism. But the existence of universal principles, values or interests is commonly denied, and those who argue in favour of these are often dismissed as idealists.²

¹ Gilpin, Robert (2002), "A Realist Perspective on International Governance", in D. Held and A. McGrew (eds.), *Governing Globalization: Power, Authority and Global Governance*, 237-248, 237.

² Korab-Karpowicz, W. Julian, Political Realism in International Relations; Sterling-Folker, Jennifer (2005), "Realist Global Governance. Revisiting *Cave! Hic Dragones* and Beyond", in M. J. Hoffmann and A. D. Ba (eds.), *Contending Perspectives on Global Governance. Coherence, Contestation and World Order*, 17-38.

In the realist worldview, the international order is often referred to as anarchy in the sense of the absence of a supra-state authority. Yet, this does not necessarily imply international chaos and a continuous war of all against all (as a Hobbesian view would contend). Although states are driven by self-interest, they can and do cooperate with other states, but only when it serves their interests. Hence, they can and do form alliances, pursue a "balance of power", or sign up to multilateral agreements if these are perceived to be in their interest. Also, as states are highly unequal in power, the most powerful state or states (hegemon) are likely to perceive the maintenance of the status quo as desirable and therefore may be averse to engaging in international action that destabilises the existing order. The existence of a global hegemon is therefore often seen as conducive or even a necessary condition for a stable global order, and for state cooperation, albeit on the terms of the hegemon.³

Hence, in the Realist view, to paraphrase Orwell, all states are sovereign, but some states are more sovereign than others. Cooperation by the most powerful states is always contingent upon their perceptions of their main (security and general economic) interests, even if this comes at the expense of other states (and their sovereignty). Given the enormous differences in (relative) power between states it is, as pointed out in Chapter 5, rather meaningless to try to develop a general theory of states, as many Neo-Realists aim to do.⁴ Such efforts only serve to disguise these enormous inequalities and distract from the colonialist, imperialist, exploitative and repressive policies and practices that have been characteristic of most if not all major powers and empires. This is, of course, widely recognised in the case of the colonialist past of many European powers, but it applies also to the United States and other big powers, including Russia (and the ex-Soviet Union), and China.

The United States has long conformed to the Realist state model, as illustrated by its many foreign interventions over the years.⁵ Just in the recent past, successive US administrations refused to sign up to the biodiversity and climate change conventions, recognise the authority of the International Criminal Court, invaded Afghanistan and Iraq, engaged in the extra-judicial killing of suspected terrorists, have withdrawn from international nuclear arms agreements and de facto from international trade agreements, among many other instances of unilateral action. References to the United States as an empire, concerned foremost with protecting access to and control over natural resources, and maintaining its military, economic and technological supremacy, also fit in well with the Realist view of the world.⁶ By contrast, many other

³ Haas, Peter M. (1994), "Regime Patterns for Environmental Management", in P. Haas and H. Hveem (eds.), *Complex Cooperation. Institutions and Processes in International Resource Management*, 35-63.

⁴ Korab-Karpowicz, W. Julian, *Political Realism in International Relations*.

⁵ Krippendorf notes that the United States intervened 160 times in 170 years, mostly because of economic interests. Krippendorf, Ekkehart, *Die Amerikanische Strategie. Entscheidungsprozess Und Instrumentarium Der Amerikanische Aussenpolitik*, 26. See also: Chomsky, Noam, *Deterring Democracy*; Petras, James F. and Henry Veltmeyer, *Globalization Unmasked: Imperialism in the 21st Century*; Johnson, Chalmers (2006), *Nemesis: The Last Days of the American Republic*. New York: Metropolitan Books.

⁶ Dalby, Simon (2004), "Ecological Politics, Violence, and the Theme of Empire", *Global Environmental Politics*, Vol.4, No.2, 1-11; Parenti, Michael, *Against Empire*; Laffey, M. (2003),

nations do not have the degree of power that allows them to unilaterally pursue, let alone impose, their interests on other countries, and are therefore impelled to seek cooperation and compromise in their foreign policies, and are followers rather than leaders. Therefore, the Realist perspective is more applicable to the United States than to many other countries and arguably serves it well, providing a legitimate theoretical basis for its foreign policies.

However, it should be kept in mind that the Realist perspective leaves room for interpretation by the leaders of a state of what the state's (essential) security interests are. Given changes in leadership and the fluidity of the international situation, these definitions can change. For instance, there have been significant changes in US foreign policy in its emphasis on multilateralism or unilateralism (such as from Obama to Trump and back to multilateralism under Biden). US foreign policy, like the foreign policies of all countries, is dynamic rather than static, and changes depending on who is in power, developments, circumstances, and interpretations. This does not mean that the Realist perspective is wrong, and/or that the United States is not foremost concerned about advancing and protecting its national interests as defined by its leaders. In some areas or respects, there is likely to be continuity in foreign policy. Arguably, the most important continuing and ever-growing concern in US foreign policy over the last 20 years or so has been the rise of China and the threat that it poses to US hegemony.⁷ In other respects, policy changes may reflect reconsiderations of (the effectiveness of) means rather than of ends or what a country's vital (national) interests are. This, indeed, is well illustrated by the rise of the notion of environmental security.

Environmental concerns and interests did not figure prominently in Realist accounts until they started to be connected with the notion of environmental security. Originally, this notion was advanced in environmental circles as a way of broadening the traditional concept of security and possibly increasing the political weight assigned to environmental interests.⁸ But, as some environmental analysts feared, it has been hijacked by those who have a vested interest in maintaining the traditional notion of national security. Realists, including staff of the United States Pentagon,⁹ adopted a

"Discerning the Patterns of World Order: Noam Chomsky and International Theory after the Cold War", *Review of International Studies*, Vol.29, No.4, 587-604.

⁷ Golub, Philip S. (2019), "Curbing China's Rise", *Le Monde Diplomatique (English edition)*, October, 2-4; MacFarlane, Laurie (2020), "The Tensions over Huawei Are Not About Trade, but over Supremacy", *The Guardian*, 16 July; Layne, Christopher (2017), "The US Foreign Policy Establishment and Grand Strategy: How American Elites Obstruct Strategic Adjustment", *International Politics*, Vol.54, No.3, 260-275; Tisdall, Simon (2016), "US on Back Foot as China Rises", *The Guardian Weekly*, Vol.195, 17, 1,12; Clark, Ian (2011), "China and the United States: A Succession of Hegemonies?", *International Affairs*, Vol.87, No.1, 13-28; Khong, Yuen Foong (2014), "Primacy or World Order? The United States and China's Rise - a Review Essay", *International Security*, Vol.38, No.3, 153-175.

⁸ Barnett, Jon, *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*; Renner, Michael, "Security Redefined".

⁹ Schwartz, Peter and Doug Randall, *An Abrupt Climate Change Scenario and Its Implications for United States National Security*; Townsend, Mark (2004), "Giant Space Shield Plan to Save Planet", *The Observer*, 11 January.

view of environmental security that emphasises the risk of conflict over, and the need to secure access to, natural resources, and protect the nation against waves of environmental refugees. From this outlook, climate change is foremost of concern because of its geopolitical and security implications for the United States and its allies.¹⁰

Thus, from a Realist perspective, environmental concerns are considered only or mainly to the extent that they threaten or serve first-order interests. Environmental issues are redefined to fit in with these concerns, making at most for a reverse or subordinate form of environmental integration. As several analysts have pointed out, this form of integration is unlikely to be conducive to addressing the underlying causes of environmental problems, which lie foremost within countries and are thus internal rather than external. The integration of environmental concerns into traditional security thinking may well make matters worse as it “weaponizes” the environment and uses environmental problems as an excuse for strengthening and using military force to address environmental problems, at great environmental and human costs, as argued in Chapter 5.¹¹

However, this does not mean that the Realist perspective should be ignored by advocates of environmental integration. To the extent that this perspective influences, drives, or even dominates the actions of states and governments, it poses significant obstacles to international cooperation efforts aimed at resolving or addressing environmental problems. Not surprisingly, this view of the world continues to hold much attraction to the major powers, notably the United States, as it provides a rationale and justification for pursuing and imposing its (perceived) interests and views on other countries and governments.¹² Although the United States may no longer be the all-dominant and hegemonic global superpower or empire that it was widely considered to be since WWII, in particular after the demise of the Soviet Union, it is still the most powerful nation on Earth, economically, militarily, and in the media/communications (cognitive power) domain. However, China is rapidly becoming a rival superpower, and is perceived as such by the United States, while India and Russia, along with the EU, are increasingly asserting their own significant power amid this rivalry. From a Realist perspective, this is likely to lead to growing international tension and conflict, a view that may become a self-fulfilling prophecy if this perspective continues to maintain or strengthen its grip on governments of countries.

If this turns out to be the case, this does not bode well for the prospects of environmental integration at the global level and for that matter at the level of nation-

¹⁰ Deudney, Daniel (1990), “The Case against Linking Environmental Degradation and National Security”; Dalby, Simon (1997), “Environmental Security: Geopolitics, Ecology and the New World Order”, in J. Braden, et al. (eds.), *Environmental Policy with Political and Economic Integration*, 453-475.

¹¹ Deudney, Daniel (1990), “The Case against Linking Environmental Degradation and National Security”; Dalby, Simon, “Environmental Security: Geopolitics, Ecology and the New World Order”.

¹² It has been argued that this is still the prevailing view of the United States, despite the rise of China. Zajec, Olivier (Translated by Charles Goulden) (2020), “Biden Dreams of Rebuilding the International Order”, *Le Monde Diplomatique (English edition)*, December, 6-7.

states. As many environmental problems can only be tackled effectively by global cooperation, growing conflict, distrust, and rivalry, accompanied by a revival of nationalism, is likely to increase rather than reduce environmental exploitation for perceived national security and economic interests. As Renner has pointed out, the "war on terror", waged in the name of enhancing security, has had the effect of diverting attention and resources away from environmental imperatives and has made the world even less secure in all respects.¹³ The more the Realist perspective dominates, the gloomier the prospects of effective environmental integration at the national and international levels.

But the Realist view of the world does not go unchallenged. There are other schools of thought that offer a more optimistic perspective on the willingness and ability of states to cooperate. One of these, which I refer to as Institutionalism, will be discussed next.

Institutionalism

Institutionalism, also referred to by other labels such as Neo-Institutionalism, (Neo-) Liberal Institutionalism, and Pluralist-Institutionalism is a variegated school of thought that focuses on international institution-building as a means by which states give expression to or develop their common and overlapping interests and resolve issues between them. Like at the national and sub-national levels, institutions are defined here as formal and non-formal rules and organisations. Institutions are important mechanisms for guiding or channelling the behaviour and actions of governments, non-governmental organisations, and citizens. Institutionalists seek to create or strengthen international law (hard and soft), regimes (normative arrangements around specific issues), and international organisations (regional and global) as means of addressing or resolving transnational issues.

Like Realists, Institutionalists accept the existence of the state system and see states as the main international actors. But unlike Realists, they are more optimistic about the willingness of states to co-operate with each other given the interactions between citizens of different countries, the (functional) interdependence between states, and their shared or common interests. States are not seen as the impenetrable and autonomous billiard balls that Realists perceive them to be, but as more or less open systems that function in an interdependent world. Nevertheless, Institutionalists are not blind to the differences between states, to the pursuit by states of their interests, and the existence of conflict. Arguably, the main difference between Realists and Institutionalists is that the latter argue that much of the conflict that occurs is *unnecessary*.¹⁴ This implies that the extent to which conflict or cooperation occurs depends largely on how state actors interpret or define state interests. While Realists define the state's (security and economic) interests exclusively in a national context, institutionalists see greater scope for interpreting these interests in an international context. For instance, they may look at international agreements and institutions for facilitating communication, transportation and navigation as serving shared or

¹³ Renner, Michael, "Security Redefined", 13-16.

¹⁴ Jervis, Robert (1999), "Realism, Neoliberalism, and Cooperation: Understanding the Debate", *International Security*, Vol.24, No.1, 42-63.

common interests rather than purely national interests. Such agreements and institutions create mutual advantages that one state on its own is unable to obtain (unless it were to be powerful enough to impose its idea of what is needed or desirable on other states). Similar benefits may derive from trade agreements, even if these create interdependence. Arguably, the notion of security can no longer be defined solely based on a state's territorial integrity as the fall-out of a major war (let alone a nuclear war) could significantly compromise its security even if that state is not directly involved in that conflict. Hence, international agreements and institutions aimed at preventing war are in the common as much as in the national interest. One of the sources of Institutionalism, classical liberal internationalism, put forward the idea that growing interdependence, notably in trade, would also make war between states irrational and less likely.¹⁵

However, institutionalists regard international institution building as the creation of systems of international governance rather than of international or world government. The latter is seen by most as unrealistic, undesirable, and unnecessary.¹⁶ Yet, the institutional perspective offers more hope for international and global cooperation on environmental protection than the Realist school of thought. Although Institutionalists do not assume or take the view that states and governments are *driven by* common interests or goals, they see much scope for cooperation to mutual advantage, inspired by the liberal view of free trade and the free market. The creation and expansion of the European Union is perhaps the most prominent example of how the (perceived) benefits of economic cooperation have led to high levels of cooperation and integration across a wide range of policy areas, including the environment.

Yet, international institution-building is no easy matter, and its success is heavily contingent on whether differences in the political-economic and security interests of states, as defined by governments, can be accommodated. Politics and political rationality (or irrationality, depending on one's view) may lead to an emphasis on short-term and particularistic interests rather than longer-term, collective and common interests. Cooperation, therefore, according to the Functionalist perspective, is often less difficult to achieve in (policy) areas that are perceived to be less politically charged or controversial and more of a technical or functional nature. For instance, international cooperation has long occurred in areas like communication (postal services are often cited as a classic example) and combating contagious diseases. David Mitrany, who has been described as the "chief exponent of Functionalism", linked these functions to human needs and the promotion of human welfare. In his view, international conflict was best tamed by the expansion of global cooperation, notably by experts, in non-political areas, as successful cooperation in such matters would lead people to gradually transfer their loyalty beyond the nation-state to

¹⁵ McGrew, Anthony G. (2002), "Liberal Internationalism: Between Realism and Cosmopolitanism", in D. Held and A. G. McGrew (eds.), *Governing Globalization: Power, Authority and Global Governance*, 267-289.

¹⁶ Young, Oran R. (1989), *International Cooperation: Building Regimes for Natural Resources and the Environment*. Ithaca: Cornell University Press; Haggard, Stephen and Beth A. Simmons (1987), "Theories of International Regimes", *International Organization*, Vol.41, No.3, 491-517.

international organisations, thus strengthening the legitimacy of international governance.¹⁷ As scientists and experts tend to play a major role in the interpretation of such issues and the development of policy options, agreement and cooperation on such matters is often more achievable than on politically controversial issues. It can be argued that cooperation in those areas, and the increased mutual advantages, interdependence, and trust that it generates, can provide a basis for further policy and institutional integration between states, including in areas where this would initially have been very difficult or politically impossible.

However, functionalist optimism, although attractive to those who advocate global cooperation on environmental integration, must be tempered by the fact that it is not possible to draw a sharp line between technical issues, values, and politics. Also, one must acknowledge the limitations and risks of technocratic policymaking and rule, and the crucial role of power and interests (politics) in decision-making and policy development. These factors make progression towards ever-higher levels of cooperation and integration between states far from self-evident, let alone automatic.¹⁸ The European Union exemplifies both tendencies: on the one hand, economic integration, notably the creation of a single market and of the European Central Bank that assumedly makes decisions on monetary policy based on technical expertise, has made it desirable or even necessary to harmonise national social and environmental policies, delegated largely to technocrats in Brussels. On the other hand, member states have resisted full economic policy integration, such as in taxation matters, the creation of an integrated defence force, and assigning sovereign power to the European Parliament. The adverse or even disastrous socio-economic effects of these “technical” policies, and the perceived lack of legitimacy of European institutions and decisions (their democratic deficit), have not just stalled the European integration process but led to growing Euro-scepticism and political pressure towards disintegration, as exemplified by Brexit. The flailing responses of the EU to the Euro-crisis, the refugee crisis, and the COVID-19 pandemic, have exposed the serious shortcomings and limitations of EU institutions, raising questions about the merits and prospects of the European project.

However, these developments do not discredit the Institutional perspective. As noted above, Institutionalists are generally more optimistic about the possibilities of cooperation between states than Realists, but they also take the view that states are, and are likely to remain, the key political units of the international system. The importance of international institutions lies not in their potential to supplant states and become a global state but in their ability to assist states in fulfilling their main functions. Thus, they complement or enhance the capacity of states to cope with issues that they may find difficult or impossible to resolve on their own. International and global institutions, therefore, serve to strengthen and bolster rather than erode the legitimacy and sovereignty of states. Institutionalists are interested in and focused on determining the conditions and ways that are conducive to enhancing international

¹⁷ Haas, Ernst B. (1964), *Beyond the Nation-State: Functionalism and International Organization*. Stanford: Stanford University Press, Chapter 1.

¹⁸ *Ibid.*

cooperation and the effectiveness of international institutions, not in exploring how states can be supplanted by a world government.

This also applies to much of the research and debate on the role and effectiveness of international and global environmental institutions. Within the Institutionalist school of thought, the study of and theorising about regimes has been an important focus of attention and effort. Perhaps not surprisingly, the Institutionalist perspective, and notably the study of regimes, has proved to hold much appeal to those who have an interest in the development of international environmental policy. In return, it can be argued, the Institutionalist school has benefitted considerably from research on the environmental challenge in an international and global context. Many studies on international environmental issues and policy have contributed insights into the role and importance of science, scientists, and knowledge more generally (epistemic communities),¹⁹ NGOs,²⁰ on the (in-)effectiveness of regimes,²¹ and the diffusion or transfer of ideas and practices,²² among others.

Research has also highlighted the weaknesses and limitations of global environmental institutions like the United Nations Environment Programme (UNEP) and the Commission on Sustainable Development (CSD), as discussed in the preceding chapter, as well as the deficits in the policies, practices, and legitimacy of international organisations like the World Bank, IMF and the WTO with regard environmental protection and integration. This has sparked much debate about the kind of

¹⁹ Haas, Peter M. (1992), "Introduction: Epistemic Communities and International Policy Coordination", *International Organization*, Vol.46, No.1, 1-35; Haas, Peter M. (2005), "Science and International Environmental Governance", in P. Dauvergne (ed.) *Handbook of Global Environmental Politics*, 383-401; Haas, Peter M. (1990), "Obtaining International Environmental Protection through Epistemic Consensus", *Millennium*, Vol.19, No.3, 347-363; Adler, Emanuel and Peter M. Haas (1992), "Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Programme", *International Organization*, Vol.46, No.1, 367-390.

²⁰ Auer, M.R. (2000), "Who Participates in Global Environmental Governance? Partial Answers from International Relations Theory", *Policy Sciences*, Vol.33, 155-180; Humphreys, David (2004), "Redefining the Issues: NGO Influence on International Forest Negotiations", *Global Environmental Politics*, Vol.4, No.2, 51-74; Betsill, Michele Merrill, et al. (eds.) (2008), *NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations*. Cambridge, Mass.: MIT Press.

²¹ Miles, Edward L. et al. (2002), *Environmental Regime Effectiveness: Confronting Theory with Evidence*. Cambridge, Mass.: MIT Press; Mitchell, Ronald B. (2006), "Problem Structure, Institutional Design, and the Relative Effectiveness of International Environmental Agreements", *Global Environmental Politics*, Vol.6, No.3, 72-89; Wettstad, Jorgen (2006), "The Effectiveness of Environmental Policies", in M. M. Betsill, et al. (eds.), *Palgrave Advances in International Environmental Politics*, 299-328; Andresen, Steinar (2013), "International Regime Effectiveness", in *The Handbook of Global Climate and Environment Policy*, 304-319; Jackson, Wendy and Ton Bührs (2015), "International Environmental Regimes: Understanding Institutional and Ecological Effectiveness", *Journal of International Wildlife Law & Policy*, Vol.18, No.1, 63-83.

²² Jänicke, Martin, *Ecological Modernization: Innovation and Diffusion of Policy and Technology*; Tews, Kerstin (2005), "The Diffusion of Environmental Policy Innovations: Cornerstones of an Analytical Framework", *European Environment*, Vol.15, No.2, 63-79; Jörgens, Helge, "Governance by Diffusion - Implementing Global Norms through Cross-National Imitation and Learning".

institutional reforms that are desirable or necessary to enhance the effectiveness of global environmental institutions. However, as yet, there is little agreement on this front perhaps apart from the conclusion that the viability of reform proposals depends foremost on the political will of states and governments and that there appears to be little chance that the presently dominant powers, in particular the United States, will agree to significant institutional reforms that would restrain their power or erode their sovereignty. Their willingness to cooperate appears to be limited by the extent to which their self-defined interests are being served and some common ground can be found. To the extent that international agreement requires significant constraints on their power and/or sacrifice, even of short-term interests, as will be needed to mitigate and reduce environmental pressures, this proves very difficult to achieve.

Although the Institutionalist perspective has generated many ideas, views and insights on issues associated with the development of environmental governance at the international level, it has relatively little to say about the structural causes and driving forces that underlie environmental problems. As noted by Paterson, Institutionalism interprets environmental issues mostly as instances of the "tragedy of the commons" and the related collective action problem, the disjunction between the international or global nature of many of such problems and the given state system, and a range of "discrete trends" such as population growth, economic growth, the demand for resources, and technological change.²³ Institutionalist analyses generally look at these trends as separate developments rather than as being connected at a systemic level, and they ignore or take for granted the power structures that produce and maintain these trends. As a result, the ideas and solutions advanced by Institutionalists address mostly the effects and symptoms of environmental problems, mitigating them at best, but have little to offer in terms of the elimination or greening of the structures that produce these problems. To get an understanding of these structural impediments, we need to turn to another school of thought, that of International Political Economy (IPE).

International Political Economy

Both Realism and Institutionalism regard states as the building blocks of the international political system. But although they differ in their views on the extent to which there is scope for cooperation between states and conflict between them is unnecessary or even irrational, they also share a common weakness. Both schools of thought take a largely voluntarist view of state (and government) action in the sense that what governments do or don't do depends foremost on the rational choices made by those who act on behalf of their state. But while these choices are based on these actors' interpretations of what their states' (or their own) interests are, both Realists and Institutionalists have little to say about how these interests are structured and circumscribed by the political-economic systems within which these actors operate. But what state officials and political leaders define as the essential interests of a state

²³ Paterson, Matthew (2000), *Understanding Global Environmental Politics: Domination, Accumulation, Resistance*. New York: St. Martin's Press, 23-29. See also Chossudovsky, Michel (1997), *The Globalisation of Poverty. Impacts of IMF and World Bank Reforms*. Penang, Malaysia: Third World Network TWN.

does not simply depend on their personal preferences, as is often assumed in Realist and Institutionalist models of rational choice. Similarly, the international interactions between state representatives, and the choices they make collectively, do not just reflect the personal preferences of those involved. Although agency—the ability of individuals to choose—can make a crucial difference (demonstrated, for instance, by different presidents of the United States), the choices of state officials, both elected and appointed, are circumscribed by the institutions within which they operate and by the political-economic power relations and structures that have shaped those institutions.

The school of International Political Economy (IPE) has much to offer when it comes to advancing understanding of the structural factors that shape the interactions between states. The label Political Economy has been interpreted in different ways,²⁴ but here I lean foremost on the Marxist or Critical school of thought as it focuses on the links between political and economic systems and on how these influence or shape international and global institutions, processes, and interactions. Realism and Institutionalism have little time for the idea that capitalism may be a major factor in what states do (or don't do) internationally even though they may talk in general terms about states pursuing economic interests as well as safeguarding the security (territorial integrity) of the state. IPE, by contrast, has much to say about how the interactions between capitalism and states influence and shape much of what is going on in the world.

International exploitation already played a role in the early stage of capitalism, referred to by Marx as the stage of "primitive accumulation". Marx argued that "The colonies secured a market for the budding manufactures, and, through the monopoly of the market, an increased accumulation. The treasures captured outside Europe by undisguised looting, enslavement, and murder, floated back to the mother-country and were there turned into capital."²⁵ Competition between capitalists and the centralisation of capital into ever fewer hands drove the internationalisation of capitalism: "Hand in hand with this centralization, or this expropriation of many capitalists by few, develop, on an ever-extending scale [...] the entanglement of all peoples in the net of the world-market, and with this, the international character of the capitalistic regime."²⁶ It is worth noting that Marx located the growth imperative in the industrial system, with its growing need for resources and expanding markets, *and* in the competitive nature of the capitalist system, which necessitates the search for new opportunities for investment and profit (the accumulation imperative). As

²⁴ See Gilpin, Robert and Jean M. Gilpin (2001), *Global Political Economy: Understanding the International Economic Order*. Princeton, N.J.: Princeton University Press, Chapter 2. The authors offer a succinct summary of different interpretations of Political Economy, defining it broadly as referring to "questions generated from the interactions of economic and political affairs" (p.31). O'Brien and Williams, who use the label IPE interchangeably with Global Political Economy (GPE), identify three main perspectives: economic nationalist, liberal, and critical, with the latter comprising the Marxist school of thought. O'Brien, Robert and Marc Williams (2010, 3rd ed.), *Global Political Economy: Evolution and Dynamics*. New York: Palgrave Macmillan, Chapter 1.

²⁵ Marx, Karl, *Capital. Volume 1. The Process of Production of Capital*, Chapter 31.

²⁶ *Ibid.*, Chapter 32.

discussed in Chapter 6, both recognise no limits to growth, making these systems inherently ecologically unsustainable.

That capitalism has been a driving force behind imperialism, colonialism, and neo-colonialism is a theme that has been taken up and further developed by many later thinkers and analysts, including Hobson, Hilferding, and Lenin. While Hobson agreed that colonisation provided an outlet for overproduction and surplus savings (capital), he argued that it was not strictly necessary as theoretically surpluses *could* be absorbed domestically if wages were to be raised sufficiently to create effective demand.²⁷ However, Marxist analysts, including Hilferding and Lenin, were quick to point out that increasing wages to such levels goes against the logic of capitalist competition which requires their suppression to keep the costs of production down. Hilferding expanded on the role of finance in furthering the concentration of capital and that of monopolies and cartels in recruiting the assistance of the state in the expansion of colonial markets and new investment opportunities, turning nationalism into an ideology of imperialism.²⁸ Lenin, who leaned on both Hobson and Hilferding in his study of imperialism, also emphasised the growing influence of financial capital and its search for new profitable outlets around the world, leading to rivalry and division among the major capitalist states. Imperialism was just the next stage in the development of capitalism, inevitably leading to international conflict and war.²⁹

Thus, from an IPE perspective, states have always played, and continue to play, a crucial role in facilitating the expansion of capitalism. Although capitalism only became the dominant economic system in a relatively small part of the world (Western European countries and North America) in the 19th century, strongly intertwined with the process of industrialisation, its expansionist needs led to the rapid integration of much of the world into the capitalist system. While the main European powers competed for the creation of colonies or protectorates in most of Africa and Asia, the United States claimed the Americas as its own backyard even though it pursued a different strategy than the European powers to pull this region into its realm of economic dominance.³⁰ But while the policies and strategies of the imperial powers differed, the result for the rest of the world was much the same. The economies of the countries under their control were (re-) structured to serve the (resource, market, and investment) needs of their national capitals, which resulted in the "development of underdevelopment" in many of the subjugated territories.³¹

Great Britain, which got a head start in the industrial revolution and the colonisation of large chunks of the world, due also to its superior naval power and the fact that France and Germany were embroiled in (the 1870) war with each other, was

²⁷ Hobson, John A. (1902), *Imperialism: A Study*. New York: James Pott & Company.

²⁸ Hilferding, Rudolf (1910), *Finance Capital. A Study of the Latest Phase of Capitalist Development*. London, Boston and Henley: Routledge & Kegan Paul.

²⁹ Lenin, W. I. (1916), "Der Imperialismus Als Höchstes Stadium Des Kapitalismus", in *W.I. Lenin - Ausgewählte Werke in Drei Bänden, Band 1*, 763-873.

³⁰ Panitch, Leo and Leo Gindin, *The Making of Global Capitalism: The Political Economy of American Empire*, Chapter 1.

³¹ Frank, Andre Gunder (1966), "The Development of Underdevelopment"; Rodney, Walter, *How Europe Underdeveloped Africa*.

the leading power and the financial centre of capitalism until WWII. However, the United States, which already was the most technologically advanced industrial country in the late 19th century, and which benefitted economically from both world wars, rose to become the dominant power following WWII as most of Europe and Japan lay in tatters. During WWII, American policymakers had already started re-designing the global political-economic order that was to be created after the war, of which the Bretton-Woods system became a cornerstone. Also, with the emergence of the Cold War and the “threat” of socialism, US governments decided that it was in America’s interest to rebuild the European and Japanese economies and to integrate them into its political-economic sphere under a free trade umbrella.³² The Marshall Plan and a similar aid package for Japan opened the door to American capital and exports while also offering access to the US market for European and Japanese goods, services, and capital. With Germany and Japan rising from the ashes to become again strong industrial powers with prosperous economies, and the containment of Germany in European and Transatlantic cooperative institutions, the threat of political instability and socialism was effectively controlled, while the dominant position of American capitalism was firmly secured. This was also reflected in the US dollar becoming the world’s preferred reserve currency with all the advantages that it bestowed on the United States.³³

However, as discussed in Chapter 9, the golden era of capitalist expansion, which allowed many European nations to build welfare states without compromising capitalist imperatives, came to an end during the 1970s. Although explanations for this turn of events differ, most IPE analysts agree that the contradictions that are inherent to capitalism had reasserted themselves. After some 25 years of unprecedented levels of economic growth, production and consumption, the problems of declining accumulation opportunities and overproduction resurfaced.³⁴ The crisis created an opportunity for the advocates of neoliberalism to roll back the Keynesian political-economic consensus on which the post-WWII order had been based, and to push through their agenda of destroying the power of labour, dismantling the welfare state, the deregulation of capital and full-scale privatisation to create new accumulation opportunities and to restore the primacy of profit (capital) over people and societies. In 1973, Chile became the first country where, under General Pinochet, the neoliberal

³² Ikenberry, G. John, “Globalization as American Hegemony”.

³³ This meant, for instance, that the US could afford to incur big balance of trade deficits, enabling American consumers to import whatever they fancied, and that the US government was able to run big budget deficits to spend large, among other, on a strong “defence” force, financed by issuing bonds that foreign investors were all too happy to buy as they were considered to be very safe investments. Panitch, Leo and Leo Gindin, *The Making of Global Capitalism: The Political Economy of American Empire*, 17.

³⁴ Analyses differ in emphasis on problems like overproduction, declining opportunities for capital accumulation and the rate of profit, the inflexibility of wages (responsible for stagflation), and the oil crisis of 1973. The latter was a result of geopolitics (the Israeli – Arab War and the oil embargo imposed by Arab countries) rather than of capitalism, but the fourfold rise in the price of oil helped trigger a sharp recession.

agenda was forcefully imposed after the elected government of Salvador Allende was brought down in a US-sponsored military coup.³⁵

Although European governments, to varying degrees, also embraced neoliberalism, it was in the United States that neoliberalism was developed into a more or less coherent ideology and comprehensive government programme.³⁶ And given the dominant influence of the United States in the IMF and the World Bank, it did not take long for neoliberal prescriptions to be imposed on these organisations' "clients" in the form of structural adjustment programmes that opened the door for Western capitalist interests to find new investment (capital accumulation) opportunities, at great costs to the countries involved.³⁷ Through the World Trade Organisation, set up in 1995, the United States sought to create a global regime to further reduce and eliminate national barriers to the free movement of capital and trade in goods and services. After China's capitalist conversion in the late 1970s, and particularly its entry into the WTO in 2001, and the collapse of the Soviet Union in 1989, virtually the whole world was integrated into one global capitalist system. Production was increasingly organised in complex production value chains (PVCs), the obstacles to international capital flows and investments were steadily lowered, countries became increasingly dependent on trade (export-oriented growth), the means of communication and information sharing became instantaneous and truly global, and consumption patterns increasingly converged.

These developments, often discussed under the label of globalisation, have sparked much debate about whether the global capitalist system has become truly international, possibly guided by a Transnational Capitalist Class (TCC) or global elite, or whether the United States remains (pretty much) in charge as the hegemonic or (informal) imperial power, or whether the capitalist system has become fully autonomous and beyond the control of any group or state. The TCC theory is in line with a longstanding stream within Marxist theory that claims that the imperatives and dynamics of capitalism inevitably turn it into a global system in which national class divides are being overtaken by a globalised divide of (capitalist and working) classes.³⁸ This claim has been supported by studies and data about the existence of networks of interlocking ownership and control of companies (especially of financial institutions) by a relatively small group of people who have the power to dictate to governments

³⁵ Klein, Naomi, *The Shock Doctrine: The Rise of Disaster Capitalism*.

³⁶ For accounts of how this occurred, see MacLean, Nancy, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America*; Mayer, Jane, *Dark Money. The Hidden History of the Billionaires Behind the Rise of the Radical Right*.

³⁷ Structural Adjustment Participatory Review International Network (SAPRIN), *Structural Adjustment. The SAPRI Report: The Policy Roots of Economic Crisis, Poverty and Inequality*.

³⁸ Sklair, Leslie (2001), *The Transnational Capitalist Class*. Malden, Mass.: Blackwell; Overbeek, Henk (2005), "Global Governance, Class, Hegemony. A Historical Materialist Perspective", in M. J. Hoffmann and A. D. Ba (eds.), *Contending Perspectives on Global Governance. Coherence, Contestation and World Order*, 39-56; Robinson, William I. (2017), "Debate on the New Global Capitalism: Transnational Capitalist Class, Transnational State Apparatuses, and Global Crisis", *International Critical Thought*, Vol.7, No.2, 171-189; Robinson, William I. and Jerry Harris (2000), "Towards and Global Ruling Class? Globalization and the Transnational Capitalist Class", *Science and Society*, Vol.64, No.1, 11-54.

what they can or must do (or not do).³⁹ On the other hand, there is an equally strong school that assigns dominance, if not hegemony, to the United States, depicting it as an “informal empire” that has created a global institutional (or “new constitutional”) framework that reflects its structural power and that gives primacy to its interests.⁴⁰ A third (non-IPE) perspective claims that the global capitalist system functions autonomously and is beyond the control of any particular class, group or state, as power has been diffused.⁴¹

There is much to be said for the perspective that capitalism has become a truly global system. The picture is very recognisable when looking at the financial-economic policies and decisions of governments around the world, with the views and movements of the capital markets being treated as the will of the Gods, receiving priority over everything else. It is recognisable in the very similar austerity and government financial discipline policies and institutions (including independent Central or Reserve Banks) that have held most governments in their grip for the last four decades or so. It can also be seen at play in the draconian austerity decisions and conditions imposed on countries like Argentina, Greece, and many others when they were unable to repay their debts, despite, or rather because of, the neoliberal “medicines” that they had taken, only to become even more dependent on global financial capital.⁴²

However, it is debatable to what extent capitalist enterprises and/or their management have become truly internationalised or even transnationalised. Although foreign investments, mergers and takeovers across national borders have become the new normal with the free movement of capital promoted under the new neoliberal order, TNCs still have a home base. Intra-firm trade and transfer pricing between

³⁹ Phillips, Peter (2018), *Giants. The Global Power Elite*. New York: Seven Stories Press; Vitali, S., et al. (2011), “The Network of Global Corporate Control”, *PLoS ONE*. Vol.6, No.10, <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0025995>; Carroll, William K. with Colin Carson, Meindert Fennema, Eelke Heemkerk and J. P. Sapinski (2010), *The Making of a Transnational Capitalist Class: Corporate Power in the Twenty-First Century*. London: Zed Books.

⁴⁰ Parenti, Michael, *Against Empire*; Magdoff, Harry, *The Age of Imperialism. The Economics of U.S. Foreign Policy*; Strange, Susan (1996), *The Retreat of the State: The Diffusion of Power in the World Economy*. New York: Cambridge University Press; Sinclair, Timothy J. (1994), “Between State and Market: Hegemony and Institutions of Collective Action under Conditions of International Capital Mobility”, *Policy Sciences*, Vol.27, No.4, 447-466; Gill, Stephen (1995), “The Global Panopticon? The Neoliberal State, Economic Life, and Democratic Surveillance”, *Alternatives: Global, Local, Political*, Vol.20, No.1, 1-49.

⁴¹ In Hardt and Negri’s interpretation of “empire”, it becomes an amorphous phenomenon while the opposition against it is an equally amorphous “multitude”. Hardt, Michael and Antonio Negri (2000), *Empire*. Cambridge, MA: Harvard University Press. Beck treats globalisation as an autonomous and uncontrollable process against which resistance is futile. Beck, Ulrich (2006), *The Cosmopolitan Vision*. Cambridge, UK: Polity Press, 117-118. Friedman’s “Flat World”, depicted as a world in which *individuals* are the main empowered global actors, is driven by autonomous technological (ICT) development and global competition and cooperation, but with no one in control. Friedman, Thomas L. (2005, 1st ed.), *The World Is Flat: A Brief History of the Twenty-First Century*. New York: Farrar, Straus and Giroux.

⁴² Varoufakis, Yanis (2017), *Adults in the Room. My Battle with Europe’s Deep Establishment*. London: Vintage.

branches of a TNC may occur for legitimate and creative accounting purposes to minimise taxes and maximise profits,⁴³ but ultimately decisions about the (global) structure and direction of a company are still made by the company's headquarters (CEO, Board). Therefore, predominantly American-owned TNCs like Apple, ExxonMobil, and Goldman Sachs, notwithstanding their extensive foreign investments, international networks, and global production chains, have remained American companies subject to American law. This national basis or bias of TNCs is also reflected in the membership of the boards of these companies in which "nationals" predominate even if foreign capital owners are represented. Looking at the home bases of TNCs still tells us a lot about the relative position of countries and their capitalist systems in the global order.

On that point, the United States and Europe have tended to predominate. In 2010, twenty of the top 50 companies were based in the US, nineteen in Europe, four in Japan and three in China. Based on an analysis of interlocking directorships between the Global 500 corporations, Carroll concluded that "*capitalist interests based in the USA retain a dominant position in the global network*" [original emphasis].⁴⁴ In the financial realm, the figures were also leaning towards the United States. In 2011, a Swiss study of the largest financial companies revealed that six of the top-ten financial institutions within the network, controlling 80% of the value of all such TNCs, were based in the United States, with two in the UK, one in France, and one in Switzerland. Among the top fifty financial-economic actors, twenty-four were based in the US, eight in the UK, five in France, four in Japan, two in Germany, two in Switzerland, two in the Netherlands, and one each in China, Canada and Italy.⁴⁵ These data suggest that the TCC is largely a *transatlantic* capitalist class in which American-based companies dominate by sheer numbers. This is confirmed by data on the transnational interlocking corporate directorships which indicate the predominance of US and European directors and also support the idea of the existence of an Atlantic ruling class under American hegemony.⁴⁶

To be able to exert power aimed at protecting and advancing its interests (to act as a "class for itself") a class must develop class consciousness. Transnational policy organisations and fora like the Mont Pélérin Society, the Bilderberg Conferences, the Trilateral Commission, the World Economic Forum, the International Chamber of Commerce, and the World Business Council for Sustainable Development, among others, have played a key role in the cultivation of transnational or transatlantic

⁴³ By some estimates, intra-firm trade accounts for 70 to 80% of all international trade. Bonturi, Marcos and Kiichiro Fukasaku (1993), *Globalisation and Intra-Firm Trade OECD Economic Studies*. Paris: OECD; United Nations Conference on Trade and Development (2013), Press Release - 80% of Trade Takes Place in Value Chains' Linked to Transnational Corporations, UNCTAD Report Says, <https://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=113> (Accessed: 29 July 2020).

⁴⁴ Carroll, William K. with Colin Carson, Meindert Fennema, Eelke Heemkerk and J. P. Sapinski, *The Making of a Transnational Capitalist Class: Corporate Power in the Twenty-First Century*, 96.

⁴⁵ Vitali, S., et al., "The Network of Global Corporate Control".

⁴⁶ Carroll, William K. (1986), *Corporate Power and Canadian Capitalism*. Vancouver: University of British Columbia Press, 34-35.

capitalist class consciousness that is an essential element for hegemonic capitalist rule.⁴⁷ Despite their differences, these policy communities share a common belief in capitalism and capitalist values as the *only* basis for organising economic life. They are likely to have been instrumental in the spread of neoliberalism as the dominant economic paradigm. As discussed above, US academics and think tanks sponsored by capitalists were instrumental in the rise of neoliberalism as the dominant ideology and government policy framework in the United States. But it should be acknowledged that these US actors found willing partners across the Atlantic in making neoliberalism the dominant paradigm for governments, not only in the United Kingdom (under Margaret Thatcher), but also in Germany, where “ordoliberal” ideology offered a bridge to neoliberalism,⁴⁸ and more or less eagerly in a range of other European countries, in particular Sweden.⁴⁹

However, even if a transatlantic capitalist class has emerged and developed a degree of class consciousness that is reflected in shared advocacy of neoliberalism, this does not imply that nation-based capitalist classes or fractions and competition no longer exist, that competition and rivalry have halted, and that such a class is able or even willing to overcome internal political, economic, and socio-cultural differences. This applies even more so to the claim that a *global* capitalist class has emerged or is emerging. If anything, neoliberal globalisation has intensified capitalist competition and rivalry. In TCC theory, the World Bank, IMF, and the WTO are guided or instructed by the TCC and advocate for the most globalised sectors of capital, while national governments take their lead from these agencies as well as from fractions of the TCC within their countries. However, this is problematic as (nation-) states are not simply executive committees of the TCC but relatively autonomous institutions that are the subject of continuous struggle between competing classes, interests and demands, including from different fractions of capital. Even if there is an emergent TCC, it is not simply able to instruct governments what to do or not to do. As a rule, transnational directorships are embedded within *national* business communities, which leads Carroll to conclude that the Transnational Capitalist Class “exists neither as a free-standing entity [...] nor as a homogeneous collectivity.”⁵⁰

While it is widely acknowledged that the benefits of this process have been very unevenly distributed and that it has eroded the power of governments to control their national economies, this has intensified rather than diminished battles over the role of the state. If anything, the mounting economic and social pressures caused by

⁴⁷ Carroll, William K. with Colin Carson, Meindert Fennema, Eelke Heemkerk and J. P. Sapinski, *The Making of a Transnational Capitalist Class: Corporate Power in the Twenty-First Century*, 36-45, 179-202.

⁴⁸ Streeck, W. (2016, e-book ed.), *How Will Capitalism End? Essays on a Failing System*. London: Verso Books, Loc 2701-2760; Quatrepoint, Jean-Michel (2017), “Why the EU Has No Industrial Policy”, *Le Monde Diplomatique (English edition)*, August, 12-13; Denord, Francois, et al. (2015), “Germany’s Iron Cage”, *Le Monde Diplomatique (English edition)*, August.

⁴⁹ Steinmo, Sven, “The Evolution of the Swedish Model”; Therborn, Göran (2017), “The ‘People’s Home’ Is Falling Down, Time to Update Your View of Sweden”.

⁵⁰ Carroll, William K. with Colin Carson, Meindert Fennema, Eelke Heemkerk and J. P. Sapinski, *The Making of a Transnational Capitalist Class: Corporate Power in the Twenty-First Century*, 228.

neoliberal policies, have raised public expectations of governments. From experience, people have learned all too well that they have nothing (good) to expect from a transnational or global capitalist class, the IMF, the WB, the WTO or, for that matter, the EU. If anything, with globalisation, the functions of and expectations towards the state to meet the individual, shared and common needs of people have become more pressing and important. The election of (ex-) US President Trump, Brexit and growing EU scepticism can be seen as signs of this growing public sentiment.

Another reason for casting doubt on the existence or emergence of a truly autonomous TCC is that capitalists (and the wealthy in general) need and seek the strongest possible protection for their wealth.⁵¹ Foremost among the civil rights that are considered sacred in capitalist systems, and perhaps most emphatically so in the United States, are private property rights.⁵² In the absence of a powerful global state, an incipient transnational class cannot rely on global institutions like the IMF, the World Bank and the WTO, often touted to be the backbones of a proto-type global state, to effectively protect its wealth. A capitalist class needs the backing of a powerful state to effectively protect its property and other legal rights, especially in the face of (growing) threats, both nationally and internationally. Hence, not surprisingly, many billionaires and TNCs locate (much of) their wealth and formal ownership titles in the United States given the high level of protection afforded to private property, the financial security provided by the US dollar as the global reserve currency, and the unrivalled force that US governments are able and willing to bring to bear upon any country or regime that threatens US property, apart from other advantages enjoyed by US capital. As Carroll states: "US capitalism, with its giant home market, political stability and low-tax regime, is the centre of gravity for the world's billionaires."⁵³ Moreover, since WWII, US governments have played a dominant role in advancing the interests of US capital internationally and globally, including via the IMF, the World Bank, and the WTO.⁵⁴ Not surprisingly, despite globalisation, many TNCs still have their home basis in the United States and rely on its enormous power to protect and advance their interests worldwide.

That, since WWII, the United States has been the biggest military and economic world power is a widely accepted view, even though the Soviet Union, because of its military and nuclear might, was commonly regarded as a countervailing superpower. However, whether or to what extent the United States has been, and still is, a globally hegemonic power or empire has been the subject of ongoing debate and disagreement. As discussed above, after WWII, European powers (notably Germany) and Japan, arose from the ashes, largely because of American support, to become major economic powerhouses in their own right, competing with American

⁵¹ Winters, Jeffrey A., *Oligarchy*.

⁵² Borger, Julian (2020), "Pompeo Claims Private Property and Religious Freedom Are 'Foremost' Human Rights", *The Guardian*, 16 July.

⁵³ Carroll, William K. with Colin Carson, Meindert Fennema, Eelke Heemkerk and J. P. Sapinski, *The Making of a Transnational Capitalist Class: Corporate Power in the Twenty-First Century*, 140.

⁵⁴ Panitch, Leo and Leo Gindin, *The Making of Global Capitalism: The Political Economy of American Empire*.

companies. Nonetheless, it was the United States that created the post-WWII capitalist economic (Bretton Woods) order, was the home of the neoliberal revolution of the 1980s, and the main driver behind the spread of neoliberal ideology and reforms around the world, opening up many countries to American businesses.⁵⁵ It has done so mainly by creating and changing national and global institutional frameworks (including Independent Central Banks, free trade rules, fiscal responsibility and good governance criteria), sometimes referred to as the "new constitutionalism,"⁵⁶ using its enormous economic power (providing funding) and cognitive power (shaping the dominant policy discourse; persuasion of policymakers) without conquering or occupying countries. Hence, the United States has been referred to as an "informal empire" to distinguish it from past (Roman and other) empires based on territorial occupation or control.⁵⁷ Nonetheless, American governments have not hesitated to also use America's unrivalled military power to invade countries when this was deemed necessary or desirable.⁵⁸

In the realm of cognitive power, the capacity and ability to persuade, influence, manipulate or indoctrinate people based on knowledge, information, skills and technologies, the United States has also been the biggest powerhouse since the early 20th century. Triggered by commercial (capitalist) imperatives linked to mass production and competition, United States businesses were early leaders in the scientific development of knowledge and technologies enabling effective persuasion, advertising, marketing, propaganda, communication and public relations.⁵⁹ These capabilities have been taken to new heights in the 21st century by "surveillance capitalists", among whom American enterprises (notably Google/Alphabet, Facebook/Meta and Microsoft) became globally dominant players.⁶⁰ In addition, the global reach of the American entertainment industry, and private ownership of most of the mass media, give US capitalists an unrivalled capacity to project and spread

⁵⁵ Harvey, David (2003), *The New Imperialism*. Oxford: Oxford University Press; Harvey, David, *A Brief History of Neoliberalism*; Panitch, Leo and Leo Gindin, *The Making of Global Capitalism: The Political Economy of American Empire*; Petras, James F. and Henry Veltmeyer, *Globalization Unmasked: Imperialism in the 21st Century*.

⁵⁶ Gill, Stephen and A. Claire Cutler (2014), "New Constitutionalism and World Order: General Introduction", in S. Gill and A. C. Cutler (eds.), *New Constitutionalism and World Order*, 1-21.

⁵⁷ Panitch, Leo and Leo Gindin, *The Making of Global Capitalism: The Political Economy of American Empire*; Petras, James F. and Henry Veltmeyer, *Globalization Unmasked: Imperialism in the 21st Century*.

⁵⁸ Chomsky, Noam (2016, e-book ed.), *Who Rules the World?* New York: Metropolitan Books; Parenti, Michael, *Against Empire*; Foster, John Bellamy (2006), "A Warning to Africa: The New U.S. Imperial Grand Strategy", *Monthly Review*, Vol.58, No.2, 1; Duffy Toft, Monica, "Why Is America Addicted to Foreign Interventions?"

⁵⁹ Bernays, Edward L. (1928), *Propaganda*. New York: H. Liveright; Herman, Edward S. and Noam Chomsky (1988), *Manufacturing Consent: The Political Economy of the Mass Media*. New York: Pantheon Books; Simpson, Christopher (1994; 2015), *Science of Coercion. Communication Research & Psychological Warfare, 1945 - 1960*. New York: Open Road Integrated Media.

⁶⁰ Zuboff, Shoshana, *The Age of Surveillance Capitalism*. All three are among the world's biggest 50 companies. Forbes (2021), Global 2000. The World's Largest Public Companies, <https://www.forbes.com/lists/global2000/#3932e75e5ac0> (Accessed: 24 January 2022).

their capitalist values and worldview.⁶¹ US political actors, including governments, avail themselves of this enormous capacity, through public and private agencies, to pursue their aims, domestically and internationally.

But although American governments have varied over time in their relative reliance on hard and soft power, and on unilateral and multilateral foreign policies,⁶² since WWII they have been consistent in their commitment to maintaining American supremacy in the world, de facto admitting its status as an empire.⁶³ As Layne points out, the American foreign policy establishment shares some fundamental beliefs that are held across party lines and that have not changed since WWII. These include a belief in the need for the US to provide "leadership" (implying primacy; hegemony), a belief in the imperative of national security, in defending and spreading liberal ideology, and "perhaps most importantly" in the economic Open Door, the need for open markets.⁶⁴ Rooted in lessons learned from the pre-WWII experiences, US foreign policymakers firmly reject isolationism and appeasement as these policies are perceived to have led to economic and political disasters. Instead, the US follows strategies of active engagement where and when potential threats to America's (future) interests are perceived. As noted above, this includes (threatening with) the use of military force whenever deemed necessary.

All in all, these are convincing grounds for characterising the United States as an "informal empire". However, this does not mean that the United States is all-powerful and able to fully control what is happening in the world, politically, economically or in any other area. Nor does it mean that the dominant or hegemonic position of the United States will endure. Indeed, for decades, authors and observers have declared that the United States has been in (relative) decline, or that it is no longer a dominant, let alone an imperial power.⁶⁵ More recently, it is the rise of China and the threat that this poses to American dominance that takes centre stage in this debate.⁶⁶ In 2021, of the global top 50 corporations (based on revenues), 22 were based in the United States (up from 20 in 2010), 12 in China (up from 3 in 2010), 7 in Europe (down from 19 in

⁶¹ McChesney, Robert W., *Rich Media, Poor Democracy: Communication Politics in Dubious Times*, Chapter 2.

⁶² Engler, Mark (2008), *How to Rule the World. The Coming Battle over the Global Economy*. New York: Nation Books.

⁶³ Layne, Christopher (2017), "The US Foreign Policy Establishment and Grand Strategy: How American Elites Obstruct Strategic Adjustment".

⁶⁴ *Ibid.*, 263.

⁶⁵ Hardt, Michael and Antonio Negri, *Empire*; Kennedy, Paul M. (1989), *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000*. New York: Vintage Books; Mandel, Ernest (1970), *Europe Vs America. Contradictions of Capitalism*. New York: Monthly Review Press.

⁶⁶ Tisdall, Simon, "US on Back Foot as China Rises"; Jacques, Martin, *When China Rules the World: The End of the Western World and the Birth of a New Global Order*; Golub, Philip S., "Curbing China's Rise"; Layne, Christopher (2017), "The US Foreign Policy Establishment and Grand Strategy: How American Elites Obstruct Strategic Adjustment"; Borger, Julian (2020), "US Uses Coronavirus to Challenge Chinese Communist Party's Grip on Power", *The Guardian*, 4 May.

2010), and 4 in Japan (same as in 2010).⁶⁷ Compared to the figures for 2010, these numbers do not indicate a decline in the position of American corporations in absolute terms, but they do signify a significant rise of Chinese corporations, albeit largely at the expense of European-based companies. The rise of China is also reflected in the number of billionaires based in that country which, in 2021, stood at 698 compared to 724 in the US.⁶⁸ Among the top 100 billionaires in the world, the number of Chinese went from zero in 2010 to 22 in 2021. Over the same period, the number of US billionaires in this top group increased from 32 to 34, while the number of European billionaires (excluding Russia) declined from 23 to 16.⁶⁹ These figures indicate that much of the world's wealth remains concentrated in the United States and Europe, but also that there has been a staggering rise in the concentration of private wealth in China. That Chinese capital accumulation has been nothing less than momentous is also reflected in the absolute and relative status of Chinese banks in the world. In this sector, in 2021, based on assets, four of the Forbes top 10 Financials list were Chinese companies, three American, two European, and one Japanese.⁷⁰

However, in the financial world, the United States still holds on to a crucial trump card: the status of the US dollar as the global reserve currency. This gives the US Federal Reserve enormous international clout (structural power), for instance, in its ability to influence global interest rates and capital flows. Moreover, it allows US governments to get away with accumulating levels of public debt that would trigger punishing reactions by the capital markets and lead to the imposition of severe austerity policies in any other country. Even in times of international financial-economic crisis, the US dollar functions as a safe haven, attracting overseas capital and boosting the value of the currency. The crucial role and power of the US in the financial-economic realm was confirmed during the 2008 financial crisis, in which intervention by the Federal Reserve in support of capitalist interests in both the US and Europe prevented a global financial collapse. These events show that, if there is a TCC, it depends on the US rather than the IMF or any other proto world government agency, to come to the rescue in times of crisis. By contrast, the crisis, which was much more prolonged in the EU than in the United States, highlighted the ineptitude of EU institutions.⁷¹ This was demonstrated once more during the COVID-19 pandemic which put again enormous strain on the global financial system.⁷² Anyone who had the idea or hope that the euro would be able to supplant the US dollar as the global reserve currency must now admit that this is very unlikely. But, as Tooze explains, China, apart from being financially involved in the US and Europe, has been struggling

⁶⁷ Forbes, Global 2000. The World's Largest Public Companies. These rankings are based on four metrics: sales, profits, assets, and market value.

⁶⁸ Dolan, Kerry A., *et al.*, Forbes World's Billionaires List. The Richest in 2021.

⁶⁹ *Ibid.*

⁷⁰ Wikipedia (2021), List of Largest Financial Services Companies by Revenue, https://en.wikipedia.org/wiki/List_of_largest_financial_services_companies_by_revenue (Accessed: 24 January 2022).

⁷¹ Tooze, J. Adam, *Crashed: How a Decade of Financial Crises Changed the World*.

⁷² Tooze, Adam (2020), "How Coronavirus Almost Brought Down the Global Financial System", *The Guardian*, 14 April.

with its own financial vulnerabilities.⁷³ Given the wish of the CCP to keep control over the Chinese currency and capital markets, it is hard to see how the yuan would be able to take over from the US dollar as the global reserve currency anytime soon.

It has been said that the main aim of ex-President Trump's foreign policy was to break or block China's seemingly unstoppable rise to global supremacy and that the Trump administration became convinced that it was no longer in the US's interest that the Chinese Communist Party (CCP) remains in charge of the country, which suggests that the US was/is seeking nothing less than "regime change" in the country, posing an existential threat to the Party. President Biden's stance suggests continuity in the US foreign policy towards China as the biggest threat to US hegemony, a view that puts both countries on a direct collision course with the risk of causing a globally devastating conflict.⁷⁴

One main conclusion that can be drawn from these developments and analyses is that the globalisation of capitalism intensifies rather than mitigates its internal contradictions. The rebuilding of Europe and Japan, and the rise of China, as major centres of industrialisation and capitalism, has intensified competition on a world scale. The increasingly free movement of capital between the United States and these centres has neither led to the emergence of an autonomous or cohesive transnational capitalist class nor to the complete dominance of American capital around the world, which was perhaps the intention or hope behind America's "Open Door" policy. China, in particular, has become a rival centre of state-controlled capitalism that competes strongly with both the United States and Europe. China's immense economic success and accumulation of capital, combined with its excess capacity in the construction sector, has compelled it towards expanding foreign investments, notably through its Belt and Road programme, which also serves Chinese geopolitical interests.⁷⁵ These developments also highlight the crucial role that states continue to play in assisting the imperatives of their (nation-based) capitalist systems.

This may not end well. There is a good chance that intensified capitalist competition, backed up by state-based concerns about national sovereignty, security, and (strategic) resources will lead not only to major conflicts or a third World War but also seal environmental collapse. In the absence of an effective system of global governance, there are few impediments to the exploitation of whatever natural resources are left and to even more serious levels of pollution and ecological devastation. Arguably, this makes looking at whether a cosmopolitan perspective

⁷³ Tooze, J. Adam, *Crashed: How a Decade of Financial Crises Changed the World*, Chapter 25.

⁷⁴ China Briefing (2021), US-China Relations in the Biden-Era: A Timeline, <https://www.china-briefing.com/news/us-china-relations-in-the-biden-era-a-timeline/> (Accessed: 19 April 2021); Cheng, Evelyn (2021), Biden's China Policy Is Tougher on Financial Firms Than Trump's Was, Report Says, <https://www.cnbc.com/2021/04/09/bidens-china-policy-greater-risk-for-us-financial-firms-than-trump.html> (Accessed: 19 April 2021); Tisdall, Simon (2021), "How to Rein in China without Risking War Is the Issue Biden Must Address", *The Guardian*, 14 February.

⁷⁵ Kuo, Lily and Niko Kommenda (2018), "What Is China's Belt and Road Initiative?", *The Guardian*, No date; Watts, Jonathan, "Belt and Road Summit Puts Spotlight on Chinese Coal Funding".

offers any hope or prospects for coming to terms with the world's challenges highly desirable.

Cosmopolitanism

This section aims to discuss some of the main ideas, views, and themes in the cosmopolitan school of thought as it provides quite a different take on the international and global order. This difference is important in that, in contrast to the three perspectives discussed above, it is explicitly based on, and begins with, a moral argument.⁷⁶ In the broadest sense, cosmopolitanism is a quest for common moral ground for the whole of humanity. Therefore, arguably more so than the other schools of thought discussed in this chapter, the cosmopolitan perspective has more to offer in terms of guidance towards *desirable* changes in the international order. The main point that I extract from the discussion is that, although the cosmopolitan perspective may seem (highly) idealistic, it is solidly supported by developments in reality. While this does not mean that the cosmopolitan worldview will inevitably prevail, it offers good grounds for a different way of approaching the environmental challenge, although it needs to be complemented with insights from the other three schools of thought to develop a strategy that might have any chance of success.

The concept of cosmopolitanism has its roots in ancient Greek philosophy. The Cynic Diogenes, when asked where he came from, proclaimed that he was a "citizen of the world".⁷⁷ Cynics, who sought to live by the general laws and order of the universe (implying taking distance from politics which was considered corrupt and corrupting), influenced the Stoics who believed in the existence of a law of nature and a universal moral law which could be known through the human capacity for reasoning and deliberation. From this perspective, as all humans share that capacity and are bound by the same universal laws, rights, and duties, they form a world community or "kosmopolis". However, the Stoics considered it both possible and desirable to be citizens of local communities as well as citizens of the world. Among the adherents of Stoic ideas were Zeno, Seneca, Cicero, and Marcus Aurelius.⁷⁸

However, the Stoic idea of shared humanity slumbered during much of the Middle Ages (although it found expression in Augustine's "City of God") and was only picked up again during the Enlightenment and developed into a distinct political philosophy in the second half of the 18th century. Immanuel Kant is commonly seen as the most important contributor to this project, putting forward principles and ideas regarding natural law, practical reason, and "categorical imperatives", including the principle that our actions should be universalizable. Kant ascribed natural rights to all humans, including the right to freedom and equality, that he wished to see enshrined in cosmopolitan law. He advocated a representative republican system of government in which citizens could participate in making and enforcing laws. In his work *Perpetual*

⁷⁶ Delanty, Gerard (2012), "Introduction. The Emerging Field of Cosmopolitan Studies", in G. Delanty (ed.) *Routledge Handbook of Cosmopolitan Studies*, 1-8, 2.

⁷⁷ Stanford Encyclopedia of Philosophy (2019), Cosmopolitanism, <https://plato.stanford.edu/entries/cosmopolitanism/> (Accessed: 22 June 2020); Hayden, Patrick (2005), *Cosmopolitan Global Politics*. Aldershot, Hants, England: Ashgate, 12.

⁷⁸ Hayden, Patrick, *Cosmopolitan Global Politics*, 12-15.

Peace, he proposed a system of international and cosmopolitan laws that put binding constraints on the sovereignty of states. However, it is noteworthy that Kant did not advocate the creation of a world state or government but a federation of free states.⁷⁹

But although Kant's claim of the existence of universal human rights was compatible with 18th-century republicanism and its emphasis on constitutional human and political rights, this idea was increasingly contextualised and applied within the framework of sovereign nation-states. Civic and political rights became entangled with nation-building and the introduction of exclusive rights of citizens of particular states or nations that did not apply to non-nationals or foreigners. For much of the 19th century and the first half of the 20th century, nationalism flourished, promoted by governments, and fuelled national rivalries, colonialism, imperialism, and wars. Although Marxism and international socialism called for international solidarity between the working classes of nations, such calls were swept aside by dominant nationalist ideologies and sentiments.⁸⁰

It was only in the wake of the devastation wrought by both World Wars that the ideal of "perpetual peace" came again to the fore. Unfortunately, the League of Nations created after WWI failed miserably in containing international conflict and in preventing atrocities, most notably the slaughter of six million Jews by the Nazis. Following WWII, the desire to prevent another major war led to the creation of the United Nations and a renewed recognition of the importance of human rights, reflected in the adoption, in 1948, of the Universal Declaration of Human Rights and several other rights conventions thereafter.⁸¹

However, although concerns about political, civil, and other human rights led to the creation of several international human rights organisations like Amnesty International (in 1961) and Human Rights Watch (in 1978), it was only in the 1980s that we see a strong revival of interest in cosmopolitan thinking and ideas.⁸² In large part, this can be attributed to the phenomenon of globalisation which was said to create a much more interdependent world. The burgeoning globalisation literature raised questions about the role, capacity and even continued relevance of states and the need for strengthening the mechanisms for global governance to deal with perceived threats. Among these were concerns about global financial-economic (in-) stability, climate change or global warming and its effects, rising international crime, and international terrorism, the latter issue taking centre-stage after the attacks of September 11, 2001. Added to this, there was growing concern about the adverse socio-economic effects of economic globalisation as promoted by the IMF and the World Bank (based on neoliberal prescriptions involving structural adjustment, cuts in

⁷⁹ Kant, Immanuel (2016), *Collected Works*. Hastings, United Kingdom: Delphi Classics; Fine, Robert (2006), *Cosmopolitanism*. London: Routledge, 22-29; Hayden, Patrick, *Cosmopolitan Global Politics*, Chapter 1.

⁸⁰ Colás, Alejandro (1994), "Putting Cosmopolitanism into Practice: The Case of Socialist Internationalism", *Millennium: Journal of International Studies*, Vol.23, No.3, 513-534.

⁸¹ Such as the Convention on Civil and Political Rights (CCPR) and the Convention on Economic, Social and Cultural Rights (CESCR), both adopted in 1966.

⁸² Marchetti, R. (2008), *Global Democracy: For and Against. Ethical Theory, Institutional Design, and Social Struggles*. London: Routledge, 3.

social welfare spending, and free trade), especially in the so-called developing countries, and increasingly also about the growing inequality between and within countries. In the cultural realm, globalisation was associated with the erosion of cultural diversity and the spread of a superficial consumer and entertainment culture pushed by American (media) interests.⁸³

The concerns about globalisation also led to the flourishing of literature about the political-philosophical implications of these developments. Cosmopolitan thinking, often inspired by the ideas of Kant, experienced a resurgence. Established views about the importance of nation-states, sovereignty, national identities and loyalties, citizenship, and international relations, among other, were revisited and drawn into question. The growing interest in cosmopolitan ideas and thinking was not so much driven by cosmopolitan idealism but by an acknowledged need to make sense of a world in which the belief in more or less independently functioning states and societies was shaken to its foundations. As Beck argued, cosmopolitanism is not just an ideal but has become a reality ("cosmopolitan realism") that requires the social sciences to rethink its state and nation-based foundations.⁸⁴ Much of the effort of modern cosmopolitan thinking is aimed at what Beck calls the development of "methodological cosmopolitanism" and what Fine refers to as the building of "cosmopolitan social theory". However, while driven by the perceived need to develop a (better) understanding of what is going on in an increasingly interdependent world, many of these theorists were influenced in their thinking by the normative ideas and ideals of cosmopolitan thinkers, in particular Kant. Thus, modern cosmopolitans aim to build a bridge between moral cosmopolitanism and (empirical-analytical) social theory.⁸⁵

The aim here is not to summarise or provide an overview of the many different efforts that have been undertaken on this front, but to elaborate on some of the difficulties faced by cosmopolitans and to suggest a stronger link with the environmental challenge. The main difficulty relates to the core of the cosmopolitan enterprise, namely, how to determine what is the common ground shared by humanity. Other difficulties relate to the weak social and political support basis for the cosmopolitan cause. Yet, arguably, the aggravation of global environmental conditions points towards not just the possibility but to the necessity of strengthening the link between environmental imperatives and cosmopolitan thinking.

The question "What does it mean to be human?" arguably underlies cosmopolitan thinking from its earliest beginnings. Rather than taking the dominant views, way of life and standards (culture in a broad sense) of the particular community in which one has grown up or lives as the only basis for answering this question, a cosmopolitan outlook begins with embracing an interest in and an open mind towards other cultures. However, it must be noted that this does not have to go very far. Curiosity about other cultures may have been a common driver of early explorers and

⁸³ Ramonet, Ignacio (2000), "The Control of Pleasure", *Le Monde Diplomatique* (English edition), May, 4; Barber, Benjamin R. (1998), "Culture McWorld Contre Démocratie", *Le Monde Diplomatique*, Vol.45, 533, Aout, 14-15.

⁸⁴ Beck, Ulrich, *The Cosmopolitan Vision*, 17-18; Fine, Robert, *Cosmopolitanism*, xi.

⁸⁵ Fine, Robert, *Cosmopolitanism*, xi.

19th-century world travellers, and still among modern-day tourists, but this does not necessarily mean the loss of bias and prejudice, and it may instead affirm ideas about the superiority of one's own culture or way of life.⁸⁶ Cosmopolitanism, it can be argued, means more than a recognition of cultural diversity and involves seeking what is common to or shared by humans, a search for what is essentially human. Moreover, cosmopolitans seek to derive moral or normative guidance from the answer(s) to this question, in part because they recognise that the differences between cultures or societies can lead to serious conflict, violence and harm. As such, cosmopolitanism is as relevant today as it has ever been.

However, not surprisingly, answering these questions has proven to be difficult and often controversial. Roughly speaking, one can identify two main approaches in the attempts: the "natural law" approach, which has dominated cosmopolitan thinking from antiquity, and the empirical or science-based approach. It must be emphasised that these approaches may overlap and are not necessarily mutually exclusive.

The idea that the laws of nature also govern humans, that consequently, these laws provide guidance for how humans should behave, and that it is possible to discover these laws through the human capacity to reason, goes back at least to the Stoics.⁸⁷ Early cosmopolitans saw the capacity for reasoning (rationality, logic) as the defining characteristic shared by all humans, distinguishing them from other animals. As all humans share this capacity, this makes them fundamentally and morally equal. Through reasoning, communication, and deliberation people can discover the laws of nature that also govern themselves. These laws provide the basis for determining what is "naturally" good or bad, moral or immoral, just or unjust. It speaks for itself that, as these natural laws, rules and norms apply to all humans, they are universal laws.

This line of thinking runs like a thread through the history of cosmopolitanism, influencing Cicero, Grotius, Kant, and also many modern cosmopolitans.⁸⁸ While modern cosmopolitans may be reluctant to talk about the laws of nature, they still largely rely on reason and "reasonableness" as the basis for their arguments. They often simply begin their argument with axiomatic principles, such as the moral worth and equality of all individuals,⁸⁹ the claim "that we share some basic ideas about the nature and requirements of morality"⁹⁰ or principles that "cannot be rejected by any reasonable person".⁹¹ Reasonableness is also the dominant concept in Rawls's theory

⁸⁶ Appiah, Kwame Anthony (2006), *Cosmopolitanism. Ethics in a World of Strangers*. New York: W.W. Norton & Company, Chapter 1.

⁸⁷ Hayden, Patrick, *Cosmopolitan Global Politics*, 13-15; Nussbaum, Martha C. (2019), *The Cosmopolitan Tradition. A Noble but Flawed Ideal*. Cambridge, MA: The Belknap Press, 73-80.

⁸⁸ Fine, Robert, *Cosmopolitanism*, 11.

⁸⁹ Caney, Simon (2005), *Justice Beyond Borders: A Global Political Theory*. Oxford: Oxford University Press, 4.

⁹⁰ Beitz, Charles R. (1979, rev. 1999 ed.), *Political Theory and International Relations*. Princeton, N.J.: Princeton University Press, 17.

⁹¹ Caney refers to Barry on this point. Caney, Simon, *Justice Beyond Borders: A Global Political Theory*, 27-28. Caney's own argument for moral universalism begins with "the assumption that there are valid moral principles", and that there are "persons who share some morally relevant properties", both of which presume the existence of a 'valid' view of human nature on which morality can be based.

about a “law of peoples”.⁹² Although Rawls does not refer to himself as a cosmopolitan, his work is fundamentally a search for principles that should guide global interactions, albeit at a collective (“peoples”) rather than the individual level. However, the diversity of cosmopolitan ideas and positions demonstrates that it is very difficult to arrive at common ground based purely on reason and the criterion of reasonableness, and to reach agreement on issues like distributional justice, humanitarian intervention, or cosmopolitan responsibilities and duties more generally.

Rather than rely on fundamental assumptions about human morality, another way of trying to find common ground for cosmopolitan principles is to undertake empirical research on the world’s cultures and to see what (if any) beliefs or norms they hold in common. This could involve using participatory research methods by which people from different cultures can determine what (if anything) they can agree upon.⁹³ This is what has been referred to as the “overlapping consensus” approach, on which Rawls’s work is also said to be based.⁹⁴ However, although it may be possible to uncover common elements in the belief systems and socio-cultural norms of cultures or societies, there are likely to be other points on which they (fundamentally) disagree, for instance, related to the position and role of women, homosexuality, and the relative importance of individuals and community. Research and interpretations in such matters are inevitably influenced or shaped by pre-existing beliefs and ideologies held in a given political-economic, socio-cultural, and historical context. This has become apparent, for instance, in the debate about whether there is a “clash of civilisations” that has become more rather than less important in a globalising world.⁹⁵

Such difficulties have also arisen in the area of human rights. As noted above, human rights became an important topic of international discourse and rulemaking after WWII, and a core element in much cosmopolitan thinking, which is not surprising given their link with natural law (as reflected in Kant’s philosophy) and the claim of moral universalism that is attached to these rights. But although the notion of human rights enjoys widespread global support, it has also been argued that the existing declarations of rights are biased towards Western liberal-ideological individualism and that they do not acknowledge the importance of collective and community values. This critique is addressed foremost at the first generation of civic and political rights, which have indeed their roots in Western liberal thinking and ideology, with its emphasis on individuals and property rights. Although this does not necessarily invalidate these rights, it should be kept in mind that the human rights discourse is relatively young and must be seen in a historical political-economic and socio-cultural context. While it is not true that modern Western societies do not recognise community values at all or that individuals count for nothing in non-Western societies,

⁹² Rawls, John (1999), *The Law of Peoples*. Cambridge, Mass.: Harvard University Press.

⁹³ For an exploration along these lines, see Note, Nicole, *et al.* (eds.) (2009), *Worldviews and Cultures. Philosophical Reflections from an Intercultural Perspective*. Springer.

⁹⁴ Caney, Simon, *Justice Beyond Borders: A Global Political Theory*, 29-30.

⁹⁵ Huntington, Samuel P., *The Clash of Civilizations and the Remaking of World Order*; Barber, Benjamin R. (1995), *Jihad Vs McWorld. How Globalism and Tribalism Are Reshaping the World*. New York: Ballantine Books.

this is not an adequate response to this critique.⁹⁶ As humans are social beings and depend on social institutions for meeting their basic needs, a good case can be made for assigning high importance or even priority to collective values and institutions (community values, public or collective goods) notably when these are being encroached upon and eroded by individuals who aggressively assert their rights. All too often, in capitalist liberal-democratic systems, private rights (notably property rights) trump collective values to the detriment of whole communities, and a case can be made for giving greater legal protection to the latter. This applies, in particular, to essential environmental systems and services on which communities, and humanity as a whole, depend.

Another controversial issue associated with human rights is that they can and have been used as grounds for humanitarian intervention in countries against the will of their governments, officially to prevent mass atrocities from being committed. While few would disagree that this is justified in cases where genocide threatens to occur, this principle has also been critiqued as a cloak for major powers to pursue their (geo-) political and economic interests and/or to seek regime change, as happened in Libya in 2011.⁹⁷ This does not mean that humanitarian intervention should never occur, but it highlights the political-economic and geopolitical obstacles to reaching common ground on when such intervention is justified.⁹⁸

This also raises the issue of the weak social and political support basis of cosmopolitanism. Whether or to what extent people around the world have started to embrace cosmopolitanism and/or look at themselves as global citizens (even while continuing to identify themselves as citizens of a country or nation) is far from clear. On the one hand, linked to economic globalisation driven by capitalist imperatives and dominated by American TNCs, there has been a spread of a consumerist and entertainment culture that has created a banal form of cultural globalisation that has been labelled as *McWorld*.⁹⁹ Some research has found that, at the mundane level, there are indeed many signs of growing cosmopolitanism, and that people are increasingly conscious of a shrinking world.¹⁰⁰ On the other hand, however, while these developments have created a more economically interdependent and socially interactive world, they do not necessarily lead to globally shared values that provide a basis for the adoption of cosmopolitan norms and rules. As Beck notes, cosmopolitan consciousness lags well behind these developments.¹⁰¹ Support for cosmopolitanism

⁹⁶ This is Caney's main response on this point. Caney, Simon, *Justice Beyond Borders: A Global Political Theory*, 46.

⁹⁷ Borger, Julian (2020), "Srebrenica 25 Years On: How the World Lost Its Appetite to Fight War Crimes", *The Guardian*, 5 July; Bush, Ray, et al. (2014), "Humanitarian Imperialism", *Review of African Political Economy*, Vol.38, No.129, 357-365; Chomsky, Noam (2016, Expanded ed.), *A New Generation Draws the Line. Humanitarian Intervention and the "Responsibility to Protect" Today*. London and New York: Routledge.

⁹⁸ Fine, Robert, *Cosmopolitanism*, Chapter 5.

⁹⁹ Barber, Benjamin R., *Jihad Vs McWorld. How Globalism and Tribalism Are Reshaping the World*; Ramonet, Ignacio, "The Control of Pleasure"; Beck, Ulrich, *The Cosmopolitan Vision*, 40-44.

¹⁰⁰ Szerszynski, B. and J. Urry (2002), "Cultures of Cosmopolitanism", *Sociological Review*, Vol.50, No.4, 461-481.

¹⁰¹ Beck, Ulrich, *The Cosmopolitan Vision*, Chapter 1.

at a deeper level remains largely confined to a relatively small group of humanitarian (aid) workers, international activists, and intellectuals.

One reason for the weak social support basis for cosmopolitanism may lie in its inability to generate the kind of we-feeling that people derive from membership of smaller political communities, including nation-states.¹⁰² The ability to identify with a particular political community can be seen as a necessary condition for people's willingness to submit voluntarily to the collective decisions of a polity and to contribute to meeting the collective needs, and the functioning of a community, which are essential to its stability and continuity. As discussed in Chapter 5, social integration has been (and still is) a core function of states and advocating their abolition or even significant weakening may create a vacuum that cannot be filled by global institutions or unions of states like the European Union. States, therefore, are likely to remain crucially important as foci of collective identity, as institutions for collective decision-making and, one might add, for democracy. However, whether this implies that states should (not) give up *some* of their sovereignty is open to discussion.¹⁰³ But, as I will argue in the next chapter, if humanity is to survive, some parts of the functions that have been, and still are, core functions of the state will have to be delegated to the international (and ultimately global) level while many other parts of these functions can continue to be fulfilled by states, albeit in quite different ways than they have been thus far.

In part, also, the lack of a mass support basis for cosmopolitanism comes back to the issues, already discussed before, associated with the process and effects of economic globalisation as it has been pursued by (especially American) capitalists under the neoliberal agenda. Although this process has been instrumental in spreading banal forms of cosmopolitanism as reflected in a global consumer and entertainment culture, it has also provoked a strong backlash against globalisation because of its adverse socio-economic impacts on many people, both in the so-called developed and developing worlds. As this has already been discussed earlier, there is no need to elaborate on this point again here, apart from noting that this backlash has boosted widespread political discontent and right-wing nationalism rather than advanced the cause of cosmopolitanism with its emphasis on a shared humanity.

These issues and developments highlight that we should not confuse globalisation with cosmopolitanisation. It may be true that global interaction has greatly increased in the political-economic and socio-cultural realms, but this does not mean, as Beck suggests, that "the human condition has itself become

¹⁰² Eckersley, Robyn (2007), "From Cosmopolitan Nationalism to Cosmopolitan Democracy", *Review of International Studies*, Vol.33, 675-692.

¹⁰³ Nussbaum, for one, seems to have abandoned her earlier belief in cosmopolitanism, now seeing it as a noble but "flawed" ideal, notably because of its "moral-psychological problem" of (not) motivating people, and the importance of "particularistic attachments" for the functioning of a political community. Consequently, she now presents herself as a fierce defender of (US) sovereignty: "one should always beware of leaching away national sovereignty", a statement that seems to leave little if any room for delegating *some* important supreme authority to international or global institutions. Nussbaum, Martha C., *The Cosmopolitan Tradition. A Noble but Flawed Ideal*, Chapter 6.

cosmopolitan."¹⁰⁴ National borders, states and societies have far from dissolved, governments still have (albeit variable degrees of) power to make decisions that affect their citizens in significant ways (which became apparent once more in the different ways the COVID-19 epidemic has been handled), and nation-states or cultures remain important foci of political and social identification and integration. Although it has been suggested that a global (civil) society is emerging,¹⁰⁵ as reflected in the rise of global social movements, international non-governmental organisations (INGOs), and transnational activism, facilitated by modern transport, information, communication and technology media, in particular the internet, this should not be confused with growing cosmopolitanism. Global society is by implication the most diverse and plural of all societies, characterised by differences in wealth and income, position and class, cultural and ethnic differences, ideologies and power, and a history of domination, exploitation, and conflict. Even if all borders were to be abolished and a world government created, this does not, by itself, create a cosmopolitan society.

In recognition of this social and political reality, and to avoid being seen as naive idealists, many cosmopolitan thinkers do not reject the (continued) existence of (nation-) states. Many also reject the idea that cosmopolitanism is about the creation of a world government that takes over most of the functions of states (political cosmopolitanism).¹⁰⁶ As noted above, Kant was against the creation of a world government as it could easily turn into a dictatorship, and he advocated a federation of free states instead. Moreover, many cosmopolitan thinkers consider that identification with a particular (nation-) state is compatible with a sense of global citizenship ("cosmopolitan nationalism"), something which has been referred to as a "both-and" quality.¹⁰⁷ Habermas emphasises the integration of universalistic principles into national and supra-national constitutions as a means for bridging the gap between "constitutional patriotism" and cosmopolitanism.¹⁰⁸ Held advocates the adoption of a Global Covenant that links human rights, social-democratic principles and global institutional reform to enhance the transparency, accountability and democratic legitimacy of global governance.¹⁰⁹ Rawls sees "Peoples" united by "common sympathies" that have instituted "reasonably constitutional democracies" as the political building blocks for a "Society of liberal and decent Peoples around the

¹⁰⁴ Beck, Ulrich, *The Cosmopolitan Vision*, 2.

¹⁰⁵ Smith, Jackie (1998), "Global Civil Society?", *American Behavioral Scientist*, Vol.42, No.1, 93-107; Kaldor, Mary, et al. (2012), *Global Civil Society 2012. Ten Years of Critical Reflection*. Houndsmill, Basingstoke, Hampshire: Palgrave Macmillan; Lipschutz, R., "Governing Nature: Global Change, Social Complexity and Environmental Management", Chapter 3.

¹⁰⁶ Hayden, Patrick, *Cosmopolitan Global Politics*, 21; Caney, Simon, *Justice Beyond Borders: A Global Political Theory*, 164-165.

¹⁰⁷ Fine, Robert, *Cosmopolitanism*, 42; Beck, Ulrich, *The Cosmopolitan Vision*, 26.

¹⁰⁸ Habermas, Jürgen (1998), *The Inclusion of the Other. Studies in Political Theory*. Edited by Ciaran Cronin and Pablo De Greiff. Cambridge, Mass.: The MIT Press, 64; Habermas, Jürgen (2001), *The Postnational Constellation. Political Essays*. Cambridge, Massachusetts: The MIT Press, Chapter 4; Fine, Robert, *Cosmopolitanism*, Chapter 3.

¹⁰⁹ Held, David et al. (2005), *Debating Globalization*. Cambridge: Polity Press, Chapter 1; Held, David (2009), "Restructuring Global Governance: Cosmopolitanism, Democracy and the Global Order", *Millennium*, Vol.37, No.3, 535-547.

world", effectively limiting the cosmopolitan order to a subset of all nation-states.¹¹⁰ Thus, many cosmopolitan thinkers are trying to do their best to sell the idea that humans should be forging a more effective supra-national level of governance to address the common challenges facing humankind by putting forward fairly modest and often rather vague proposals for (global) institutional change. In this respect, the dividing line between cosmopolitanism and those who adhere to the Institutional school of thought is not very sharp. There are relatively few advocates of cosmopolitanism who dare to be bold and who have put forward more or less specific ideas and proposals for strong and sovereign, but also democratic, global institutions.¹¹¹

One of the weaknesses in much of the cosmopolitan literature is that the link between the environmental reality and imperatives on the one hand, and the need for a cosmopolitan outlook on the other, is often insufficiently acknowledged. Although it is widely recognised that many environmental issues require global solutions, the nature of the environmental challenge is often depicted inadequately in terms of a series of separate issues or risks. That the ecological reality is also a cosmopolitan reality (a feature affecting all humans) is rarely mentioned. This reality has, of course, been long recognised by many environmental thinkers as discussed in Chapter 1. Humans are constituted by nature and part of the ecological realm together with trillions of other beings and the biophysical systems and processes that sustain them. People may be *ecological citizens*,¹¹² but they should not forget that they are a tiny minority in the web of life without any special rights granted to them by the rest of nature. As ecological citizens, they should recognise planetary limits and boundaries and respect the "citizenship" of all other species. This consciousness, rooted in a biophysical reality rather than a humanistic-individualistic ideology, could be referred to as *ecological cosmopolitanism* or the ecological dimension of cosmopolitanism. Awareness of this common feature of humanity is arguably the strongest motivator for adopting a cosmopolitan outlook as human survival depends on it. Being human implies having to learn how to shape and adapt human thinking, behaviour, and practices to interdependent local, regional, national, and global ecological realities.

While bringing a normative cosmopolitan perspective to the debate about how environmental integration can be advanced at the international and global levels is a positive contribution, it needs to be complemented with critical analyses of factors that stand in the way. As noted above, a potential weakness often associated with cosmopolitanism is its idealism. Although many cosmopolitan authors do their best to

¹¹⁰ Rawls, John, *The Law of Peoples*, 23-25.

¹¹¹ Marchetti's model of "cosmo-federalism" is a rare example. Marchetti, R., *Global Democracy: For and Against. Ethical Theory, Institutional Design, and Social Struggles*. George Monbiot has put forward a proposal for the creation of a World Parliament. Monbiot, George (2003), *The Age of Consent. A Manifesto for a New World Order*. London: Flamingo.

¹¹² This expression is commonly referred to as implying human rights to (aspects of) the environment, in line with the liberal-ideological philosophical tradition which seeks to protect or strengthen the rights of *individuals* in a liberal-democratic order. Although the discussion on this topic sometimes raises the idea of also granting rights to non-human nature, the discourse of "rights" seems odd when talking about the need for environmental protection: referring to human and organisational *duties* to protect ecosystems and species seems more appropriate.

avoid putting forward ideas or solutions that seem quite unrealistic and others refer to their stance as “utopian realism”, indicating that notions of what is realistic are relative and can change over time, they often open themselves up to legitimate critique by ignoring the insights and lessons offered by the other perspectives discussed in this chapter. For instance, many cosmopolitans find the Realistic perspective not just abhorrent but underplay the continuing importance of the role and power of states, especially that of the United States. Equally, most seem to be almost allergic to, and/or ignorant of, political-economic perspectives and analyses, dismissing them as discredited Marxist or socialist ideology or ignoring them altogether. Much of the cosmopolitan literature remains firmly rooted in normative liberal-philosophical thinking, discussing principles and ideas *for* the cosmopolitan cause rather than analysing the obstacles to it. Hence, many of the obstacles to environmental integration discussed in Chapters 3 to 9 are hardly discussed in the cosmopolitan literature. Cosmopolitan thinking, therefore, needs to be complemented with insights derived from the other three schools of thinking discussed in this chapter if it is to provide realistic as well as normative guidance on how to meet the environmental challenge.

Conclusion

This chapter aimed to try to make sense of what is going on in the world given that it is now commonly thought that (nation-) states and governments are heavily circumscribed in what they (can) do and cannot do by the international and global context. Theories aimed at explaining state and government policies based on national contexts and histories only (“methodological nationalism”) are generally deemed inadequate given the interactions and influences between states, governments, and societies, which have greatly increased with what is commonly referred to as the process(es) of globalisation. This is highly relevant to the environmental challenge which, as many analysts argue, requires coordinated international or global action. However, as we have seen in the preceding chapter, environmental integration efforts at these levels have also fallen short and have failed to halt the environmental decline.

The brief tour of international relations perspectives in this chapter has made it apparent that they all have strengths and limitations. Each perspective emphasises different aspects of reality and is influenced by different views of human nature, society, and the world. None offers a complete and, in my view, satisfactory account of the developments that affect environmental integration, positively as well as negatively. While Realism may help explain much of what drives American foreign policy and the low priority it attaches to environmental integration, the International Political Economy perspective provides a complementary account of the role and importance of systemic political-economic factors behind such developments. However, many political-economy perspectives, especially those that cast doubt about the continuing importance or even relevance of states, appear to have little to offer in terms of how the obstacles to environmental integration can be overcome, or for that matter on how the inexorable march of (global) capitalism towards human annihilation and ecological destruction can be stopped. Institutionalism and the Cosmopolitan perspectives appear less pessimistic and more useful in this respect by offering ideas about how environmental integration can be advanced, albeit from different angles,

with the Institutionalist school being more pragmatic and Cosmopolitanism more principled, perhaps idealistic. Both would gain from an infusion of realism from the Realist and the IPE schools of thought. At the risk of causing indigestion, as some views held within these schools of thought are incompatible (including conflicting views on human nature and society), I am inclined to take an eclectic approach to what they have on offer as a basis for thinking about how environmental integration can be advanced.

The main argument that I have put forward in this book is that, if there is still a way to avoid a planetary tragedy, we must do three things. First, we must revisit the nature of the environmental challenge, recognise its depth and scope, and acknowledge the failings of the approaches that governments have adopted to “solve” or address environmental problems. This has been the subject of the first two chapters. Second, we must ask why governments have taken these inadequate approaches and identify what have been the main obstacles to taking a more meaningful and effective approach to environmental integration. These were, at first, classified into three categories of more or less specific factors (socio-cultural, political-institutional, and political-economic), that were discussed broadly in Chapters 3 to 6. Then, Chapters 7 to 9 dug a bit deeper to assess whether and/or to what extent the obstacles to (and opportunities for) environmental integration were inherent to national-level political-economic systems characterised by different combinations of capitalism, socialism and degrees of democracy or authoritarianism as they evolved in the real world. Chapters 10 and 11 looked at the extent to which environmental integration has been pursued internationally and globally and discussed four different perspectives that can shed light on constraining and conducive factors at those levels. Altogether, these chapters sketch an overwhelmingly daunting and gloomy picture: the obstacles to environmental integration are not only many and diverse but are also deeply entrenched in political-economic systems at the national and the international and global levels. Third, therefore, we must rethink how “we” might be able to overcome the fundamental flaws or limitations that are inherent to human nature in a collective (societal) context. Thus far, humans appear to have been unable to develop the collective environmental consciousness and cooperation that is required to compensate for our lack of an environmental instinct and of a (genetically based) code that guides collective human behaviour and cooperation. Highly fractious and prone to conflict, humans must, collectively, accept and come to terms with their shortcomings, differences, and common humanity.

As, thus far, human societies, and the world as a whole, have failed to rise to these challenges, it is hard to avoid the conclusion that it may be (near-) impossible for humanity to achieve meaningful and timely environmental integration and to prevent a planetary tragedy. There certainly is no ground for facile and hollow optimism. For hundreds of years, perhaps even much longer, humanity has been behaving, from an environmental point of view, like the proverbial bull in a china shop. Fundamentally, this behaviour, even though it has its roots in the unspecialised nature of human beings and their lack of a built-in environmental compass or instinct, also raises deep questions about their ability to collectively construct and follow such a compass. The construction of such a compass raises questions about the kind of

fundamental (systemic) changes that societies would need to make to put them on the path towards more sustainable collective thinking, institutions, behaviour, and practices. Some of these will be discussed in the next chapter

Chapter 12 – Systemic Transformations

Introduction

In this chapter, I present ideas on the kind of systemic changes that would need to occur to advance towards sustainable societies. As discussed in earlier chapters, major obstacles to environmental integration can be found in political-institutional, political-economic, and socio-cultural systems, as well as in the international/global political-institutional (state) system. Logically, therefore, we will be looking at systems changes that eliminate or overcome those obstacles. Whether this means that *new* systems need to be created or that existing systems are, or can be, adapted to heed environmental imperatives, is to some extent a matter of labelling. When does a system end and a new one begin? As discussed in the foregoing chapters, some features can be seen as core elements of a system, like those that I have associated with capitalism. If one agrees with such a characterisation, systems change implies that all, or perhaps most, of those features would need to be changed to qualify as *transformational* change.

Bringing about such systemic changes is an enormous challenge, and even more so in a deliberate, coordinated, and targeted way. Given the strong links and interactions between political-institutional, political-economic, and socio-cultural systems, a programme of systemic reform can only succeed if changes in all three realms are undertaken in a coordinated way. For instance, the development and introduction of sustainable production systems will only work if, at the same time, people's ideas, behaviour, and practices have integrated the need for such changes and the acceptability or desirability of the alternatives. Therefore, the process of transformation is likely to be difficult and protracted. In part, also, this may be because the dominant institutions have created a poverty of imagination that makes it difficult for many people to even think that systems *could* be changed without invoking major problems or even disaster. But it is also true that those who do think outside the box in many cases do not agree on the *kind* of changes that are required and/or desirable, and that, consequently, there is no clear picture and widespread agreement on the kind of societies that are possible and desirable.

For these reasons, a process of transformation will (need to) involve much debate and research, planning as well as trial and error, and feedback loops to find out what works and what not, all of which will take considerable time. Given these process requirements, there is little merit in providing a blueprint for the institutions of a new society. Nonetheless, based on the nature of the environmental challenge and the systemic obstacles that I have identified as standing in the way of advancing sustainability, I put forward a range of ideas about the *kind* of changes that I deem essential to break down those obstacles.

It will be beyond the power of individual countries, even the most powerful, to singlehandedly change global systems. Global transformation is only possible if a sufficiently large and powerful group of countries were to agree on the kind of international order that is desirable, partly because it serves their national interests and partly because of recognised shared or common interests. But, as argued in Chapter 11, it is highly unlikely that a fundamental change of global systems aimed at

giving priority to global environmental protection (not only linked to climate change) and at changing the global political-economic system to bring it in line with environmental limits and imperatives, will occur at the global (political-institutional) level. Despite globalisation, the existing state system, dominated by powerful competing states and geopolitical realities, stands in the way of establishing an effective global governance system, let alone a global state or government that would assign primacy to global sustainability, even if not doing so may bring about the demise of humanity. Here, I reflect on the adoption of a bottom-up approach to global transformation aimed at advancing sustainability at the international level. Contrary to the presently prevailing view, this approach is likely to offer better and more realistic prospects for moving towards a less unsustainable world than the pursuit of a strong, top-down global governance (let alone government) approach. Nonetheless, whether the world as a whole will be able to achieve sustainability remains highly uncertain.

The ideas on systemic transformations will be discussed under the following headings: political transformation, economic transformation, socio-cultural transformation, and global transformation.

Political transformation: greening the state

As discussed in Chapters 5 and 11, states are still the most important political institutions through which societies (can) make collective decisions. Notwithstanding globalisation, states fulfil a range of core functions (security, economic, conflict management, social integration) that are still crucially important for meeting the needs of the citizens of a country. Although environmental protection arguably should be added as a core function of the state, it has as yet been given less weight than the four traditional core functions, with the result that the latter often prevail at the expense of the former.

The need or imperative for states to assign a higher, arguably the highest, priority to environmental protection can be referred to as the challenge of greening states. This greening of states (also referred to as the creation of ecostates) has received considerable attention in the literature.¹ However, many of the ideas that have been put forward on this front assume that this process of greening is incremental and occurs within the (mainly capitalist) political-economic order. Also, it has been argued that this process takes a long time and is neither linear nor irreversible. Conceived as such, the process of greening states seems to match real-world developments, as described in Chapters 2 and 3. Even after some fifty years of ecostate building, there is little evidence that the capacity of states to deal effectively with the environmental challenge has greatly increased; if anything, from the 1980s, with the onset of the neoliberal era, it has declined. If, as is sometimes argued, there

¹ For some of the contributions on this front, see Eckersley, Robyn (2004), *The Green State. Rethinking Democracy and Sovereignty*. Cambridge, Mass.: The MIT Press; Meadowcroft, James (2005), "From Welfare State to Ecostate", in J. Barry and R. Eckersley (eds.), *The State and the Global Ecological Crisis*, 3-23; Meadowcroft, James, "Greening the State?"; Mol, Arthur P. J. (2016), "The Environmental Nation State in Decline", *Environmental Politics*, Vol.25, No.1, 48-68; Duit, Andreas, et al. (2016), "Greening Leviathan: The Rise of the Environmental State?"; Sommerer, Thomas and Sijeong Lim (2016), "The Environmental State as a Model for the World? An Analysis of Policy Repertoires in 37 Countries".

are parallels between the development of the welfare state and the ecostate, and if it took fifty to eighty years for welfare states to arrive at their present mode, then this confirms that there is little merit in waiting for another thirty years before ecostates reach a point at which they are as (in-) effective as they are today!² Therefore, as argued in this book, much deeper and fundamental political-institutional change will be required if meaningful progress towards sustainability is to be made.

Greening states involves much more than simply adding an environmental function to the functions of the state. While creating (new) institutions (rules and organisations) for tackling environmental issues, including by the development of (comprehensive) environmental policy (green planning) is essential, greening the state also implies that the other (non-environmental) functions of the state are brought into line with environmental imperatives. This applies to all four functions: security, economic, conflict management, and social integration. The state's institutions and policies that are responsible for these functions need to integrate these environmental imperatives so that these areas are no longer sources of new environmental pressures and problems but, instead, fulfil their functions in ways that are at least compatible or complementary, but preferably supportive of, environmental goals. Therefore, all the state's institutions, but especially those that have (potentially) significant environmental impacts, must be greened so that they help to protect the environment.

As argued in Chapter 1, this requires taking a coordinated approach. It is crucial that responsibility for overall environmental integration within the state is assigned to a core government agency that sits at, or close to, the apex of the political hierarchy. Such an agency would be responsible for the implementation of the overarching policy framework adopted at the highest level to ensure that environmental imperatives and goals are adhered to by all other government departments and agencies. This agency, which could be named a Ministry for Sustainability, would need to be assigned the power and resources to ensure that environmental integration and protection are pursued in a comprehensive and coordinated way, and that non-environmental institutions, in particular those that harbour or support the main sources or causes of environmental pressure, are brought into line with such an approach. Thus, this core/apex agency would be the motor driving the greening of the economic system and processes, as well as the systems that govern and steer policies and developments in the energy, agriculture, industry, transport, urban development, health, education, science and technology, defence, and other areas.

It must be noted that this process of greening the state goes beyond what has been referred to as transition management (TM). TM, which arose in the Netherlands as part of the country's green planning efforts, is based on a recognition that, to achieve long-term environmental goals (such as further major reductions in polluting emissions), more than policy adjustments are required.³ To go further, it was

² For a comparison between social welfare states and ecostates, see Meadowcroft, James, "From Welfare State to Ecostate", 16.

³ Kemp, René, *et al.* (2007), "Assessing the Dutch Energy Transition Policy: How Does It Deal with Dilemmas of Managing Transitions?", *Journal of Environmental Policy & Planning*, Vol.9, No.3-4, 315-331; Kern, F. and M. Howlett (2009), "Implementing Transition Management as Policy Reforms: A Case Study of the Dutch Energy Sector", *Policy Sciences*, Vol.42, No.4, 391-408; Kemp,

acknowledged that changes of a systemic and structural nature are required. This applies, in particular, to the systems of highly environmentally relevant sectors, such as energy, transport, and agriculture. However, as it is (not yet) known what systems can or should replace the existing systems (transition to what?), most TM advocates deem that an evolutionary approach is required and desirable. This approach involves the active involvement of all major stakeholders (including existing industries) to figure out what the options and possible scenarios are, and which ones appear most feasible and economic. Conceived in this way, TM is a technocratic and reformist approach to greening, focused foremost on technological change that is seen as feasible and advantageous to the vested interests in the sectors involved, largely without the consideration of broader political, social, and ethical aspects.⁴

Although there will be a need for many more political-institutional changes to green the institutions of the state, I will just briefly touch upon one other area in which change is both of great strategic importance, environmentally essential, and highly desirable. That is the area of local government.

In many countries, local government is the poor cousin of the system of government. While national-level governments, federal governments, and the states or provinces in countries like the United States, Australia, and Canada, hold much political power, local (and small regional) government is often foremost endowed with responsibilities rather than with significant power and resources. Yet, local governments are of great importance for advancing sustainability and, in the first instance, for putting the brakes on unsustainable development in areas like spatial and urban planning, roading and public transport, pollution and waste management, the management (or exploitation) of natural resources, including water, energy, productive land, and natural areas, and the provision of social and public health services (including social housing) and collective goods (including parks and recreational facilities, libraries, cultural centres), all of which make a big difference to the quality of life enjoyed (nor not) by the people living within their boundaries. Arguably, in many respects, local government is more directly relevant to human well-being and environmental quality than national-level government.

Yet, the importance of local government is often highly underestimated. Often denigrated as agencies responsible mainly for the three Rs (roads, rubbish, and rates), local councils are commonly the target of much political dissatisfaction and frustration, complaints about high rates (local taxes), and accusations of wastefulness. Scepticism about the importance of local government is commonly reflected in lower electoral participation rates compared to national elections. It must be acknowledged that, at

René and Jan Rotmans (2009), "Transitioning Policy: Co-Production of a New Strategic Framework for Energy Innovation Policy in the Netherlands", *Policy Sciences*, Vol.42, No.4, 303-322; Ministerie voor Volkshuisvesting, Ruimtelijke Ordening and Milieu (VROM), *Een Wereld En Een Wil. Nationaal Milieubeleidsplan 4*, 64-68.

⁴ See Meadowcroft, James (2009), "What About the Politics? Sustainable Development, Transition Management, and Long Term Energy Transitions", *Policy Sciences*, Vol.42, No.4, 323-340; Hendriks, Carolyn (2009), "Policy Design without Democracy? Making Democratic Sense of Transition Management", *Policy Sciences*, Vol.42, No.4, 341-368; Smith, Adrian and Florian Kern (2009), "The Transitions Storyline in Dutch Environmental Policy", *Environmental Politics*, Vol.18, No.1, 78-98.

times, weak public esteem for local politics and politicians is not helped by shows of incompetence and political infighting, and by the absence of inspiring, visionary, and charismatic political leaders. At the same time, local electoral systems induce political candidates for office to take an a-political stance (in terms of party politics), and to advocate for the whole of the community, but without a clear programme shared by a group or party. Also, many local politicians have a personal stake in development and growth, which are depicted as priorities for the community, but that cause ever more environmental degradation. Such systems make local governments virtually unaccountable, as voters do not and cannot know what to expect when electing councillors, and all councillors can blame each other for not achieving anything. At the same time, state or national governments have no difficulty riding roughshod over local democracy when deemed necessary or desirable. While this sketch of local government may present a highly generalised and distorted picture that does not apply to particular countries and/or local polities, I hold it up here, even if it is a caricature, as something that does not look much, if at all, like the local government system that is needed to advance sustainable and desirable societies.⁵

Again, the key to systemic change lies in tilting the imbalance of power towards the people that the system is meant to serve. Rather than being represented by highly unrepresentative individuals, membership of local government councils could be determined by sortition to create much more representative bodies. There is no reason why local citizens' councils constituted on this basis would be less able or capable to deal with the local government issues than existing councils. Rather, they would include a wider range of capabilities than is often found among present council members. However, given the likelihood that short term and day-to-day issues will dominate the agenda of such councils, it would be important for local councils to be fitted into a nested system of local and regional government in which citizens' agencies representing larger geographical areas, also constituted by sortition, would carry responsibility for the development and adoption of regional long-term sustainability plans that provide a binding policy framework for local councils. Such regional entities (Regional Citizens' Authorities?)⁶ obviously will need to be equipped with the scientific and administrative support capacity to be able to build a good picture of the environmental capacity of a region, to set strict boundaries, limits, and rules within which all economic and other activity needs to operate, and to work hard at the ecological restoration and strengthening the environmental resilience of the region.

⁵ It is appropriate here to acknowledge that this picture of local government is heavily influenced by what I have seen and experienced in my home country, New Zealand (specifically, in Auckland, the Canterbury Region, and Tauranga).

⁶ Depending on the geographical setting and the extent to which an area has been urbanised, such Regional Citizens' Authorities could represent a conglomeration of built-up areas (a metropolis). But given the far wider (national and even international) environmental impacts and ecological footprint of such conglomerations, it would make sense to assign the responsibility for long-term sustainability planning for such areas to a (national level) Sovereign People's Authority, to be discussed in Chapter 14. An SPA may well deem it necessary to bring a halt to urban sprawl, to de-urbanise metropolitan conglomerations, and to promote a better spread of population based on regional environmental capacities.

In combination, such a system of truly representative nested political institutions at the local, regional, and national levels would amount to a significant shift in the imbalance of power that is inherent to existing state institutions towards agencies that embody a much broader range of values, interests, and ideologies. Nonetheless, as noted above, this rebalancing of political-institutional power does not imply that the enormous inequality in economic power within societies disappears. As long as this inequality exists, it will continue to pose a threat to (more) egalitarian and democratic political institutions. Therefore, economic transformation is also a high-level priority and imperative.

Economic transformation

As discussed in Chapter 7, the most common economic system, capitalism, is ecologically and socially unsustainable because of its inherent imperatives. Moreover, the most prevailing system of production and consumption, industrialism (which has also been prevalent in socialist systems) is also ecologically unsustainable because of its built-in need for continuously expanding markets. Furthermore, many of the technologies on which these systems rely have proven to be seriously harmful to both humans and ecosystems, contributing to the destruction of the very life support systems on Earth. For these reasons, economic transformation is a fundamental requirement for moving towards sustainable economic systems.

In addition to these reasons, several other factors and developments will necessitate governments to play a much greater role in managing and steering national economies. First, fairly soon, economic growth is likely to come to an end.⁷ This may happen regardless of whether governments recognise environmental limits, as these limits will impose themselves directly and indirectly, for instance, through rising costs of fossil fuels, water shortages, growing scarcity of mineral resources, and the deterioration and destruction of agricultural land, among other. The limits and destruction of natural capital inevitably spell the end of growth. This will lead to a severe economic downturn (shrinking and closing of businesses, mass unemployment) and will require an overhaul of (capitalist and industrial) economic systems to avoid social and economic collapse and disintegration. The likelihood of a global financial-economic collapse and crisis as a result of stagnating economic growth and the resulting social and economic breakdown will require states to redefine and significantly expand their economic function. As discussed before, when things go drastically wrong, people look at states and governments for protection from what may be life-threatening disruptions.

Second, governments will need to prepare for, and deal with, the increasingly frequent disasters and destruction that are expected with the intensification of global heating. Global warming has already been built into the climate system for hundreds of years at the very least and will be prolonged and intensified by the (still growing) emissions in the decades ahead as the goal of global carbon neutrality will not be achieved before 2050 at the earliest. Apart from the need to boost the national capacity to cope with more frequent weather-related disasters, states will have to

⁷ Heinberg, Richard (2011, e-book ed.), *The End of Growth: Adapting to Our New Economic Reality*. New York: New Society Publishers.

make climate adaptation an urgent priority. In many countries, that may require major infrastructural projects (notably to protect coastal zones), but also the restructuring of economies (including the energy, agricultural and transport sectors) to strengthen resilience and security of supplies. This requires a degree of research, planning and coordination, finance, (re-) development and action that can only be undertaken effectively by states and governments that have the political-institutional power to overcome resistance against the so-called uneconomic nature of many of these tasks.

Third, ironically and paradoxically, globalisation, which has significantly increased the exposure of countries to the effects of events and developments from around the world, has also made it apparent that national governments need to regain and boost their capacity to deal with unpleasant surprises, shocks, and disruptions. This increased vulnerability has been clearly illustrated by the COVID-19 pandemic (which will not be the last). But there are also the threats of (potential) disruptions of supply chains in the wake of (natural) disasters, the spread of pests and diseases affecting vital food crops, and wars and political upheavals. In general, the greater a country's dependence on exports and imports, and foreign capital, the higher its vulnerability to developments and events in other countries. A high level of economic dependence on some "trading partner(s)" may also compromise a country's political independence as these "partners" can (and already do) use this economic leverage as a political tool.

For all these reasons, the need for economic transformation is of the highest urgency. Yet, it is also the most daunting and difficult to achieve. Nonetheless, once Sovereign People's Authorities (SPAs) (to be discussed in Chapter 14) have been created, the chances of economic transformation are significantly improved given their supreme political (institutional) power. Yet, questions remain about what exactly SPAs should do to transform the prevailing economic systems. Although I do not pretend to have detailed answers, here, I put forward three interrelated principles that can provide a basis for the development of more specific economic institutions and policies aimed at advancing towards sustainability and more desirable societies. These principles are: restoring the economic sovereignty of (nation-) states; economic democracy; and sustainable production and consumption.

First, (nation-) states need to restore their economic sovereignty because it constitutes the fundamental (power) basis that is required to be able to seriously steer their economies into a less unsustainable direction. The present global capitalist system is fundamentally and inherently unsustainable, environmentally as well as socially, and will drag the whole of humanity into the abyss if countries do not disengage themselves from this treadmill. Economic globalisation has little to do with the promotion of free trade (the US and the EU have always kept in place restrictions to protect their interests), but everything with capitalist imperatives related to the need for expanding markets and new capital accumulation (and profit) opportunities. Economic globalisation simply uses countries and their resources as fodder for the insatiable economic growth machine, pulling down all political and social barriers that stand in the way of exploitation at minimal costs, whatever the social and environmental effects. Given the competitive nature of this system, the highly unequal power between states, and geopolitical realities, there is simply no prospect of

capitalism being globally regulated to protect local and global environments, let alone to *reduce* material throughput and bring a halt to economic growth. If a country is serious about wanting to protect and restore its environment, it has no other option but to stop allowing environmentally and socially destructive practices on its territory that are presently being justified by economic globalisation.

Doing so requires regaining sovereign power over a country's economic affairs, notably finance, investments, and trade. It means withdrawing from free trade agreements and reintroducing state control over trans-border capital movements. Why would countries sign up to agreements that primarily benefit small minorities? In most countries, domestic economic production and activity account for most of the GDP, while export revenues account for a (much) smaller fraction of national income.⁸ Even after some four decades of economic globalisation and growing trade across the world, in most countries, the value of exports as a proportion of GDP is considerably less than 50%, especially in high-income countries. By far most people depend on local production (of goods and services), not on exports, for employment and income. Letting export-led growth interests dominate a national economic policy is an example of the tail-wagging-the-dog phenomenon, benefitting primarily the exporters involved.⁹ As Mitchell and Fazi note, exports are more a cost than a benefit to a nation, as they involve the exploitation of resources (with the environmental costs thereof) without benefitting most people, while imports represent real benefits.¹⁰ Maintaining domestic economic activity for the local (national) market should be at the forefront of government concern and policy. This does not mean that countries have to become completely self-sufficient. For most countries, complete self-sufficiency would be impossible. But it is also neither necessary nor desirable as trade can be genuinely sustainable and desirable if controlled and regulated. What is important is to retain national and state capacity to meet the essential needs of populations.

This applies a fortiori to decisions about finance and foreign investments. At the moment, decisions in these areas are based on the financial return to the owners and issuers of capital (including global financial TNCs) without much if any (token) regard for social and environmental consequences. Moreover, the greater the degree of foreign ownership and dependence on foreign capital (formalised by free-trade agreements), the more the citizens of a country lose their capacity to steer their

⁸ For the United States, exports account for 11.9% of GDP, and 16.1% for Japan, 19.8 for China, 21.3 for Australia, 25.8% for New Zealand, 30.5% for the United Kingdom, 30.9% for France, and 47.2% for Germany. Singapore, Hong Kong, and Luxembourg (countries with very small resource bases of their own) are at the top end with 177.3%, 188.8%, and 230% respectively. I do not include import figures here, as these do not constitute domestically generated production and income. Wikipedia (2021), List of Countries by Trade-to-GDP Ratio, https://en.wikipedia.org/wiki/List_of_countries_by_trade-to-GDP_ratio (Accessed: 8 September 2021).

⁹ Here, it is perhaps useful to remind ourselves that exports are *imperative* for big corporations that have outgrown their national market shoes and that need bigger markets and new opportunities for investing their profits. It is these that propagate the export-led growth myth and that push governments to pursue free trade agreements.

¹⁰ Mitchell, William and Thomas Fazi, *Reclaiming the State: A Progressive Vision of Sovereignty for a Post-Neoliberal World*, 203-205. Whether imports are essential or desirable (benefits) is not a given but is open to debate.

economy into a sustainable and socially desired future, effectively losing their economic sovereignty.¹¹ Given the enormous economic power that comes with the control over finance and credit, it is imperative that countries regain that control, for a start by nationalising banks and other financial institutions.¹²

A key element of this sovereignty is the power of a state to issue its own currency. As Modern Monetary Theory (MMT) convincingly argues, governments that issue their own currency cannot default on debt issued in that currency. As modern money is predominantly a matter of (electronic) accounting (entering figures on accounts) and is no longer convertible to gold or any other substance, in principle, there is no limit to how much money governments can create (“print”) to pay for domestically essential activities. This does not mean that there are no economic limits to how much money governments can issue responsibly. But these limits are related to the availability of real resources and labour in a country, not to some fictional idea of what level of government debt is sustainable. As long as spare labour (unemployment) and resources are available within a country that can be used productively and sustainably, governments can print as much money as needed to create full employment, pay a living wage to those employed, and produce everything that can be produced domestically and that is considered essential or desirable, such as affordable housing.¹³ This also applies to the urgent requirements of environmental adaptation and ecological restoration that can be met by local labour and resources. This crucial element of economic sovereignty enables a country to gradually wean itself from (over-) dependence on, and vulnerability to (blackmail by) global capital markets.

While this may sound too good to be true, mainstream economists have difficulty debunking MMT theory, foremost arguing that it would lead to (runaway) inflation. But this argument is implausible as long as government-sponsored economic activity would use spare capacity in a country’s economy. The main reasons why mainstream economists have difficulty accepting the validity of MMT lie in the overwhelming predominance of neoliberal economic thinking and theory taught at universities (even though these have been convincingly debunked by some economists), and the fact that, in many countries, dominant economic institutions have entrenched neoliberal dogma (also legally, like in the form of independent Central or Reserve Banks, and laws or constitutions that mandate limits on government spending

¹¹ These points have also been convincingly made by Hines, who makes a case for “Progressive Protectionism”. Hines, Colin (2017, ebook ed.), *Progressive Protectionism: Taking Back Control*. Park House Press. And by Mitchell, William and Thomas Fazi, *Reclaiming the State: A Progressive Vision of Sovereignty for a Post-Neoliberal World*.

¹² Mitchell, William and Thomas Fazi, *Reclaiming the State: A Progressive Vision of Sovereignty for a Post-Neoliberal World*, 255-258. This does not exclude the creation of collectively owned (community-owned) financial institutions that do not operate on a profit basis. See Mellor, Mary (2005), “The Politics of Money and Credit as a Route to Ecological Sustainability and Economic Democracy”, *Capitalism, Nature, Socialism*, Vol.16, No.2, 45-60; Hutchinson, Frances, et al., *The Politics of Money. Towards Sustainability and Economic Democracy*.

¹³ Kelton, Stephanie (2020), *The Deficit Myth. Modern Monetary Theory and the Birth of the People’s Economy*. New York: Public Affairs Information Service; Mitchell, William, et al. (2016), *Modern Monetary Theory and Practice: An Introductory Text*. Callaghan, NSW, Australia: Centre for Full Employment and Equity (CofFEE).

or borrowing). Also, to the extent that countries have already become heavily dependent on foreign capital (and incurred high levels of debt in foreign currencies), they are being held captive by international finance capital which may resort to disciplinary action aimed at governments that do not play by the neoliberal book.

However, governments should not be deterred by such threats and gradually but steadily steer towards regaining financial-economic control. Governments can increasingly rely on their own (created) currencies to reduce the need for borrowing more money from the international capital markets. Moreover, control over capital flows and currency trading can be restored to prevent speculation against the national currency. Banks and other financial institutions must be nationalised to control borrowing, while private borrowing in foreign currencies should be minimised to diminish financial instability. While such measures may deter foreign investment (which amounts to foreign companies buying up local businesses and exploiting local resources to increase their profits) and reduce the amount of foreign capital available for financing major capital projects, this is not necessarily a bad thing. In many countries, moving towards sustainability is likely to require reducing material throughput (material resource use), and all countries need to become much more discriminating in determining what kind of development is feasible and desirable.

The second principle that should guide economic transformation efforts is economic democracy. Where restoring economic sovereignty is needed for a country to regain control over its economy, economic democracy is required to ensure that the people rather than national economic elites have control over the decisions that affect them most. The notion of economic democracy used here is broader than that of workers' democracy or industrial democracy which refers to the democratisation of the workplace and to how businesses should be run.¹⁴ Here, economic democracy means subjecting all economic decisions that have a significant impact on the lives of people in a country to democratic decision-making. This applies not just to decision-making in the workplace or at the management level of individual companies, but also to the macro-economic policies and decisions made by governments. For too long, economics and government economic decision-making have been kept in the hands of economists and economic policy experts who treat the economy as something that is too important (or too complex) to be given over to democracy. Economic democracy is a precondition for ensuring that economic decision-making serves needs and goals as determined by society rather than the market, which, in practice, means the most powerful economic interests such as financial capital and TNCs.

At its most basic level, economics is about allocating and using natural resources to provide for human and societal needs. Inevitably, this involves impacting the biophysical environment. It also implies making decisions about what and how things are produced, how much, and for whom. As people, with the odd exception, produce things collectively, economics is a social and political as well as an environmental affair. This fundamental nature of economics is hidden in neoclassical and neoliberal (free market) political-economic regimes, which have disembedded economic theory and decision-making from social and environmental realities, at great social and

¹⁴ For a discussion of views on economic democracy, see the section on Democratic Socialism in Chapter 8.

environmental costs. Under these regimes, economic power has been left largely unbridled and free to accumulate. Moving towards a sustainable economic system requires re-embedding economic institutions into environmental and societal systems (realities) and acknowledging the political nature of economic decisions.

It will be evident that the approach advocated here will involve and require planning. However, economic planning does not necessarily imply the adoption of the type of authoritarian, top-down system that was practised in the former Soviet Union and that was of debatable effectiveness.¹⁵ It has been argued that this type of planning may be much more workable now given the availability of high-powered computers and sophisticated algorithms that did not exist during the Soviet era.¹⁶ But, to be responsive to needs as defined by society, economic planning will have to be democratic and based on public input and deliberation on what is important or essential. This applies, for instance, to decision-making on what are considered to be essential public and private goods and services, such as housing, health care, education, social care, public playgrounds, libraries, community facilities, as well as on how energy, transport, and recreational needs, among other, are best provided for. Decisions on investments and the production and/or imports of private goods could make use of the sophisticated communication and computer technologies that are already being used by the big-tech companies for top-down manipulative commercial purposes, and that could be made transparent and controlled democratically. But as production and consumption are not simply a matter of aggregating and meeting individual consumer preferences, and can have significant social consequences, decisions must be guided by other criteria, including what a society deems (most) important for the common good.

Apart from steering the production of goods and services into socially desired directions, democratic planning would make it possible to eliminate most of the wastefulness that accompanies the allegedly efficient market-based system, including the billions of dollars spent on advertising and marketing and the inevitable boom and bust (over- and underproduction) cycles inherent to capitalism. Moreover, it would eliminate the practice of built-in obsolescence and the deliberate neglect of environmental (durability) considerations in the design of products, not to speak of the huge amount of waste and pollution, with all their adverse environmental and human health effects, that are inherent to both competitive market-based and capitalist-monopolistic economies dependent on capital accumulation and ever-larger markets.

¹⁵ The dominant view in Western circles is, of course, that this planning system failed abysmally. But this is debatable considering the standard of living that the Soviet Union did achieve, including the provision of public services in health and education, as well as guaranteed employment and housing – no beggars in the street and no food banks, which have become common “achievements” of neoliberal capitalism. Cuba, as discussed in Chapter 8, also adopted Soviet-style planning and has often been praised for its achievements especially in comparison with many other countries in Latin America (or even the United States). This is not to idealise traditional socialist planning— it surely failed on the environmental front— but neither should capitalist propaganda cloud our judgement of planning.

¹⁶ Cockshott, W. Paul and Allin Cottrell (1993; 2010), *Towards a New Socialism*. Nottingham, England: Spokesman.

Economic democracy also implies that society has the right to collectively decide what is an acceptable or desirable distribution of income and wealth, if only for reasons of social justice and equity. As discussed in Chapter 9, in many countries, inequality in income and wealth has greatly increased with the rise of neoliberalism as the dominant political-economic ideology from the 1980s, and the decline of social democracy in the West. There is no need here to elaborate further on this fact as it has been well documented and extensively discussed in the academic and general literature.¹⁷ But it would be fair to say that inequality, or rather poverty, grew from an issue that was seen to be relevant to so-called developing countries into a problem that affects also rich countries. While philosophers debate the grounds on which inequality may be justifiable,¹⁸ it has become an issue of widespread public concern, further undermining the legitimacy and support for liberal democracies. As Daly notes, in a steady-state economy (and one should add even more in a degrowth economy), it is a "logical necessity" to set a maximum limit on wealth (and consequently also income). Without economic growth, a socially agreed distribution of income and wealth becomes more important to keep inequality "within some tolerable levels".¹⁹

That large inequality in wealth and income is incompatible with democracy, is not a novel idea,²⁰ and has been amply backed up by research on the political influence of the very rich,²¹ and by investigative journalists who, assisted by data leaks, have revealed that the line between politics and wealth is very thin and often crossed, even

¹⁷ A publication that has had a catalytic effect on the rise of inequality as an issue on the international agenda is Piketty, Thomas, *Capital in the Twenty-First Century*. See also Alvarado, Facundo, et al. (2018), *World Inequality Report* World Inequality Lab; Krugman, Paul R. (2009), *The Conscience of a Liberal*. New York and London: W.W. Norton & Company. But this rise in attention has been amplified by the considerable publicity given to the extreme discrepancies in wealth and income (and to the "1%") in the media, leading to many calls for government action to address the issue. See, for instance, Oxfam international (2017), *An Economy for the 99%* Oxford, UK: Oxfam GB; Savage, Michael (2018), "Richest 1% on Target to Own Two-Thirds of All Wealth by 2030", *The Guardian*, 7 April 2018; Partington, Richard (2018), "Pay Rising Faster for Top 1% of Earners in Richest Countries, Says Report", *The Guardian*, 4 July.

¹⁸ Rawls, John (1999), *A Theory of Justice*. Cambridge, Mass.: Belknap Press; Pogge, Thomas W. (2002), "Moral Universalism and Global Economic Justice", *Politics Philosophy Economics*, Vol.1, No.1, 29-58; Miller, David (1999), "Justice and Global Inequality", in A. Hurrell and N. Woods (eds.), *Inequality, Globalization, and World Politics*, 187-210.

¹⁹ Daly, Herman E., "The Steady-State Economy: Toward a Political Economy of Biophysical Equilibrium and Moral Growth", 168-170. It is worth noting that, although Daly builds his case on moral grounds, he does not reject capitalism (private ownership of the means of production). Rather, giving workers a share in ownership helps to maintain its legitimacy. Putting a maximum on income and wealth would prevent extreme (immoral) inequality and remove many of the incentives to monopoly. Daly admits that putting some limit on corporate size would also be needed.

²⁰ Dahl, Robert A., *A Preface to Economic Democracy*; Keane, John, *The Life and Death of Democracy*.

²¹ Gilens, Martin and Benjamin I. Page (2014), "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens"; Winters, Jeffrey A., *Oligarchy*; MacLean, Nancy, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America*; Mayer, Jane, *Dark Money. The Hidden History of the Billionaires Behind the Rise of the Radical Right*.

if not strictly illegally.²² As discussed in Chapter 3, economic power is arguably the most important source of power as, in high concentrations, it enables its holders to use that power to buy cognitive power (for instance, the power of the media), and political-institutional power (buying political candidates or being elected to political office). Protecting or enhancing democracy requires abolishing sharp inequalities in wealth and income and moving towards a much more egalitarian society. Economic democracy implies that societies can impose absolute limits on income and wealth to prevent the accumulation and concentration of economic power to levels that are considered to be dangerous to democracy.

While governments can adopt (and have adopted in the past) a wide range of well-known measures to limit and reduce these inequalities (including progressive income taxes, a wealth tax, and inheritance taxes), these need to be quite high to make a significant difference. In this respect, putting maxima on income and wealth would be more effective, an idea that has been gaining support.²³ But even such measures would still not address the roots of the problem. Inequality of income and wealth themselves originate from the economic institutions and mechanisms that enable and have been designed for accumulation. In a capitalist system, the power to make decisions over the distribution of the wealth generated by economic activity lies with those who own and/or control capital. Not surprisingly, top managers of companies (who are also often major shareholders) grant themselves obscene salaries and bonuses because they can. As discussed in Chapter 7, capitalism is about making money from money, and in its purest form, it does that even without producing anything.²⁴ With the deregulation of finance, it became even easier for financial capital to make money from money and for its managers to grant themselves extraordinary incomes and accumulate wealth without precedent. To address the source of inequality of income and wealth, the economic-institutional power that generates it must be addressed and brought under control.

²² Guardian investigations team (2021), "Pandora Papers: Biggest Ever Leak of Offshore Data Exposes Financial Secrets of Rich and Powerful", *The Guardian*, 3 October 2021; Pegg, David (2020), "Leak Reveals \$2tn of Possibly Corrupt US Financial Activity", *The Guardian*, 20 September; Garside, Juliette, *et al.* (2016), "The Panama Papers: How the World's Rich and Famous Hide Their Money Offshore", *The Guardian*, 3 April 2016.

²³ Pizzigati, Sam (2018), *The Case for a Maximum Wage*. Cambridge: Polity Press; Robeyns, Ingrid (2019), "What, If Anything, Is Wrong with Extreme Wealth?", *Journal of Human Development and Capabilities*, Vol.20, No.3, 251-266; Monbiot, George (2019), "For the Sake of Life on Earth, We Must Put a Limit on Wealth", *The Guardian*, 19 September.

²⁴ As expressed in the formulae used by Marx: M-C-M (money turned into capital to make more money), and M-M (money turned into more money via financial transactions: banking, insurance, speculation, and all kinds of complex and opaque instruments, including derivatives). See Tooze, J. Adam, *Crashed: How a Decade of Financial Crises Changed the World*. Also Christophers, Brett, *Rentier Capitalism. Who Owns the Economy, and Who Pays for It?*

Deconcentrating and equitably sharing economic institutional power implies looking at alternative economic ownership and/or control structures and making connections with the principle of economic democracy discussed above. It could mean putting ownership and control into the hands of all workers (the idea of workers' or industrial democracy), cooperative businesses, or community-owned and state-owned enterprises.²⁵ In all cases, this should involve introducing economic decision-making institutions that enable collective control over important decisions (including investments, salaries, and the distribution of revenues).

The third interrelated principle is sustainable production and consumption. For reasons that have already been discussed, the presently prevailing systems of production are incompatible with long-term sustainability on all three dimensions (ecological, resource and human). While the dominant approach to the development of green production systems is heavily oriented towards technological innovation (notably to increase resource efficiency), this is likely to generate new unforeseen and unintended effects. Developing truly sustainable production and consumption systems requires (re-) designing production methods based on ecological, resource and human (health; qualitative) criteria (limits and desiderata). Rather than doing so at an abstract level, this implies design based on specific and different social and environmental contexts, thus from the ground up. Embedding production within the ecological context requires building an inventory of a country's environmental capacity based on local/regional assessments.

These assessments may indicate scope for regional specialisation based on sustainability criteria, but also a need to cut down on excess production and consumption derived from particular areas and ecosystems. If the notions of industrial ecology or circular economy are to be implemented meaningfully, they will require the (re-) design of a country's production system as a whole, from "cradle to cradle", from the extraction of raw materials through all stages of production, the use of energy, distribution and consumption (or lease), to the re-integration of end of life materials into environmental cycles.²⁶ Constructing a circular economy requires a nation- and economy-wide approach. No government has even started taking such an approach, apart from expressing an interest in, or even commitment to, the idea of a circular economy.²⁷

²⁵ For a discussion of some alternatives, see Mellor, Mary (2012), "Co-Operative Principles for a Green Economy", *Capitalism Nature Socialism*, Vol.23, No.2, 108-110; New Economics Foundation (2020), *Change the Rules. New Rules for the Economy* New Economics Foundation; Moye, A Melissa (1993), "Mondragón: Adapting Co-Operative Structures to Meet the Demands of a Changing Environment", *Economic and Industrial Democracy*, Vol.14, No.2, 251-276.

²⁶ For interesting ideas on what may be technically possible on this front, see Benyus, Janine M. (1997), *Biomimicry: Innovation Inspired by Nature*. New York: Morrow; McDonough, William and Michael Braungart (2002, 1st ed.), *Cradle to Cradle: Remaking the Way We Make Things*. New York: North Point Press; Ausubel, Ken and J. P. Harpignies (2004), *Nature's Operating Instructions: The True Biotechnologies*. San Francisco: Sierra Club Books.

²⁷ For the idea of creating circular economies and an exploration of applications see EMAF (Ellen MacArthur Foundation), Stiftungsfonds für Umweltökonomie und Nachhaltigkeit (SUN) of the Deutsche Post Foundation, and the McKinsey Center for Business and Environment (2015), *Growth Within: A Circular Economy Vision for a Competitive Europe*; European Environment

Socio-cultural transformation

As discussed in Chapter 4, although, in many countries, environmental awareness and support for environmental protection may have grown considerably, the environment is still mostly seen and treated as a set of separate problems or issues that can be solved by technological and managerial means. While many people are willing to do their bit for the environment (for instance, by partaking in recycling), most people remain stuck in dominant patterns of behaviour and practices (at work, travelling, consuming, energy use, recreational, among other) that contribute to environmental pressures and problems. In part, this is because they may have little or no choice (for instance, because of a lack of or poor public transport), or because “environmentally friendly” options (products and services) are in their infancy and/or too expensive. But it would also be fair to say that most people do not have a holistic view of nature or the environment and that there is a disconnect between their environmental views and practices on the one side, and how they (want to) live their lives on the other.

Bringing about a fundamental change in (environmental) worldviews, values and attitudes is no small matter. As worldviews and values are often strongly held and socially entrenched, they may take much time and changing conditions, and/or life-changing experiences, to change. Some argue that this is a long-term (inter-generational) affair that depends foremost on socio-economic developments that are beyond control.²⁸ However, as discussed in earlier chapters, societal views are also subject to consciously fought battles for the hearts and minds between rival groups and interests who wish to maintain or gain hegemony in the cognitive realm, deploying most forms of power (personal, cognitive, economic, social, political-institutional). The rise of neoliberalism during the 1980s, for instance, was not a matter of evolution or generational change, but an instance of purposeful political agency by powerful economic interests and their intellectual advocates, albeit that their success was aided by economic stagnation (stagflation) during the 1970s.²⁹

Who gains or maintains cognitive hegemony depends largely on who has control over the systems that influence or even shape people’s views. The battle for the hearts and minds takes place on several battlefields, in particular, the education

Agency, *Paving the Way for a Circular Economy: Insights on Status and Potentials*; European Commission (2020), *A New Circular Economy Action Plan for a Cleaner and More Competitive Europe. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* Brussels: European Commission; Gallaud, Delphine and Blandine Laperche (2016), *Circular Economy, Industrial Economy and Short Supply Chain*. London: Wiley; McDowall, Will, et al. (2017), “Circular Economy Policies in China and Europe”, *Journal of Industrial Ecology*, Vol.21, No.2, 651-661. China has adopted the idea of a circular economy with the dual goals of environmental sustainability and economic growth.

²⁸ Inglehart’s theory about societies’ change towards “post-material values” (discussed in Chapter 4), falls into that category. Similarly, arguments about the rising support for the environment among “generation Z” can also be seen in this light.

²⁹ Mayer, Jane, *Dark Money. The Hidden History of the Billionaires Behind the Rise of the Radical Right*; MacLean, Nancy, *Democracy in Chains: The Deep History of the Radical Right’s Stealth Plan for America*; Harvey, David, *A Brief History of Neoliberalism*.

system, the media, and the field of science and technology. However, each of these fields is far from level, and those who already hold control over these systems have a big advantage. Therefore, changing the dominant views is hardly possible without gaining control over one or more of these systems. The power of the state plays a crucial role on this front.

That education systems play a major role in shaping the outlook of (young) people on many if not all facets of life and society is denied by hardly anyone. This does not just relate to subject matter (curricula), but also to the kinds of values and norms that are instilled formally and informally, for instance, through the organisational culture of an institution and extra-curricular (experiential) activities. Changes to the formal curriculum of schools will be essential for influencing the knowledge and values of students. To a degree, such reforms have already been undertaken in many countries, and this may well help explain the growing level of environmental awareness and concern among the younger generation ("Z"). In many countries, universities now also offer an array of environmental programmes and degrees, preparing graduates for a variety of careers in the environmental field.

But while important, these changes are largely a-political and do not develop knowledge and awareness of the political-economic roots of the environmental crisis. Environmental education programmes walk a tightrope between those who accuse them of spreading particular (anti-capitalist) ideologies and not sticking to offering students the facts and those who argue that they fail to bring about significant change in behaviour and practices.³⁰ To stay on the safe side, many such programmes encourage students to take personal responsibility for their environmental behaviour and practices, thereby individualising the environmental challenge (we are all responsible). They are also likely to emphasise and propagate practical and technology-based solutions to environmental problems, such as renewable technology, recycling, and alternative modes of transport. This applies also to higher education and research in the environmental field, notably in the areas of agriculture, energy, and transport. There is much merit in such programmes in terms of generally increasing environmental knowledge and awareness, but they do not make people aware of the systemic causes and sources of environmental pressures that lie beyond the control of individuals. While science and technology have an important role to play in moving towards sustainable systems (from the design stage), this is unlikely to occur until the power and control over these systems have been changed.

One area of education that plays a very significant role in influencing and shaping dominant views is that of economics. As noted before, the economics fraternity and the teaching of economics at universities have been very successfully captured by neoliberal economists and ideologues. Bringing about paradigmatic

³⁰ For an expression of (right-wing) concerns about environmental education programmes in the American context, see Cushman Jr., John H. (1997), "Critics Rise up against Environmental Education", *New York Times*, 22 April. For a rather meek critique, see Saylan, Charles and Daniel T. Blumstein (2011), *The Failure of Environmental Education (and How We Can Fix It)*. Berkeley and Los Angeles: University of California Press. And for a more radical critique, see Gkiolmas, Aristotelis S. and Constantine D. Skordoulis (eds.) (2020), *Towards Critical Environmental Education. Current and Future Perspectives*. Cham, Switzerland: Springer.

change in this discipline will not be easy as it has been captured by economic power and ideology.

The second system (or complex of systems) that is crucial to influencing and shaping cognitive frameworks is that of the media. There is no need here to elaborate on the importance of the media as strongholds of cognitive power, increasingly controlled by private corporations that are themselves key players in the global capitalist system, including the big tech companies (Google/Alphabet, Microsoft, Facebook/Meta, Amazon, and Apple), with their growth and investment imperatives.³¹ With the rise of neoliberalism, in many countries, governments have been instrumental in allowing the privatisation and commercialisation of the public media and their concentration in ever fewer hands, also across different types of media (radio, television, the—increasingly digitalised—printed media, the film and entertainment industry, and the social media).³² This has raised much concern about the decline of quality journalism and reporting, the manipulation of the public for commercial and political purposes, the decline of (investigative) journalism as a pillar of democracy, and the spectre of totalitarian control in the hands of a media magnates and/or governments.³³ Media content is determined foremost by the lowest (biggest) common denominator, especially in the form of entertainment and by turning even news into personality shows to increase audience numbers and maximise advertising revenue. It distracts people from the important issues and factors that influence and shape their lives and/or depoliticises them.³⁴ The media, in particular the social media, have become platforms for sowing and cultivating social divisiveness, especially around identity issues (identity politics), thus diverting attention from the political-economic forces that manipulate people, and from their collective interests.³⁵

While the media may give a lot of exposure to environmental issues, their portrayal tends towards the (dramatic) effects rather than to the underlying sources

³¹ Zuboff, Shoshana, *The Age of Surveillance Capitalism*.

³² For comprehensive data and information on the concentration of media ownership around the world, see Noam, Eli M. and the International Media Concentration Collaboration, *Who Owns the World's Media? Media Concentration and Ownership around the World*. The author notes the high concentration of ownership in both content media and (network) platform media in all the countries surveyed, that media concentration is indeed taking place around the world – driven by economics (10), and that we must expect further market concentration, with the Internet “becoming part of the feared problem” (9). For a discussion of concerns about concentration in the European context, see White, Aidan (2005), *Media Power in Europe: The Big Picture of Ownership*. Brussels: European Federation of Journalists.

³³ Diglin, Greg (2014), “Living the Orwellian Nightmare: New Media and Digital Dystopia”, *E-Learning and Digital Media*, Vol.11, No.6, 608-618; Crouch, Colin (2016), “The March Towards Post-Democracy, Ten Years On”, *The Political Quarterly*, Vol.87, No.1, 71-75; Pilger, John (1999), *Hidden Agendas*. London: Vintage; McChesney, Robert W. (2003), “The Problem of Journalism: A Political Economic Contribution to an Explanation of the Crisis in Contemporary US Journalism”, *Journalism Studies*, Vol.4, No.3, 299-329.

³⁴ Postman, Neil, *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*; Lewis, Paul (2017), “Everyone Is Distracted. All of the Time”.

³⁵ Swyngedouw, Erik (2011), “Interrogating Post-Democratization: Reclaiming Egalitarian Political Spaces”.

and causes, let alone those inherent to capitalism and industrialism.³⁶ Almost always playing the “we are all responsible” and the “technology will save us” cards, the courses of action and solutions that are held up by the media divert attention from the systemic nature of the environmental crisis, while those who demand radical or systemic change are depicted as extremists or even terrorists.³⁷ Even an independent newspaper like *The Guardian*, which has expressed a commitment to informing its readers about the seriousness of the climate *emergency*, and which reports extensively on environmental issues, appears to be constrained in its reporting on the systemic (political-economic; political-institutional; and socio-cultural) sources of the environmental crisis, caught by commercial imperatives, notably its dependence on advertising.³⁸

Creating and maintaining opportunities for different, competing, alternative and radical views (narratives) to find expression in the media is an important cornerstone of democracy (or of “democratic infrastructure” as McChesney and Nichols note).³⁹ Enabling citizens to dig deeper into the causes and sources of (environmental, economic, social justice, and other) issues, and to make up their minds about what needs to be done to protect the environment for its own sake as well as that of society and future generations, requires the democratisation of the media. Even the internet, and notably the social media, which in their early days were regarded as platforms for enhancing democracy, have increasingly fallen victim to capitalist imperatives and manipulative strategies used for accumulation and profit maximisation purposes.⁴⁰ Its promise as a means for enhancing democracy is increasingly compromised by the use of the same manipulative tools for political purposes and government control.⁴¹ These developments have made it increasingly difficult to try to achieve media reform before a fundamental shift in political-institutional power.

As long as the media remain under the control of the vested political-economic interests, it will be difficult to escape their propaganda and manipulative practices. A first step towards reducing this grip could be the creation of a public service media

³⁶ Luedecke, Gesa and Maxwell T. Boykoff (2017), “Environment and the Media”, in D. Richardson, et al. (eds.), *The International Encyclopedia of Geography*.

³⁷ Pedroni, Laurence (2017), *Green Vs. White: An Examination of Media Portrayals of Radical Environmentalists and White Supremacists* Master of Arts. San Jose State University, Justice Studies.

³⁸ Edwards, David, and David Cromwell, *Propaganda Blitz. How the Corporate Media Distort Reality*, notably Chapter 11.

³⁹ McChesney, Robert W. and John Nichols, *People Get Ready: The Fight against a Jobless Economy and a Citizenless Democracy*; Pilger, John (ed.) (2004), *Tell Me No Lies. Investigative Journalism and Its Triumphs*. London: Jonathan Cape.

⁴⁰ Zuboff, Shoshana, *The Age of Surveillance Capitalism*; McChesney, Robert W. (2013), *Digital Disconnect: How Capitalism Is Turning the Internet against Democracy*. New York and London: New Press; Meikle, Graham (2002), *Future Active: Media Activism and the Internet*. Annandale, N.S.W.: Pluto Press.

⁴¹ This is, not surprisingly, most advanced in authoritarian states such as China and Russia. Browne, Ryan, *Russia Follows China in Tightening Internet Restrictions, Raising Fresh Censorship Concerns*; Kenyon, Flavia (2021), “China’s ‘Splinternet’ Will Create a State-Controlled Alternative Cyberspace”, *The Guardian*, 3 June; Solon, Olivia (2017), “China Cracks Down on VPNs, Making It Harder to Circumvent Great Firewall”, *The Guardian*, 23 January.

organisation that must uphold the highest journalistic and reporting standards and that would be made responsible for providing in-depth coverage of the issues that are of real public concern. Also, media platforms could be turned into publicly owned assets that would be made available to and used by individuals and groups to disseminate their own content and to express their views.⁴² Such a system must be free from any commercial influence, and publicly funded and accountable.

A third cognitive system in which change is required to move towards more sustainable societies is that of science and technology. Although science and technology are commonly seen as non-political or even value-free areas of activity, and not aimed at directly influencing or shaping people's hearts and minds, behaviour, and worldviews, they arguably are the most insidious forces in these respects. Historically, science and technology have always had a big influence on the ways people work, meet their needs, and generally live their lives. Tools are not just means but also influence ends and values. As discussed in Chapter 6, they have increasingly done so to the extent that technology is no longer a set of tools serving human needs but has become a system that forces or persuades people to change and adapt their behaviour and practices, arguably turning people into slaves of technology.

Science and technology, it is sometimes observed, are out of control.⁴³ However, this view is patently false. As discussed in Chapter 4, science and technology are largely developed under the control and in the service of the military and big corporations. As for the former, governments *do* exercise influence or even control over such developments because of their security function. Regarding the latter, science and technology are developed to serve corporate (foremost financial-economic) interests, often with direct or indirect support from governments in the name of the public good. But the public has no say whatsoever in decisions on the development of science and technology by either governments or corporations. The existing political-economic and political-institutional power configurations steer research and technology mostly in directions considered to be of importance to the economy and national security, with little if any regard for their broader and long-term political, social, and environmental implications.

To cure this blindness and to stop the maelstrom of unforeseen (because "we" have not been looking!) adverse social and environmental ills, two things need to happen. First, like economic decision-making, decisions about the development of science and technology have to be brought under democratic control. This could

⁴² For radio and television, broadcasting time could be proportionally allocated based on voluntary membership of media organisations, akin to the system used in the Netherlands. This system combines (originally full) public ownership with access by a wide diversity of groups, giving it a democratic quality, although it has come under threat from budget cuts, privatisation, and commercialisation advocated by neoliberal forces. Wikipedia (2021), Dutch Public Broadcasting System, https://en.wikipedia.org/wiki/Dutch_public_broadcasting_system (Accessed: 29 August 2021).

⁴³ Beck, Ulrich, *Risk Society. Towards a New Modernity*. Rees notes that it is unfeasible to put a brake on discoveries and inventions, and that it is "rather likely" that "humankind will meet its end by its own doing before the end of the 21st century." Rees, Martin J., *Our Final Hour: A Scientist's Warning: How Terror, Error, and Environmental Disaster Threaten Humankind's Future in This Century- on Earth and Beyond*, 24.

involve the creation or strengthening of a representative citizens' organisation that sets priorities for research considered to be in the (long-term) public interest, as a basis for allocating public research funding. Second, the development of science and technology would need to be made subject not just to an assessment of the potential risks, but based on a framework of principles, criteria and guidelines, rules (including limits) and goals within which future scientific and technological development must and/or should be undertaken. This could mean that technologies that are deemed to be socially and/or environmentally harmful and/or ethically unacceptable would be prohibited and phased out. In positive terms, science and technology would be steered in the direction of what is seen as desirable and/or required to create better societies and truly sustainable systems (production, energy, transport and other).

Also, the way science is approached and undertaken needs to be transformed. As discussed in Chapter 4, from the Age of Enlightenment, scientific activity has been based on a mechanistic worldview that has put humans above nature and that assumes that they are licensed and able to change and control nature at their will. The view of nature as a machine has led to the development of increasingly narrow fields of specialisation aimed at a deeper understanding of ever-smaller aspects of reality. The flip side of this development has been that scientific knowledge has become highly fragmented and that it has become increasingly difficult for specialists to assess the (potential) effects and implications of their innovations, technologies, and interventions. This is reflected in the frequent (almost daily) manifestations of unforeseen and unexpected (side) effects of scientific applications, illustrated, for instance, by the adverse effects of the use of synthetic chemical compounds in agriculture (pesticides, fertiliser), new or composite materials (like plastics, CFCs), medicines, and other technologies. Such unpleasant surprises attest to the fact that science has become an increasingly unreliable basis for guiding individuals and societies towards what can be deemed a desirable or even acceptable future.

Although it is unrealistic to expect that the trend towards specialisation can be halted, let alone reversed, it is possible to instil greater awareness among scientists about the limits of science. For instance, all science can and should be taught within a holistic framework that emphasises the indivisibility of reality and the need for modesty and caution in making any claims about being able to control (aspects of) nature and the (potential) effects of new technologies or materials. At the very least, all scientists should be exposed to the views and debates generated within the philosophy of science, and confronted with the ethical, social, environmental, and political issues and implications associated with (the frontiers of) science and technology, drawing also on the lessons that can be learned from the past.

Moreover, all scientific research and technological development (public and private) should be opened up to public scrutiny and input. This would force scientists and engineers to explain what they are doing and why and to engage with the questions and concerns that citizens may have. In more positive terms, this would allow citizens to both learn about and have an input in the development of science and technology, making it more responsive to societal needs. The call for involving citizens in science and technology has been made for quite some time, and some

countries have taken small steps in this direction.⁴⁴ But there is a good case for making citizens' involvement a standard requirement for all organisations engaged in the development of science and technology. This should be done on an ongoing, not just ad hoc, basis.

Finally, there is one other socio-cultural issue that needs mentioning here, as it is often regarded as one of the key issues responsible for the significant increase in environmental pressures and problems: population size. As discussed earlier in this chapter, environmental pressures are as much a challenge of scale (of production and consumption) as of the kinds of technologies that societies use to meet their needs and aspirations. Developing technologies that provide for people but that do not harm ecosystems poses a big challenge and may take quite some time. In the meantime, reducing environmental degradation and restoring ecosystems is likely to be achievable only by significantly reducing the amount of material throughput associated with human activities (economic degrowth) *and* by population degrowth (a shrinking population). Thus, rather than boosting population growth (either by stimulating the birth rate or by immigration) because it is "good for the economy", most countries that put themselves on the path towards sustainability should welcome a population decline, especially if their environment is already degraded and its sustainable production capacity is eroding. While there may be scope for some countries with spare environmental capacity to increase their population, the additional environmental effects (on all three dimensions: ecological, resource, and social) of doing so should be carefully considered, alongside humanitarian needs. The idea that people should have the right to settle wherever they wish in the world, without considering the effects on existing societies, ignores the importance of social integration and the right of societies to define what binds their members together, thus undermining the very foundations of societies. One does not have to be a xenophobe or right-wing nationalist to think that uncontrolled migration is a recipe for the unravelling of societies. Support for this idea comes foremost from the advocates of global (cosmopolitan) capitalism as free migration suppresses the costs of labour. But it will not do any good for maintaining a degree of social integration that is needed to keep societies together, as has become evident in many countries around the world.⁴⁵

The ideas on transformation presented above assume that states are still, and most likely to remain for quite some time, crucial political institutions for meeting the collective needs of societies (security, economic, social integration, demand and conflict management, environmental protection). States also offer the most realistic

⁴⁴ Peters, Michael A. and Tina Besley (2019), "Citizen Science and Post-Normal Science in a Post-Truth Era: Democratising Knowledge; Socialising Responsibility", *Educational Philosophy and Theory*, Vol.51, No.13, 1293-1303; Irwin, Alan (1995), *Citizen Science. A Study of People, Expertise and Sustainable Development*. London and New York: Routledge; Jasanoff, Sheila (2003), "Technologies of Humility: Citizen Participation in Governing Science", *Minerva*, Vol.41, 223-244.

⁴⁵ In this respect, I agree with Colin Hines, who refers to the idea of eliminating all controls on immigration as a "truly bizarre blind spot" on the part of many otherwise progressive people who, arguably, are afraid to be depicted as right-wing nationalists. Ironically, by taking this stance, they only fuel political support for the latter group. Hines, Colin, *Progressive Protectionism: Taking Back Control*, Loc 943-960.

and promising targets for collective action by (groups of) citizens, as they are supposed to serve, and be accountable to, their citizens. Transformative change at the national (state) level is, or at least should be, within the grasp of individual societies, while such change at the global level is not. Nonetheless, ultimately, to stop the unfolding planetary tragedy, fundamental change will have to be global. As Chapters 10 and 11 have indicated, at this stage, the chances of that happening appear very slim. But this is all the more reason to prioritise transformative action at the national level and to engage in a bottom-up process of global transformation.

Global transformation

As discussed in Chapter 10, moves towards environmental integration at the international and global level have been very modest and largely ineffective, with the odd exception. The reasons for that mirror the (socio-cultural, political-institutional, and political-economic) factors at work at the national level, compounded by the competitive nature of the global state system and the rivalry for dominance or hegemony between the major powers, regionally as well as globally. Economic globalisation served the interests of US-based and EU-based capitalism while eroding the power and sovereignty of many states.

However, since the late 1990s, the heydays of globalisation, the global situation has changed markedly. First, economic globalisation has lost much of its lustre as many so-called developing countries decided that there was little if any benefit in (further) opening their borders to foreign capital and trade if such measures were not reciprocated sufficiently by the high-income countries. Concerns about the adverse social, economic, environmental, and political effects of economic globalisation on societies (as pointed out also by the anti- or alternative globalisation movement) started to gain broader recognition. Second, the financial-economic crises of 1997 (the “Asian crisis”), the 2008 financial-economic crisis, and the crises in Argentina, Mexico, and other countries, exposed the vulnerability of the globalised financial system and the structural nature of economic stagnation in the rich countries (the absence of new significant drivers of economic growth in the real economy). Third, the rise of China as a global economic and military power, facilitated by economic globalisation, was increasingly seen as a threat by Western powers, and in particular by the United States to its hegemony. Fourth, the de-industrialisation and socio-economic decline brought about by economic globalisation in the United States, the United Kingdom, and other European countries, along with sharpening inequalities in wealth and income, eroded the support for and legitimacy of economic globalisation. Fifth, the global COVID-19 pandemic that began in 2020 not only caused major economic and social disruption around the world but also put the spotlight on the crucial role of states in providing comprehensive security (health, social, economic) to their citizens. In combination, these developments indicate that the pendulum has swung back from globalisation towards the rediscovery of the importance of the role, functions, and capacities of states for meeting (more or less effectively) the needs of their citizens and dealing with the risks, problems and pressures facing societies.

While it is impossible to predict where these global political-economic and geopolitical developments will lead to, and views about the possibility of global transformation can only be highly speculative, this should not deter debate about

these matters. However, what seems clear is that, for the foreseeable future, (nation-) states, especially the major powers, are not going to disappear or voluntarily subject themselves to a world government or other global institutions (rules and organisations) that they perceive to be (potentially) damaging to their power and interests. As discussed in Chapter 11, they may cooperate in matters and in ways that serve their interests, as the Institutionalist school of thought emphasises, but their foreign policies and actions are more plausibly explained based on a mix of the Realist and Political-Economy perspectives. Cosmopolitanism hardly gets a look-in.

This means that any significant degree of global transformation (rather than weak or symbolic reforms) aimed at environmental integration and/or advancing global social justice, will need to come from the bottom up rather than from top-down initiatives. Citizens and even countries have no other option: they cannot impose global transformation unless they are or become a globally hegemonic power like the US has been for about half a century following WWII. But apart from the question of whether the US is still a global hegemon, it is highly unlikely that (any) global hegemon (or for that matter a world government) would be willing and able to impose an effective global environmental protection regime. Rather than waiting for a global hegemon to create a sustainable world, it is more realistic and desirable for the citizens of countries to work towards transformational change within their own borders.

Working at transformation at the national level does not imply taking an isolationist path and/or aspiring to complete autarchy. As discussed above, few countries would be able to become self-sufficient at more than a basic level, even though this would be far preferable to the kind of societies that are commonly depicted in the apocalyptic literature and movies. But countries are likely to be able to enhance their resilience and productive capacity by cooperation with like-minded states that have also put themselves on the transformation path sketched above, especially if they have spare environmental space that can be used sustainably for a complementary exchange of goods. There is no a priori reason why all trade should be rejected as long as the countries involved ensure that the use of their resources is and remains within truly sustainable limits. Trade in particular goods and services may be deemed desirable or important by the respective societies.⁴⁶ In principle, the larger the network of countries engaged in trade on that basis, the greater the range and diversity of (truly) sustainably produced goods and services their populations will be able to enjoy. At the same time, these countries are likely to be willing and able to forge more effective international agreements (aimed at sources and causes of environmental pressure) amongst themselves, the effects of which may become more meaningful the more countries join them.

Ultimately, of course, international, or global economic cooperation between all major countries will be necessary if humanity is to create a much less unsustainable world. Levels of production and consumption, and their associated resource use and environmental impacts, will need to be brought to globally sustainable levels. Sustainability in one country is simply not possible if the rest of the world continues

⁴⁶ This approach aligns with that advocated by Hines, who proposes that countries conclude a "General Agreement on Sustainable Trade" and set up a "World Localisation Organisation" aimed at strengthening their economic sovereignty and capacity. *Ibid.*, Loc 92.

on an unsustainable path. If, and that is a big if, countries with a critical mass of power (economic, political-institutional, physical, social, cognitive) behind them adopt fundamental transformation as a path towards sustainability, and if they do so in a coordinated manner, the chances of bringing about global transformation will be significantly higher. Whether this possible scenario has a real chance no one can tell. This will depend on how many, and which countries put themselves on the transformation path as well as on unforeseeable events and developments.

One might object that the path towards global transformation sketched above is based foremost on an appeal to realism and its underlying assumption of (national) self-interest. Appealing to people and governments to make moving towards less unsustainable systems in their own countries a priority may seem selfish. However, as noted above, it is the only feasible and realistic way that people have to make meaningful progress towards creating a sustainable and desirable society within their borders. At the same time, this can involve cooperation with other countries that have chosen to adopt such an approach. To go one step further, it can be argued that, ultimately, this bottom-up approach can only be successful if it is combined with a cosmopolitan orientation and ethic. This does not imply advocating world government, but a recognition of a shared humanity as well as a common interest in protecting the planet as humanity's shared home. While countries that put themselves on a transformative path may do so because this is, for now, their only realistic choice, from the beginning, they will have to do so based on a cosmopolitan perspective if they are genuinely concerned about long-term sustainability.

What this means, in practical terms, is open to debate. But there are at least three interrelated areas in which humanity shares a common interest that must be incorporated into a cosmopolitan ethic and values system. These are the recognition of global environmental limits, the need for equitably sharing the world's resources (and environmental space) within those limits, and the building of a global comprehensive security system.

There is no need to elaborate on the first area of common interest, respecting the existence of global environmental (ecological, resource, and human) limits, as this imperative has already been discussed in Chapter 1 and is widely recognised, at least in principle. In practice, it means that countries that put themselves on a transformative path cannot only look at what is truly sustainable within their borders, but need to respect, for instance, global ecological limits such as those linked to greenhouse gas emissions and many forms of pollution that cross borders. Any activity in a country that has adverse environmental effects (on the biophysical and the human-made environment) beyond its borders must be addressed as being equally unacceptable as those within its borders. The same standards must apply. This also means not harming another country's biophysical environment and people for the benefit of a country's citizens even if such practices are condoned by the governments of these countries. This has nothing to do with paternalism or not recognising another country's sovereignty. Rather, it is making clear that the citizens of one country do not want to be complicit in practices that are damaging to humans (wherever they live) and the environment.

The second, closely related, area in which countries pursuing sustainability should adopt a cosmopolitan perspective is that of equitably sharing the world's resources and the benefits that are derived from these. Recognising the need for this can be based on ethical principles (respecting the basic human needs, potential, and equal rights of all humans) and on realist political grounds. A world that does not respect these social imperatives and accepts the continuation (or even worsening) of the enormous inequalities that exist within countries and at the global level does not only trample on the principle of a common humanity but will never be sustainable and at peace. Humans will always resent and fight inequality that they see as unjustifiable and resulting from exploitation (based on power differentials).

While addressing inequality at the global level, in the world as it is, can be considered a pipe dream, countries that put themselves on a transformative path should not simply ignore this imperative. Again, they can respect and implement it, within the scope of their capacities, through their choices and actions. Even if there is no global agreement on this front, this does not imply that they cannot and should not adopt a cosmopolitan orientation. One way they could do this is by bringing their consumption of resources to within what can be regarded as globally sustainable levels calculated on a per capita basis. Given the strong link between the level of income and resource use (as reflected in research on material flows and consumption, environmental space, and ecological footprints), and the extent to which existing levels of resource use are deemed unsustainable, it is possible to determine what can be considered a globally sustainable average level of income. This level of income could function as a basis for the adoption of national-level (and global, if or when possible) income policies. Countries committed to the transformation towards sustainability could use this as a yardstick for calculating their degree of over (or under-) consumption and for transferring a fair amount of finance into a global fund from which equitable allocations (rather than aid) would be made to under-consuming countries. Again, at least initially, this does not have to be a global fund, and it can be gradually built up by countries that sign up to such an international arrangement. But it would be logical to expect such transfers to occur only between countries that have adopted and are implementing fundamental transformation policies and institutions. Although societies may decide to allow a degree of inequality in income and wealth within their borders, all countries committed to transformation should adopt the globally sustainable average level of income and wealth as their yardstick. Although this idea will need much work and deliberation before it can be implemented, the willingness to globally share income and wealth derived from the Earth's resources is, in my view, a more genuine measure of cosmopolitan thinking than advocacy for world government or for disempowering or even eliminating states.⁴⁷

A third area in which global thinking and collective action are imperative is that of security. As discussed in Chapters 5 and 11, security can be interpreted narrowly (in the sense of military or national security) and/or comprehensively (including human and environmental security). While these different forms are interrelated, and

⁴⁷ For an exploration of this idea, see Bührs, Ton (2011), "Global Environmental Justice and Global Income Policy", Paper presented at the *10th Global Conference: Environmental Justice and Global Citizenship*, Mansfield College, Oxford, 8-10 July.

ultimately security can only be achieved if they are all realised, the narrow interpretation (still) tends to dominate in definitions of the security function of states, as reflected in government discourse on security and the importance or priority assigned to government expenditure on the military (including research) and police. Although the protection of a country's economic interests is also commonly included in this interpretation (for instance, secure access to vital resources, protection against attacks on critical infrastructure), these are also foremost defined from a national rather than global perspective. Yet, as noted before, even in the narrow sense, efforts aimed at achieving security at the (nation-) state level increasingly make no sense given the vulnerability of all states to the direct and indirect effects of large-scale military conflict. They are also objectionable because of the enormous human suffering caused by such conflicts, and the wastefulness and environmental damage associated with military expenditure and action. If there is one area in which the erosion of state sovereignty and the establishment of a strong global agency (perhaps under the control of a Global Citizens' Authority) is warranted, it is that of the control of physical (military) force. If all states (including all the major powers) were to accept the creation of such an authority, responsible for preventing military conflict between states, this state function would be fulfilled much more effectively, and at far lower costs.

There is no need to point out that, in the present geopolitical and political-economic reality, this is a utopian idea. Nonetheless, or perhaps for this very reason, countries that are seriously committed to advancing sustainability, have no choice but to try to advance security from the bottom up. Specifically, this may involve advocating for global agreements on military expenditure (gradually reducing military spending), strengthening the role of the United Nations (among other, by creating a more inclusive Security Council), and shifting military expenditure towards the protection of human and environmental security globally. Also, when and where the countries that have put themselves on the transformation path feel or are threatened by other countries, they could form alliances to pool their military resources and adopt collective strategies to (try to) deter such threats. It speaks for itself that the effectiveness of the latter would depend in large measure on the collective power of such alliances. But, again, this capacity can be built and expanded from the bottom up and become increasingly significant and effective.

Yet, there should be no illusions about the reactions of capitalist interests and elites to the perceived or real threats of the transformation initiatives of countries. Any country that breaks with capitalism can expect to encounter a hostile reaction from the centres of capitalism. At the very least, these will depict such initiatives as foolish and disastrous to deter other people and countries from following in their footsteps. There are likely to be economic retaliation measures, sanctions, and boycotts (as illustrated by the way Cuba has been treated by the United States). In this context, handling the reactions of the capital markets will be crucial. As discussed above, countries that issue their own currency, and that have minimised international debt, are in a stronger position in this respect, as they can rely on that currency to meet

many of a society's needs.⁴⁸ The greater the number of countries that adopt a transformation pathway, the more problems this will pose to capital accumulation and profit maximisation by transnational businesses (TNCs, banks and other financial institutions). Closing off these opportunities in a growing number of countries may instigate the dominant political-economic classes or elites in these countries to (threaten with or) use force to bring about regime change. At worst, reactions may involve foreign intervention and the use of military force to bring the deserters back into the capitalist camp or even to destroy them if they resist this more or less effectively—wars and manufactured disasters can open up major new opportunities for capital accumulation.⁴⁹

One hardly wants to contemplate this scenario, but history has shown that this possibility cannot be ruled out. This emphasises the importance for countries that have chosen the transformation pathway to be very active in international diplomacy to forge strong alliances, rather than withdraw in isolationism. Such efforts should be aimed at containing any inclinations by military powerful countries to use force against those that are engaged in fundamental transformation.

But, realistically, the chances of global transformation hinge upon what happens in the major powers, notably the United States, China, and the EU. If one of those polities were to put itself on the path of fundamental transformation, this would significantly enhance the chances, especially if much of the rest of the world would be aligned with that power in a progressive bloc. If two of those global powers were to join such a coalition of forces, that might be sufficient to practically force the remaining power into a more self-sufficient path. Thus, ultimately, the success of a bottom-up approach to global sustainability rests on the ability of a coalition of smaller countries to gradually expand their global influence and to persuade (one or more of) the major powers to accept that fundamental transformation is the only pathway towards retaining a planet suitable for the survival of the human species. At some stage, this might imply maintaining global (military) security through a global agency under the control of a global citizens' authority. But this seems a long way off, even though this is one area in which globalisation is a real imperative and priority.

In brief, the chances of fundamental global political-institutional and/or political-economic transformation being initiated and effectively implemented from the top, for environmental and/or social reasons, are very slim. Realistically, global transformation driven by social and environmental concerns and priorities only can be pursued with some chance of success from the bottom – through and by transformed states and their cooperative networks. This does not mean that all efforts aimed at international and global environmental protection on all kinds of issues should be abandoned. These sometimes do lead to agreements and actions that are better than

⁴⁸ For further discussion on how a country can regain control over its own economy see Mitchell, William (2016), "Eurozone Groupthink and Denial on a Grand Scale", *World Economic Review*, 43-55; Mitchell, William and Thomas Fazi, *Reclaiming the State: A Progressive Vision of Sovereignty for a Post-Neoliberal World*. The authors argue that most EU members would actually be better off abandoning the euro given its stifling effects on their economies.

⁴⁹ As Naomi Klein has documented in her book on "disaster capitalism". Klein, Naomi, *The Shock Doctrine: The Rise of Disaster Capitalism*.

nothing. But they do not address or tackle the sources or causes of the problems. If fundamental transformation occurs successfully in a large number of countries, especially the more powerful ones, this increases the chances of real global transformation, although this will still be a big challenge.

Conclusion

This chapter has explored the kind of transformative changes that will be needed to move towards less unsustainable societies. As discussed in earlier chapters, many of the obstacles to creating sustainable societies and a sustainable world lie in the political-economic, political-institutional, and socio-cultural systems that presently prevail around the world. This chapter has identified and discussed what may be considered essential changes in the political-institutional, economic, and socio-cultural spheres if the fundamental obstacles to effective environmental integration are to be overcome or eliminated.

In the political-institutional sphere, a major overhaul of state apparatuses will be required to put the environmental integration imperative at the core and apex of the state's functions. This requirement, often referred to as the need to green the state, involves much more than simply adding an environmental function to the traditional core functions (security; economic; demand and conflict management; social integration) of the state. It will require the creation of a core state agency (such as a Ministry of Sustainability) that has the power to guide and enforce the environmental integration efforts needed to implement an overarching vision and policy framework developed and adopted at the national level, based on local and regional assessments. Moreover, an independent monitoring and reporting agency is needed to assess the performance of the state's machinery and to be able to hold governments and state officials to account for the rate of progress made.

In the economic realm, three main principles for transformation were identified: the restoration of the state's economic sovereignty; economic democracy; and sustainable production and consumption. The restoration of economic sovereignty must have the highest priority as the power and ability of (most) states to effectively address the social and environmental pressures and problems that have made their societies increasingly unsustainable have been eroded. Continuing on the economic globalisation treadmill will simply speed up the process of social and environmental (and ultimately political) disintegration. Rather, countries need to reassert control over all economic decisions that significantly impact their environment. While this does not exclude the possibility of cooperation and (sustainable) trade with other countries, the key issue is that it is up to a society to decide what foreign trade and investment are sustainable and desirable, not to the free market (*de facto*, big businesses).

This ties in with a second principle that should underlie economic transformation, economic democracy. Economic democracy holds the key to how economics and economic imperatives are interpreted and must apply to all economic decision-making that has a (potentially) significant impact on citizens and societies. This includes decisions on the production of public and private goods and services that are considered to be essential to the well-being of all citizens (individually and collectively). Inevitably, this will require a form of democratic planning, something which could make use of deliberative processes as well as modern electronic media.

Economic democracy also extends to decision-making on what is considered to be a fair distribution of income and wealth in society. Inevitably, this implies revisiting issues of ownership and control of (especially bigger) businesses, as these economic institutions harbour and control the sources of (unequal) economic power. Greater economic equality (in economic-institutional power, wealth, and income) will also become a more important issue with the likelihood that economic growth will come to an end, scarcity returns, and many (especially high-income countries) countries will need to degrow their economies and reduce their consumption and production to levels that are considered to be environmentally sustainable.

This links to the third principle that has been identified as a basis for economic transformation, sustainable production and consumption. This will require a fundamental overhaul of production methods and technologies to align these with environmental processes and limits. This challenge (which might involve giving real substance to the notion of circular economies) will require national-level guidance, coordination, and support. In general terms, the economic function of the state will become much more significant and largely displace that of the market, a process that will be underlined by the need to strengthen the socio-economic resilience of countries in the face of the aggravating effects of climate change, including more frequent disasters and growing resource pressures.

Fundamental change will also need to occur in the socio-cultural sphere as the existing distribution of cognitive power is heavily tilted in favour of dominant (especially capitalist) economic interests that will do everything to undermine or sabotage efforts aimed at economic transformation. In positive terms, ownership of and control over the most important institutions that influence and shape societies' values and views (including on the environment) need to be brought under democratic (societal) control to enable a more level and deeper public debate over all issues that are essential to the well-being of individuals and societies, and to break the hold of forces that have every interest in distracting people's attention from what affects them crucially, towards entertainment, trivial, and socially divisive matters. Similarly, (reformed) environmental education has a role to play in making people aware of the systemic political, economic, and socio-cultural causes and sources of environmental pressures and problems and the need for democratic collective action to overcome these obstacles. Last but not least, societies will need to gain democratic control over the development of science of technology. These have an enormous impact on how people work and live their lives. Far from being out of control, science and technology are largely in the hands of governments and major corporations that set the priorities and provide the funding for, security (military-industrial) and economic (capital accumulation) purposes. The institutions guiding the development of science and technology should be democratised and guided (much more) towards social and environmental goals that have been specified as being in the collective interests of society and subjected to defined ethical, socio-political, and environmental standards.

Finally, the chapter considered the need for global transformation and how a bottom-up (national) approach to pursuing sustainability may contribute to this. Although, ultimately, transformation at the global level is a necessity if the world is to bring a halt to the planetary tragedy that is unfolding, the chances of achieving

systemic changes at that level are presently very slim. In reality, people and countries that aspire to a fundamental transformation aimed at moving towards sustainable societies and a sustainable world have no alternative but to take a bottom-up approach. However, this does not imply adopting an isolationist policy aimed at full autarky. Rather, the chances of success will be much higher if countries engage in this challenge cooperatively, notably in the economic sphere. However, from the very beginning, they should approach this undertaking not just to advance their own interests, but in the spirit of a cosmopolitan ethic. Ultimately, advancing sustainability requires global cooperation based on recognising our shared humanity, basic human needs and potential, and common interests linked to the fact that all humans depend on planet Earth for their survival. Therefore, countries that follow a bottom-up approach to transformation must do so by recognising global environmental limits (in all three domains), the need to equitably share the world's resources, and that security can only be achieved if interpreted comprehensively and by advancing the need for global collective control over military matters. Therefore, much will depend on the ability of transformed countries to forge strong international coalitions, as well as on whether the citizens of the major powers will be successful in exercising their sovereign right to govern themselves.

However, given the radical nature of the proposed changes in this chapter, it seems highly unlikely that such ideas stand much of a chance of being adopted. Being aimed at eliminating or overcoming the fundamental obstacles to change that are inherent in existing political-institutional, political-economic, and sociocultural systems, it is only natural that such ideas provoke strong critique, dismissal, ridicule, or worse, are simply ignored. Many similar ideas have been suggested before, to little or no effect. At best, they keep circulating in (mainly) academic circles, but thus far they have failed to make as much as a dent in the established systems and institutional frameworks. The most successful ideas for allegedly transformative change have been foremost of a technological and managerial nature (notably linked to energy and transport) that leave intact and even support the prevailing systems.

Whether the kind of fundamental changes and/or approaches towards advancing transformational change that have been sketched in this chapter stand a chance of being introduced or adopted depends foremost on the issues of power and agency. Although systemic change may seem beyond the control of societies, it is important to recognise that political and economic systems have been created and changed by people. As suggested in Chapter 3 and discussed in other parts of the book, the role of power and agency is crucial to steering societies ("us") in a particular direction. Whether societies can collectively steer themselves, more or less democratically, into a direction of their choice depends foremost on whether they can wrest power from the dominant political-economic elites. This will be the topic of the final two chapters.

Chapter 13 – Can “We” Stop the Tragedy?

Introduction

The purpose of this chapter is to discuss whether, and if so how, societies and humanity could (try to) address the collective environmental challenge more effectively. As discussed in Chapters 2 and 10, countries and governments, and the world as a whole, have failed to rise to the environmental challenge. Chapters 3 to 9, and 11 discussed a range of systemic factors that have contributed to this situation and that pose major obstacles to environmental integration. Humanity has always struggled with the environmental challenge, even in pre-modern times, as reflected in environmental-historical analyses and accounts of the collapse of societies in the past. But it has also become apparent that environmental pressures and degradation have significantly increased with the emergence of modernity from the Middle Ages and especially after WWII. Although, at different points in time, some countries and governments are said to have performed better, or at least seemed to have taken the environmental challenge more seriously than others, none has been willing and/or able to overcome, or even address, the systemic obstacles to environmental integration, with the result that humanity is now facing a planetary tragedy of its own making.

This raises the question: Is there (still) a way to stop this tragedy from unfolding any further? Recognising the key roles of power and agency, the chapter reflects on the idea that humans can collectively change the course of their actions and thereby influence or shape the future of their societies. All too often, analyses and discussions of the environmental challenge end with the presentation of solutions that “we” or governments should adopt and/or by calls for mass mobilisation in the expectation that this will result in more or less radical changes that will bring about more effective environmental protection and/or sustainable societies. While I do not wish to dismiss the value of such ideas and suggestions, I think that deeper questions need to be asked about whether or to what extent societal change has been (or can be) the result of purposeful collective action, and if so, about *who* changes the course of history and *how*? Looking back at history, one might argue that there is little evidence that human societies have developed in a direction that has been deliberately, collectively, and let alone democratically, chosen, or even that they have had a collective will to do so. Nevertheless, I will argue that deliberate and purposeful collective action *does* affect the development of societies, but that, thus far, such action has been the prerogative of small groups, the most powerful in societies. The steering that has taken place has not been done democratically (by “us”) or based on the collective will or choice of societies. To democratically steer societies into a collectively chosen direction (of “our” choosing) requires changing the distribution of power and the mechanisms by which it is, or can be, accumulated and concentrated.

Thus, agency and power lie at the heart of the question of whether societies, and the world as a whole, will be able to slow down, halt, or reverse environmental destruction and prevent the demise of humanity. This does not imply that societies can control developments and determine their future, as some people would like to think. Nonetheless, this does not diminish the importance of whatever steering is

possible, given the ever-growing impacts that humans have on the environment and their societies, many of which are widely deemed to be undesirable and destructive. However, whether societies will be able to democratically gain and exercise the power and agency that is needed to fundamentally change the systems that lead and keep the world on this destructive path remains an open question.¹

First, I further discuss the question of whether societies can collectively steer developments into a direction of their own choosing, drawing on a variety of views and theories about societal change. Second, I present my views on this front, based on the role and importance of systems (which contain most of the fundamental obstacles to meaningful environmental integration), and of power and agency, which were touched upon in Chapter 3. Third, I revisit and elaborate on the crucial role of the state, not just in meeting the needs of individuals and societies, but also as a strategic battleground for altering the imbalance of power that prevents fundamental change. The fourth section will make a case for strategic collective action aimed at achieving a major shift in political-institutional power that has the potential to lead to a cascade of other fundamental changes.

Reflections on societal change and collective action

For much of human history, humans accepted the world, including their own societies, as givens that were beyond their power to control. At most, they might have tried to find favour with the Gods by sacrificial offerings and rituals, for instance, in the hope of being granted a bountiful harvest. With the rise of the ancient civilisations, philosophers and historians began to raise questions and develop ideas about the course of history and societies, sowing the seeds of the view that more, or something else than, divine providence was involved. Ideas about the cyclical course of history, similar to that in nature, tended to prevail, although teleological and eschatological views (that read a purpose in the development of the world, and/or that expected it to end) became more common with the rise of the major world religions. However, common to all these belief systems was the assumption that humans cannot influence, let alone control, the course of history and their destiny.

With the rise of the Enlightenment and modernity, the belief that people and societies do not have to accept the existing situation and social order and could improve their lot and change societies for the better became a fundamental tenet that

¹ In this respect, although reluctantly, I am inclined to agree with the assessment by Robert Heilbroner, made in 1973: "If then, by the question 'Is there hope for man?' we ask whether it is possible to meet the challenges of the future without the payment of a fearful price, the answer must be: No, there is no such hope." But it must be noted that this answer does not necessarily imply "Near Human Extinction" (NHE), a view which, more recently, has been gaining ground, also in academic circles. Heilbroner, Robert L., *An Inquiry into the Human Prospect. Looked at Again for the 1990s*, Loc 1782-1783; Tonn, Bruce and Dorian Stiefel (2014), "Human Extinction Risk and Uncertainty: Assessing Conditions for Action", *Futures*, Vol.63, 134-144; Rees, Martin J., *Our Final Hour: A Scientist's Warning: How Terror, Error, and Environmental Disaster Threaten Humankind's Future in This Century- on Earth and Beyond*; Wright, Andrew (2019), "The End? Science, Conservation, and Social Justice as Necessary Tools for Preventing the Otherwise Inevitable Human Extinction?", *Journal of Environmental Studies and Sciences*, Vol.9, No.3, 281-285.

inspired inventors, scientists, philosophers, political and social movements. The idea is captured in the notion of progress which, according to Nisbet, "holds that mankind has advanced in the past—from some aboriginal condition of primitiveness, barbarism, or even nullity—is now advancing, and will continue to advance through the foreseeable future."² Bury argues simply that the idea means "that civilisation has moved, and will move in a desirable direction."³ Although these authors disagree on whether the idea has been around since the ancient Greeks or emerged in more recent times (around the mid-18th century), they agree that the notion of human progress combines two elements: a belief in the inexorable advance of knowledge, and the belief in the perfectibility of humans and societies. The accumulation of knowledge of the biophysical world in and of itself (as could be demonstrated in astronomy, physics, and biology) was not seen as sufficient to guarantee human progress. It needed to be complemented by an understanding of human societies— including politics, economics, and social patterns and developments—which were believed to be subject to general laws like the biophysical world. An understanding of these social laws would allow the perfection of societies.

This idea of progress dominated much philosophical and political thinking from the mid-18th century until the late 19th century. Although thinkers had widely different ideas about what these laws were, from economic laws governing the liberal free market advanced by Adam Smith and other classical economists, those linked to historical-materialism developed by Marx, to those put forward by the early practitioners of the new science of society, including Condorcet, de Saint Simon, and Comte (who was the first to coin the term sociology) and many others, they shared a belief in human and societal progress based on the advancement of science. Even if, during this time, there were also sceptics of the idea of progress,⁴ they were in a minority. But from the early 20th century, the number of sceptics in philosophical and intellectual circles increased sharply, and by the end of the century, arguably the belief that societies were on an inexorable path of progress started to lose its grip on the general public, at least in Western countries. Future historians may well refer to the 20th century as the Age of Disillusion, well and truly supplanting the Age of Enlightenment.

A variety of reasons can be identified for the erosion if not complete disappearance of the belief in human and societal progress and perfectibility. Probably the most commonly provided explanation is that, despite the developments in science, humans do not seem to have made any progress in tackling their ability or tendency to inflict harm on each other, as reflected in two world wars, the holocaust, and many other atrocities that were committed throughout the century. Science and technology may have progressed to unprecedented levels, but this has also enabled violence to be applied on a larger scale, and/or with greater effectiveness and precision. Second, although economic development may have led to an increase in living standards (or

² Nisbet, Robert A. (1980), *History of the Idea of Progress*. New York: Basic Books, 4-5.

³ Bury, John Bagnell (1921, 2010 ed.), *The Idea of Progress. An Inquiry into Its Origins and Growth*. The Project Gutenberg Ebook, 12.

⁴ Nisbett mentions Tocqueville, Burckhardt, Schopenhauer and Nietzsche. Nisbet, Robert A., *History of the Idea of Progress*, 318-319.

consumption), more people started to question its psychological and social effects, raising concerns about a raft of interconnected phenomena including individualisation and the breaking up of communities and families, alienation and anomie, the erosion of core social values and social capital, materialism and the decline or loss of culture, phenomena often referred to collectively as cultural pessimism or the decline of (Western) civilisation. Such themes had already been raised in the 19th century by critics of the idea of progress, but they became more common in the early 20th century. Interestingly, pessimistic views were shared by the political right as well as the left.⁵ More recently, the trend towards what Nisbet refers to as “disowning the past”⁶ seems to have become more intense with anti-colonialist and anti-racist movements tearing down statues of colonial figureheads and demanding the dismantling of cultural colonialism that is still perceived to be prevalent in Western societies.⁷ Third, growing concerns about environmental degradation have added further to this pessimism and have led to what seems like a rising tide of apocalyptic publications in environmental circles.⁸ Fourth, the persistence, and even worsening, of inequality and poverty even in high-income countries (as in most other countries around the world), the re-emergence of homelessness, food poverty and dependence on charity, and the continuing discrimination and inequality of life chances and social justice in general, can all be used as evidence of the failure of the Enlightenment project to perfect societies.

Yet, it should be noted that not everyone agrees with such an assessment. Those who take a more positive view note a range of improvements and achievements, such as increased human life expectancy, higher material living standards for most if not all households, as reflected in the near-universal (at least in high-income countries) ownership of durable consumer goods, advances in health care, higher access levels to education, and the widespread availability of sophisticated technologies (like computers, mobile phones, the internet), and other indicators. Even concerning environmental matters, the situation is sometimes portrayed as much less gloomy than depicted by “doomsayers”.⁹ Based on such indicators, it can be demonstrated

⁵ Some of the influential 20th century authors on this theme are Spengler, Oswald (1926; 1928), *Decline of the West*. New York: Alfred A. Knopf; Marcuse, Herbert, *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society*; Mishan, E. J., *The Costs of Economic Growth*; Hirsch, Fred, *Social Limits to Growth*; Bloom, Allan (1987), *The Closing of the American Mind*. New York: Simon and Schuster; Toynbee, Arnold (1972), *A Study of History*. London: Oxford University Press. For a discussion of the left and right strands in cultural pessimism, see Herman, Arthur (1997), *The Idea of Decline in Western History*. New York: The Free Press.

⁶ Nisbet, Robert A., *History of the Idea of Progress*, 323-329.

⁷ Mohdin, Aamna and Rhi Storer (2021), “Tributes to Slave Traders and Colonialists Removed across UK”, *The Guardian*, 29 January; Siddique, Haroon and Clea Skopeliti (2020), “BLM Protesters Topple Statue of Bristol Slave Trader Edward Colston”, *The Guardian*, 7 June; Steim, Tyler (2018), “Statue Wars: What Should We Do with Troublesome Monuments?”, *The Guardian*, 26 September.

⁸ McNeish, Wallace (2017), “From Revelation to Revolution: Apocalypticism in Green Politics”, *Environmental Politics*, Vol.26, No.6, 1035-1054.

⁹ Prominent examples are Simon, Julian Lincoln and Herman Kahn, *The Resourceful Earth: A Response to Global 2000*; Lomborg, Bjørn, *The Skeptical Environmentalist: Measuring the Real*

that in many countries progress has indeed occurred on a range of fronts, albeit at variable rates. Some argue that it is largely because of a lack of knowledge that many people express pessimistic views about the situation in their country and/or the future.¹⁰ As noted in Chapter 7, overwhelmingly, governments and businesses remain committed to the pursuit of economic growth, holding it up as the way to make everything better for everyone. And, as discussed in Chapters 4 and 6, arguably many if not all people in industrialised societies around the world continue to literally buy into a modern lifestyle dominated by materialism and a belief in infinite technological progress. This faith also extends to environmental problems and includes the belief that science and technology can and will offer solutions to the environmental challenge.

Here, I will not revisit this debate as I think that the environmental trend, backed up by many scientific assessments, is sufficiently clear to warrant the conclusion that, thus far, societies and the world as a whole have been unable, or/and perhaps unwilling, to prevent and stop this environmental decline, and that this poses a severe risk to the foundations on which human well-being and possibly life are based. Rather, the question I want to address here is whether the socio-cultural, political-institutional, and political-economic factors that have been identified in earlier chapters as being responsible for this trend, can somehow be controlled by, or whether they are beyond the control of, people and societies.

In the social sciences, one can find little in the way of agreement on whether societies can be guided or steered, and if so, how and in what direction. Rather, there is a large diversity of views and interpretations, linked to different sub-branches, ideological dispositions, theoretical perspectives and methodologies.¹¹ Some of these views (notably pluralist theory) question the ability of societies to steer towards a collectively agreed desirable future, while others allow for the possibility of individuals and groups (notably elites) to exercise agency and power in the pursuit of what *they* consider desirable or needed. Indeed, one of the key issues standing in the way of the development of a theory of societal guidance is the diversity and plurality in modern societies, linked to differences in socio-economic positions, social class, interests, ideologies, values and norms, and many other respects, which makes it highly unlikely if not impossible to reach societal agreement on what constitutes a desirable society.

In the wake of the collapse of the Soviet Union, many social theorists even seem to have given up on the idea that it is desirable to think about how a collective vision of a future society could be developed, let alone that governments should play a role in steering societies, thereby de facto accepting the prevailing capitalist liberal-

State of the World. And Ridley, Matt (2020), *Against Environmental Pessimism*, Property and Environment Research Centre (PERC), <https://www.perc.org/2020/07/06/against-environmental-pessimism/> (Accessed: 30 July 2021).

¹⁰ Roser, Max and Mohamed Nagdy (2014), *Optimism and Pessimism*. Published Online at Ourworlddata.Org, <https://ourworldindata.org/optimism-pessimism#citation> (Accessed: 30 July 2021).

¹¹ Ritzer's *Encyclopedia of Social Theory* discusses more than sixty "Schools and Theoretical Approaches" Ritzer, George (ed.) (2005), *Encyclopedia of Social Theory (2 Volumes)*. Thousand Oaks: Sage Publications, xiv.

democratic order. One analyst of the ideas of four prominent social theorists of the 1990s (Anthony Giddens, Ulrich Beck, Jürgen Habermas, and André Gorz),¹² argues that all four appear to accept that capitalism has become the only game in town. Of these, only Gorz hangs on to some socialist principles, but he also gives up on the idea of abolishing capitalism as “there is no alternative”. When it comes to the protection of the environment as well as social welfare, these social theorists seem to believe that there is no other option but to take a defensive approach and/or to push for more public participation and/or stronger government regulation to mitigate the adverse effects of development. Accepting the prevailing order, Goldblatt concludes, these theorists do not provide “sufficient intellectual or moral resources” on how to steer societies into a different and more desirable direction.¹³

Following the lead of the non- or anti-ideological pragmatists, other social scientists take a technocentric and technocratic approach to systems change, for instance, many of those who contribute ideas under the theme of transition management (TM).¹⁴ To its credit, this stream commonly identifies sustainability as a main, long-term, goal, and often takes a fairly upbeat view of the feasibility of achieving that goal, largely because of a belief in science and technology, and in the steering capability of governments and societies. Similarly, the school of ecological modernisation (EM), arguably one of the most well-known and popular among social scientists, is relatively optimistic about the possibility to move societies towards a (more) sustainable future, again largely based on a belief in science and technology. However, although there is a diversity of sub-streams within both schools (TM and EM), with some emphasising also the need for major political and economic changes, it would be fair to say that their adherents generally advocate gradual and reformist change in social, economic and political systems, alongside exploiting the scope for “radical” technological transformation in the energy, transport, agriculture, industrial and other systems.¹⁵ The main challenge, as they see it, is to bring all the stakeholders together in cooperative governance structures that advance common goals.

However, this approach can be criticised for an overly optimistic view of the feasibility of fundamental change within the context of liberal-democratic capitalist political-economic systems. Moreover, as argued before, such a depoliticised approach raises serious questions about the lack of democratic control over the development of science and technology, and the likelihood that this will have unforeseeable, undesirable, and potentially highly damaging or disastrous social and environmental effects. Its adoption sets societies on the path towards creating

¹² Goldblatt, David (1996), *Social Theory and the Environment*. Cambridge: Polity Press.

¹³ *Ibid.*, 203.

¹⁴ European Environment Agency (2017), *Perspectives on Transitions to Sustainability* Luxembourg: European Environment Agency; Kemp, René and Jan Rotmans (2009), “Transitioning Policy: Co-Production of a New Strategic Framework for Energy Innovation Policy in the Netherlands”.

¹⁵ Smith, Adrian, *et al.* (2005), “The Governance of Sustainable Socio-Technical Transitions”, *Research Policy*, Vol.34, No.10, 1491-1510; Szarka, Joseph (2016), “Towards an Evolutionary or a Transformational Energy Transition? Transition Concepts and Roadmaps in European Union Policy Discourse”, *Innovation: The European Journal of Social Science Research*, 1-21; Murphy, Joseph (2007), *Governing Technology for Sustainability*. London: Earthscan.

(totalitarian) technocracies, a concern that has a considerable pedigree in social, political, and philosophical thought.¹⁶

While Marxist ideas about societal change, based on the assumption of the intensification of class conflict and the likelihood that this will lead to revolutionary political change and the abolition of capitalism, offers the prospect of fundamental change, it is doubtful that this can still be expected. As discussed in Chapter 9, in many countries where social democracy had been a considerable political force, it has lost much of its support basis in part because social-democratic parties actively participated in the neoliberal turn. But this betrayal did not lead to a significant strengthening of other (more) left-wing parties; rather, it is the far-right that has benefitted most from the disillusion with the left, largely by scapegoating immigrants. As noted in Chapter 8, socialism is far from dead as an ideology that holds the promise of a more equitable society, that has recognised the importance of democracy, and taken on board the environmental cause (eco-socialism). In recent years, in some countries (notably the United States, where Bernie Sanders, a self-proclaimed socialist candidate for the 2020 Presidential elections, mobilised massive support, especially among young people), socialism appears to enjoy something of a come-back. But it seems unlikely that, in any liberal-democratic capitalist country, radical socialism (openly advocating the abolition of capitalism and the establishment of a planned economy) will be able to win the seats of government. Also working against this is the anti-socialist bias in the media which keep on depicting socialism as a bad and failed experiment.

Thus, the idea that societies can collectively and democratically steer themselves into a self-chosen direction seems to be trapped between elitism and pluralism, or voluntarism and uncontrollable autonomous development (determinism). On the one hand, there is much evidence to support the view that, in most societies, elites and/or a powerful and dominant social class can (and does) steer societies into a particular direction of *their* choosing (based on their interests or the perception thereof). On the other, the plurality, diversity, fragmentation, and even atomisation that are characteristic of modern societies make it difficult to believe that a society as a whole can steer itself into a collectively and democratically chosen direction. While, from the first point of view, societies are steered in a direction that serves foremost the interests of the elite(s), which are bound up with the prevailing political-economic system, from the second point of view it seems highly unlikely if not impossible that society as a whole can or will be able to agree on what the collective interests of society are that can and should guide collective policies and decisions. As much evidence can be gathered to support both views, there appears to be little scope and hope for the idea that societies can steer developments democratically into a direction that is deemed to be collectively desirable.

¹⁶ Hendriks, Carolyn (2009), "Policy Design without Democracy? Making Democratic Sense of Transition Management"; Scrase, Ivan and Adrian Smith (2009), "The (Non-) Politics of Managing Low Carbon Socio-Technical Transitions", *Environmental Politics*, Vol.18, No.5, 707-726; Ellul, Jacques, *The Technological Society*; Postman, Neil, *Technopoly. The Surrender of Culture to Technopoly*.

One of the social theorists who has tried to find a way out of this trap is Amitai Etzioni, who developed a theory of “societal guidance” based on what he considers the essential conditions for societies to collectively gain control over their future. He identifies “a self-conscious and knowing actor, one or more goals he is committed to realize, and access to levers (or power) that allow the resetting of the social code” as the three main components of an “active orientation” and projects these at the macro-level of society.¹⁷ While recognising the existence of elites and plurality, he puts forward the idea that societies can develop “societal consciousness” by facilitating the development of knowledge by different actors and allowing for the expression of fundamental critique, the reduction of inequalities of power (of different kinds), which involves a redistribution of what he refers to as assets (the sources of power), the promotion of social mobilisation (in which organisations play a significant role, overcoming atomisation), a process of consensus formation undertaken by societal groups and organisations, but in which the state plays an important role as a relatively autonomous actor and power, and the introduction of fundamental changes based on these efforts and processes, and which are likely to further strengthen the conditions for societal guidance. An important element underlying this theory is the recognition of the existence of basic human needs, the meeting of which is crucial to the minimisation of alienation and “inauthenticity” in society, phenomena that erode the conditions for an active (participatory; responsive) orientation of citizens. It is worth noting that, although Etzioni’s ideas were directed in the first instance at (nation-) states, he also speculated about their applicability at the international level, noting the possibility of the emergence of a global political community, growing consciousness and support for universal values and norms, and expanding international law.¹⁸

Although it is easy to dismiss Etzioni’s theory as unscientific and idealistic, given its largely abstract (not empirically based) and normative nature, it offers inspiration for thinking about how to escape the trap between elitist and pluralist theories referred to above. First, it points to the need to address the inequalities of power, linked to the unequal distribution of resources, as a key condition. This concurs well with my views on the importance of the resource-based theory of power and the tendency of power to accumulate across different sources, as discussed in Chapter 3. Second, it recognises the importance of the role of the state in improving the conditions for social mobilisation, among other by the creation of a more egalitarian society and ensuring that the basic human needs of all citizens are met. Third, it does not exclude the possibility that societies can develop a common view of their collective interests that provides a basis for steering themselves into what is deemed to be a desirable (or necessary) direction.

Arguably, the greatest weakness in Etzioni’s theory is the lack of more specific ideas on how an “active society” can be advanced *strategically* and *by whom*. He seems to assume that there already *is* a major actor who is capable of advancing or creating the conditions for such a society, either in society and/or embodied in the state. This may have been a reasonable assumption in the 1960s when the “baby boomers” in

¹⁷ Etzioni, Amitai (1968), *The Active Society. A Theory of Societal and Political Processes*. New York: The Free Press, 4.

¹⁸ *Ibid.*, Chapters 19 and 20.

many countries were full of enthusiasm and energy aimed at creating more democratic and better societies. But much of that idealism has faded or even disappeared, not in the least because of the shift towards an individualistic and selfish culture spread by some 40 years of neoliberal propaganda. Although there are indications that younger generations are again adopting an "active orientation" based on a perception of collective interests (not in the least related to environmental issues, notably global heating), they seem to lack a clear strategy about *how* to address these issues *strategically* in the context of the need for the fundamental systemic changes that are required, linked also to a collective vision on the direction into which policies and decisions should be steered to create what are deemed to be more desirable societies and a better world.

In the following three sections, I further discuss these gaps. First, I revisit the idea that the distribution of power lies at the heart of the problem. Second, I will come back to the crucial importance of states and their functions in meeting the basic needs of people and societies. Third, the need for adopting a strategic approach to collective action will be elaborated upon.

Power is the key

Fundamentally, the extent to which individuals or societies can give direction to their future is a matter of power. As discussed in Chapter 3, all people, unless they are in a vegetative state, have agency – the ability to make choices – but the extent to which they can give consequence to these choices depends on the power resources that are available to them as well as their ability to use those resources (more or less effectively). The more resources available to a person, and the greater his/her personal ability to use them effectively, the more that person has a chance to give direction to their life, even if this does not mean being able to control their future. By contrast, people with very little power have far fewer chances in life. Similarly, groups and societies differ in the resources that are available to them, but their ability to use these resources collectively and effectively depends not just on the abilities of individuals (although these can make a difference, notably of those who are in positions of leadership), but also, and arguably even more so, on the institutions (organisations and rules) through which the resources and abilities are mobilised, developed, and used. Thus, as well as resources, institutions play a crucial role in the ability of societies to collectively influence the direction of their future.

In Chapter 3, six forms (or categories) of power resources were identified: physical, cognitive, personal, social, economic, and institutional. Rather than defining power foremost in relational terms and/or outcomes (the extent to which objectives are achieved), the most prevalent interpretations in political studies, I chose a resource-based definition of power that is better able to account for the structural and distributional aspects of power while recognising that resources need to be utilised to give consequence to choices and for power to be exerted, often in interaction with other people. It was also noted that different power resources are often used in combination and concurrently, thus enhancing their effectiveness and that they tend to accumulate and concentrate, especially around economic power which enables other forms of power to be bought in a variety of ways. For that reason, economic power is arguably the most important source of power. It is accumulated and exercised

by individuals, groups, and organisations (including businesses) outside the formal realm of politics, notably by hiring or employing people to give consequence to “private” choices and decisions that can affect the lives of many people.

In all societies, there is, and always has been, a tendency for economic power to be accumulated and concentrated in elites, even though these elites may not be unified but compete more or less fiercely with each other for dominance or hegemony (which means acceptance as the legitimate dominant power). They do this by acquiring (paying for) other sources of power, for instance, from or of the media to influence other people’s views and preferences (cognitive power), and in the political-institutional realm, for instance, by funding policy papers produced by think tanks, hiring experts and lobbyists, funding political campaigns for themselves or others, or by donations and corruption. While history is not just about great men and wars, there can be little doubt that powerful leaders and elites often have been able to give enormous consequences to their choices, affecting the lives of many people. While leaders and elites may not be able to control or even shape the future of their societies in line with their aspirations, we can plausibly argue that, on many occasions, they have given direction to the course of history, although not always, or often, in ways that many people deem or deemed desirable.

Although this is not my aim, it might be possible to reinterpret the course of the history of a society, country, or even the world as a whole, based on the dynamics of the flow of power resources. The distribution and concentration of power are not static but dynamic, subject to the coming and going of individuals (each with their unique set of personal power resources), and the numerous interactions within and between groups (including societies) that affect the distribution and concentration of all power resources. Arguably, it is this flow of power resources and the resulting distribution and concentration of power that shapes and changes the societal institutions that create the appearance of (relative) stability. However, empirically studying all six flows of power through time, and the interactions between them is a daunting and probably impossible task. Interestingly, it is the discipline of history, encompassing the study of both individuals and societal (socio-cultural, socio-economic, political, and sometimes environmental) developments that often gets closest to a comprehensive understanding of what is going on in the world, giving agency *and* structure their due.

Here, my concern is not to provide a comprehensive history of the flows of power but to identify what may be the most promising and realistic way to alter the distribution and concentration of power through deliberate and targeted collective action aimed at steering societies into a less unsustainable and more desirable direction. Assuming that people and societies can collectively and intentionally influence if not shape their future (which is a big assumption), how would or could they do it? As discussed above, many past efforts have failed and/or have produced disappointing, undesirable, and disastrous results. No longer even trying or aiming to steer societies, many governments are floundering, allowing “the market” to produce brutal outcomes for many and to direct and push societies, and the world, towards self-destruction.

Our best hope, it seems to me, lies in fundamentally altering the existing distribution and concentration of power, a configuration that underlies and props up

the political-economic, political-institutional, and socio-cultural systems that are fundamentally at odds with environmental protection and sustainability and, therefore, with maintaining and creating the conditions for human life on earth.

Given the enormous and unprecedented concentration of economic power in many countries and the world as a whole, it may seem logical to target this configuration as a priority for change. It is the concentration of economic power that holds societies in an economic stranglehold, that corrupts governments (political-institutional power) and that forces them into collaboration with the “1%”. Economic power also controls the media (cognitive power), many of which are conservative and persuade people that this “is the way it is” and that there is no alternative. As a result, many individuals either do not think that fundamental change is possible and/or (actively) support the dominant elites as they identify their interests with maintaining the status quo. For these reasons, it is almost impossible to challenge the political-economic power elite head-on. Doing so gets little support, invokes ridicule, antagonism, and personal attacks, and—if a challenge is perceived to gain support and to pose a real threat—is likely to provoke suppression. Already, anti-terrorism laws adopted in many liberal democracies (and non-democratic regimes) can be broadly interpreted to punish protestors and deter opposition.¹⁹ For these reasons, we need to think of a smarter way than simply calling for the abolition of capitalism and/or for the expropriation of billionaires and the growing class of multi-millionaires who will fiercely protect their wealth. At the same time, we should have no illusions that the introduction of a progressive income tax, and/or a wealth tax, will bring about a significant redistribution of economic power, let alone systemic change (such as in property rights, let alone capitalism).

But if challenging concentrated economic power is unlikely to have much effect, what are the alternatives? Thus far, demands for fundamental change have often focused on political change, in particular the overthrow of political leaders, governments or regimes and their replacement with leaders who are (likely to be) more sympathetic to the causes advanced by those who have mobilised the people. Revolutions, from the French, American, Russian, and Chinese, to the Cuban revolution, have always been led by relatively small groups of intellectuals, activists, and charismatic and/or ruthless leaders who imposed their views on how societies need to be organised and run. One may disagree about their achievements, but such revolutions have often come at great costs to many individuals, families, and societies. Not surprisingly, the idea of political revolution has gone out of fashion which, of course, serves the dominant political-economic elites well. More recently, the idea that a revolution (or revolutions) may be needed to provide the breakthrough to fundamental change is again gaining support. The mass mobilisations in a string of Arab countries during the early 2010s, commonly referred to as the “Arab Spring”, can be seen as a revival of the revolutionary spirit.²⁰

¹⁹ Amnesty International, *Dangerously Disproportionate - the Ever-Expanding National Security State in Europe*.

²⁰ Wikipedia (2021), Arab Spring, https://en.wikipedia.org/wiki/Arab_Spring (Accessed: 6 August 2021).

However, whether these latest attempts have been successful in bringing about fundamental change is debatable; they may have rekindled the idea that governments should heed the views and interests of the people, but the present situation (as of 2021) in most countries where the Arab Spring occurred demonstrates that they failed to produce fundamental and enduring political-economic change. A similar conclusion can be drawn from popular uprisings and protest movements in the United States (the "Occupy movement"), Spain (the "Indignados"), France (the "Yellow Vests"), the UK (the "Extinction Rebellion") and in many other countries, including Belarus, Burma, and Hong-Kong. These rebellions may have led some governments (for instance, in France) to grant a few minor policy concessions, but most of these movements have either fizzled out or been brutally suppressed as in Egypt, Belarus, Burma, and Hong-Kong, demonstrating that control over physical power (the army and police) still plays a key role in (blocking) political change. These experiences also illustrate that trying to effect fundamental change by mass mobilisation is, in itself, not sufficient. More is needed.

As some analysts have pointed out, this "more" may be a persuasive and coherent programme or set of demands that is supported by a broad coalition of movements, and/or a convincing story (view of the world) that shows that the presently dominant story is no longer believable and acceptable.²¹ These suggestions hark back to Gramscian thinking that emphasises the importance of ideas and of forging a counter-hegemonic movement (an alternative "historic bloc" comprising a broad range of societal actors, including intellectuals and organisations) in advancing an alternative view of society as the basis for political praxis.²² Thus, this approach leans foremost on building cognitive power (empirical as well as moral) and social power to off-set and overcome the dominant economic and political-institutional (state) power of elites who *also* use cognitive power to maintain their legitimacy and hegemony, even though hegemony is never complete and continuously subject to contestation.

Although I concur with the idea that putting forward a shared programme for change supported by a broad coalition of social movements is an important condition for achieving political change, there are several issues with this approach. The first and most obvious problem is how to forge such a program given the diversity of social movements with different causes, views and interests, and priorities. Obviously, the broader the coalition or social base one wants to build to maximise social power, the greater this challenge. Second, a relatively small group of individuals is likely to play a leading role in forging such a programme, which, even if it is formally endorsed by the members of a broad coalition of groups, may open up the exercise to accusations of elitism, bias, or neglect of minority views and interests. Third, even if a programme receives broad and strong support, and is backed up by powerful (mass) social mobilisation, it still needs to go through the regular political-institutional processes (involving the executive, legislative and possibly judicial institutions) to be transformed

²¹ Naomi Klein makes this argument in Klein, Naomi, *No Is Not Enough: Defeating the New Shock Politics*. See also Monbiot, George, *Out of the Wreckage. A New Politics for an Age of Crisis*.

²² Fontana, Benedetto (2010), "Political Space and Hegemonic Power in Gramsci", *Journal of Power*, Vol.3, No.3, 341-363; Gill, Stephen (ed.) (1993), *Gramsci, Historical Materialism and International Relations*. Cambridge: Cambridge University Press.

into official policies and/or institutional changes. This means that it is likely to encounter the same structural obstacles and barriers that have prevented the adoption of more meaningful (environmental and other) policies before. This is not to downplay the importance of groups in society developing and putting forward proposals for change. But at the same time, we must acknowledge that other (conservative) groups do the same thing and may well outcompete the social movements in their bid to get the ear of governments because of their entrenched power and the larger pool of resources (including the cognitive power of the mainstream media) that they can draw upon. In brief, trying to effect fundamental change on a highly uneven playing field is very much an uphill battle, something acknowledged by veteran environmental advocates.²³

Wresting economic power from the economic elites, therefore, is an almost impossible task as long as the existing distribution of, and/or command over, power (resources) across the different forms, including cognitive, political-institutional, and physical power, remains intact. Somehow, we need to find a more indirect and strategic way of confronting economic power. Arguably, there is only one way to do this: focusing efforts on the power of the state. If power is the key to fundamental change and steering societies in a different direction, then states hold that key.

States hold the key

If power is the key to collectively choosing the direction of a society, states are the most important battleground in the fight over that key. In this section, which revisits some of the main points already touched upon in Chapter 5, I argue that states remain the most important political institutions in the world as it is, for three main reasons: first, despite the claim that states have lost much of their power or even relevance in the present world order, there is little evidence that states are becoming less important or redundant political institutions and collective actors; second, the functions performed by states (even if in ways that may be deemed inadequate) remain crucially important to meeting the basic needs of people and societies; third, states are the only political institutions through which people can address the accumulation and concentration of economic and cognitive power.

With globalisation, it is often argued, states have lost much of their power, and become redundant or even obstacles to progress which is deemed to lie in further eliminating barriers to trade, investment, and the movement of people.²⁴ Although many critics of globalisation deplore its adverse social and environmental effects, it has become commonplace to argue that the benefits of globalisation need to be more equally shared and/or that globalisation needs to be better regulated by strengthening global institutions, as advocated by institutionalists and many

²³ For instance, Gustav Speth, a long-time environmental advocate, has argued that "environmentalists have been winning battles, but are losing the war" Speth, James Gustave, *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*, Loc 44.

²⁴ A well-known proponent of this view is Friedman, Thomas L. (1999, 2000 ed.), *The Lexus and the Olive Tree*. London: HarperCollins Publishers; Friedman, Thomas L., *The World Is Flat: A Brief History of the Twenty-First Century*.

cosmopolitans.²⁵ Here, I reaffirm that these arguments are fundamentally flawed and that, for the foreseeable future, (nation-) states are the most important political institutions, and offer the best chances of steering societies into a socially, environmentally, economically and politically more sustainable and desirable direction.

To begin with, there is little evidence to support the contention that (nation-) states have lost much of their power and/or that they have become redundant and are on their way out. Even during the heydays of globalisation, from the mid-1980s until the end of the 1990s, states continued to play a key role in supporting and advancing their national (foremost capitalist) economic interests, earning them appropriately the label of "competition states".²⁶ Of course, given the enormous differences in power, some states, in particular the United States, are in a much stronger position to do so than others. In this context, it is also worth pointing out that the formation of the EU has not meant the demise of states within that body. The EU was forged foremost to advance the capitalist economic interests of the already more powerful countries, in particular Germany, while holding up the promise that all member states would benefit. And although the EU has indeed served the German economy well, this cannot be said for many of the economically weaker states.²⁷ The weaknesses of the EU policies have been illustrated by its obstinately holding on to a monetary policy that prolonged the Euro crisis,²⁸ and that produced harmful socio-economic effects for many people, notably in Greece,²⁹ and during the COVID-19 crisis when each member state fell back on its own capacity and borders to combat the pandemic.³⁰ The failures of the EU have fuelled public disillusionment and Euro-scepticism, and the revival of nationalism in member states. Lacking a truly federal structure, the EU is at most a weak proto-European state. The uneven distribution of economic power and benefits across the EU has generated major social and political tensions that cast a shadow over the future of the European project.

Similarly, in the United States, the legitimacy and political support basis for economic globalisation has weakened with the rise of public discontent about the adverse socio-economic effects (de-industrialisation; structural unemployment) on many of its people. This discontent provided fertile ground for the election of the populist Donald Trump as president, fuelling nationalism ("Making America Great Again") and bringing about a significant change in US foreign policy blatantly putting

²⁵ The economist Joseph Stiglitz is a prominent voice for this view. See Stiglitz, Joseph E. (2006), *Making Globalization Work*. London: Allen Lane.

²⁶ Cerny, Philip G. (1997), "Paradoxes of the Competition State: The Dynamics of Political Globalisation", *Government and Opposition*, Vol.32, No.2, 251-274; Weiss, Linda (1998), *The Myth of the Powerless State. Governing the Economy in a Global Era*. Cambridge: Polity Press.

²⁷ For the case of Greece, see Varoufakis, Yanis, *Adults in the Room. My Battle with Europe's Deep Establishment*. The dominance of Germany in the EU is also reflected in the fact that the EU does not have a common industrial policy, as the German state plays a big role in supporting its own industry. Quatrepoint, Jean-Michel, "Why the EU Has No Industrial Policy". See also Denord, Francois, *et al.*, "Germany's Iron Cage".

²⁸ Tooze, J. Adam, *Crashed: How a Decade of Financial Crises Changed the World*.

²⁹ Varoufakis, Yanis, *Adults in the Room. My Battle with Europe's Deep Establishment*.

³⁰ Butler, Katherine, "Coronavirus: Europeans Say EU Was 'Irrelevant' During Pandemic".

"America First". In part, this change has also been driven by the rise of China as a global superpower, which has given cause for concern about the maintenance of US hegemony, a priority rooted in the American foreign policy establishment.³¹ This concern, shared by both Republicans and Democrats, is reflected in the continuity of US policy towards China, even though President Biden has returned to a more multilateralist approach in his efforts to contain China instead of Trump's unilateralist policy.³²

At the same time, nationalism is at least as strong a force in China, where it is deeply rooted in its 2000-year history as a "civilisation-state" and associated superiority complex which, according to some analysts, will transform the world when China becomes the dominant power.³³ If anything, the Chinese state will become a stronger and more assertive international actor rather than give up its sovereignty. Like all big and powerful states, China is likely to bind itself to international agreements only if it suits it. And while smaller states tend to be more willing to do so in the hope of (somewhat) constraining the arbitrary use of power by bigger states, there is also no indication that they are willing to relinquish formal sovereignty. If and where the sovereignty and integrity of states are under threat or pressure, it is usually from domestic ethnic groups that wish to create their own state.

Globally, there is more evidence to be found for the waning of economic globalisation and a revival of nationalism and national rivalries than for the fading of nation-states. The 2007 financial-economic crisis and its aftermath have exposed the vulnerability of the globalised financial system. Many so-called developing countries appear to have concluded that there is little to be gained from opening their borders further to foreign capital and trade if such measures are not reciprocated sufficiently by the high-income countries. Also, concerns about the adverse social, economic, and environmental effects of economic globalisation on societies (as pointed out also by the anti-globalisation movement) have grown stronger, for instance, where ownership and control over vital resources like drinking water and agricultural land have been transferred to foreign companies.³⁴

These latter issues are linked to a second reason why states remain crucially important: they perform or at least should perform, functions that are vital to meeting the basic needs of people and societies. As discussed in Chapter 5, states fulfil four main functions: security, economic, demand and conflict management, and social integration. These functions can, and have been, interpreted quite differently, depending foremost on who is in control of a state's institutions. With the emergence of the modern (European) state in the 17th century, these functions were increasingly

³¹ Layne, Christopher (2017), "The US Foreign Policy Establishment and Grand Strategy: How American Elites Obstruct Strategic Adjustment".

³² Tisdall, Simon (2021), "Biden Races to Unite Allies against China Knowing Sooner or Later an Explosion Will Occur", *The Guardian*, 25 July.

³³ Jacques, Martin, *When China Rules the World: The End of the Western World and the Birth of a New Global Order*, 561-583.

³⁴ Grugel, Jean and Pía Ruggirozzi (2012), "Post-Neoliberalism in Latin America: Rebuilding and Reclaiming the State after Crisis"; Pearce, Fred (2012), *The Land Grabbers: The New Fight over Who Owns the Earth*. Boston: Beacon Press.

defined to serve the capitalist class, whose wealth and power had grown at the expense of the land-owning classes, and over the backs of workers and colonial peoples. However, because of its inherent contradictions and destructive social and political consequences, capitalism came under serious threat in the first half of the 20th century, which forced the capitalist class in many countries into making concessions to the working classes. As discussed in Chapter 9, this led to the creation of the social-democratic welfare states that significantly improved the living conditions of most members of these societies, strengthened the power and influence of the labour movement, and led to a broadly supported view of the state as a benign and crucial institution through which economic growth and stability, and the social well-being of all, could be promoted. Without wanting to idealise this era (referred to by Piketty as the “the thirty glorious years from 1945 to 1975”),³⁵ this marked a revolutionary change in the perception of the state and how its core functions should be interpreted. Throughout history (also in pre-modern states), states had served foremost the interests of their rulers. With the creation of the social-democratic state, the fundamental expectations of states changed as people experienced that the state could serve their individual and collective needs and interests. The experience demonstrated, albeit to a limited extent, that the functions of the state can be (re-) defined and fulfilled in ways that not only serve the basic needs of people, but that also create the conditions for their flourishing, for instance, by offering free higher education to all, which significantly boosted student numbers and enabled many young people to improve their lives, also benefitting the whole of society.

With the rise of neoliberalism, in many countries, the functions of the state were again redefined to better serve the interests of capital at the expense of the welfare state, even to the point where beggars returned to the streets and food banks have again become a common phenomenon in many nominally “developed” countries. This development highlights the crucial importance of the state to people’s survival. By far most people in modern societies have lost the capacity to provide (food and other essentials) for themselves and their families, and as globalised production systems have made many nations more dependent on imports, their vulnerability has starkly increased. When things go wrong, people have no other option than to turn to the state as social networks have eroded or disintegrated, social conflict increases, and security has become precarious. Those who think that states are no longer important only need to look at “failed states” to see what the social consequences are if a state is no longer able to fulfil its core functions. In a range of countries, this has also been demonstrated during the COVID-19 epidemic when health systems became overwhelmed and the capacity of states to protect their citizens against the virus proved to be inadequate.

There are also strong grounds for arguing that, in the first instance, states must play a central role in advancing environmental integration. Although biophysically the environment is globally interconnected, and a growing number of environmental problems have taken on a global dimension, most of their sources and drivers are geographically located within countries, for instance, in the form of burning fossil fuels, local sources of pollution, and the manufacturing of materials and products that are

³⁵ Piketty, Thomas, *Capital in the Twenty-First Century*, Loc 270.

exported and/or that become part of a global production chain. All such activities and practices also have local environmental effects (on all three dimensions). In many countries, this has found recognition in the introduction of Environmental Impact Assessment. But this tool has been inadequate to prevent ongoing environmental degradation,³⁶ mainly because it has not put a brake on development and (often export-led) economic growth. To adequately protect the environment, in the first instance, each country must look after its own environment based on an assessment of environmental conditions and local (scientific and other) knowledge, while also having regard for global impacts, as expressed by the cliché that we need to "think globally, and act locally". If all countries were to put this into practice, there would hardly be a need for global measures. While this may seem utopian, it is in the (self-) interest of every country to do so as the protection of its environment is vital to the health, well-being, and even survival of most of its citizens (but perhaps less to big exporters and not to foreign investors).

At this point, it is worth considering briefly what alternative political institutions might be better suited to meet the needs of people and societies. On this front, two main alternative options offer themselves: supra-national and sub-national. Supra-national alternatives involve the creation or strengthening of international institutions so that these are assigned the responsibility and power to make the supreme decisions in a range of areas that presently fall under the sovereignty of states. Sub-national alternatives involve the decentralisation of responsibilities and power to smaller political systems (or "mini-states"). While a good case can be made that both levels must play an important part in governance (notably linked to some of the functions of the state—such as security at the international level, and day-to-day environmental management at the local level), national-level governments remain crucial for providing coordination, support, and guidance to the local level, and to function as the collective intermediate actor between the local and the international levels. While arguably local governments can and should be granted more power and resources to facilitate a transition towards sustainable societies, and (should) play a significant role in meeting the economic and social (security) needs of their residents, their capacity has been seriously eroded with the shift of economic power towards TNCs and other big companies operating at the national and global level. And given their position in the competitive capitalist game, local governments are in a much weaker position than national governments to regulate or gain control over economic power and decision-making by the big corporations.

At the other end of the scale, it is hard to see how international or global institutions would be able to better meet the economic and social needs of people, given the (even) longer distance (geographically, socially, and psychologically) between such institutions and people, their lack of local knowledge of and/or empathy with national, regional and local socio-cultural frameworks, local/regional ecological systems and processes, and, last but not least, their lack of command over the material resources needed to meet local needs and demands. While creating a global authority for security matters is a worthy ideal, doing so for other functions of the state would cause nightmares. Anyway, as discussed in Chapters 11 and 12, there is very little

³⁶ Bührs, Ton, *Environmental Integration: Our Common Challenge*, 42-54.

chance that a world government will be created anytime soon. In summary, states are, and for the foreseeable future are likely to remain, the most important political institutions on which people and societies depend to ensure that their most basic needs are met.

A third main reason why the (nation-) state remains crucially important is that (barring revolution) it provides the only realistic basis for societies to control and reduce the power that has been accumulated and concentrated by economic elites, and to protect and strengthen democracy. As the rise of social democracy in the post WWII era, and the neoliberal revolution of the 1980s and 1990s have shown, battles over the role and power of the state are highly significant and have major consequences for societies. The power of the state can be used either to accentuate and serve the accumulation and concentration of economic power (and not only in capitalist systems) or to constrain and/or redistribute that power in favour of workers and the large majority of people. Given that states are formally sovereign, a priori, they have the right to fundamentally alter the rules by which economic power is accumulated (or not), (re-) distributed, constrained, and controlled. In principle, in a democracy, such issues should be decided collectively by its citizens: citizens should define how the power of their state is used, including to (re-) distribute and control economic power. Economic institutions are not sovereign and do not have the right to (re-) define the functions and powers of the state, and to decide how these should be used. The primacy of the state over the economy is a fundamental tenet of democracy.

Notwithstanding the accumulation and concentration of economic power and the extent to which that power has been able to get a hold over states and governments, especially during the last 40-odd years, we should not abandon the idea that the state is there to serve the interests and advance the collective aspirations of societies rather than those of elites. Much of the neoliberal revolution hinged on giving the state a bad name. Depicting the state as “the problem rather than the solution” (as President Reagan famously declared) has been a key element in the neoliberal strategy aimed at subjugating the state to “the market”, in practice, to the economically most powerful. The power of the state has been curbed by institutional reforms designed to better serve the interests of capital, notably by deregulation and reregulation, by crushing the power of labour and the trade unions, and in some countries even by constitutionally entrenching the primacy of neoliberal interests.³⁷ With neoliberal capitalism triumphant in the battle with what was referred to as “communism”, the view that the prime role of governments is to serve free-market capitalism (the economy) rather than to guide it, became the new paradigm.

At the same time, around the world, democracy has come under threat and is in retreat. Arguably, this became most apparent in the United States when ex-President Trump refused to concede losing the 2020 election, a first in American history, and appeared to provoke a coup to keep him in power. But the threats to democracy have structural causes that go beyond the dictatorial aspirations of individuals. In the United States, concern about the influence of economic power on American democracy

³⁷ MacLean, Nancy, *Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America*.

(which in the past was often held up as a model) has grown to the point that many consider the system to be in deep trouble, and some regard it no longer a democracy.³⁸ Similarly, concern has been raised about the erosion of democracy in many other countries around the world, in part related to the expansion of state powers for security reasons (allegedly needed to combat terrorism), but also linked to the rise of illiberalism and would-be dictators on a populist tide.³⁹

Furthermore, as noted in Chapter 4, media ownership and control play a vital role in winning the hearts and minds of people. Apart from presenting information, misinformation, propaganda, and opinions aimed at keeping public attention and opinion focused on safe topics and solutions, most of the mainstream media are themselves corporate entities that have a stake in maintaining capitalism, and deliberately conflate economic freedom with the rights of citizens. Therefore, putting forward ideas or proposals for restricting economic freedom, or aimed at the introduction of economic democracy, let alone the abolition of capitalism, get filtered out and stand no chance of entering the public arena.⁴⁰ By contrast, the media are saturated with entertainment and trivia, distracting people from the developments and decisions that shape their lives and the future of societies.⁴¹ Although the internet and the social media have the potential to, and to some extent do (arguably within so-called "echo chambers"), discuss the need for fundamentally transforming the political-economic system, they also are increasingly used by the powerful to manipulate people for commercial and political purposes, even to turn them against democracy.⁴²

Thus, protecting democracy without radically curtailing economic power and loosening the grip of that power on the state and the media is an uphill battle in which those who advocate fundamental change, aimed at breaking down the big obstacles to more effective environmental integration and advancing the creation of a more sustainable, democratic, egalitarian, and socially desirable society, rely mainly on mustering social power and rather limited cognitive power. This enormous imbalance of power is the main reason why environmental activism has had so little impact on the sources and drivers of environmental degradation. Significantly altering that

³⁸ Gilens, Martin and Benjamin I. Page (2014), "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens "; McChesney, Robert W. and John Nichols, *People Get Ready: The Fight against a Jobless Economy and a Citizenless Democracy*; Speth, James Gustave, *The Bridge at the Edge of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability*, Chapter 11.

³⁹ Crouch, Colin (2016), "The March Towards Post-Democracy, Ten Years On"; Levitsky, Steven and Daniel Ziblatt (2018), "This Is How Democracies Die", *The Guardian*, 21 January; Zakaria, Fareed (2007), *The Future of Freedom. Illiberal Democracy at Home and Abroad*. New York: W.W. Norton & Co; Amnesty International, *Dangerously Disproportionate - the Ever-Expanding National Security State in Europe*.

⁴⁰ For a discussion of media filters that keep coverage to 'safe' issues, see Chomsky, Noam, *Necessary Illusions: Thought Control in Democratic Societies*.

⁴¹ Postman, Neil, *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*; Lewis, Paul (2017), "Everyone Is Distracted. All of the Time".

⁴² McChesney, Robert W., *Digital Disconnect: How Capitalism Is Turning the Internet against Democracy*; Zuboff, Shoshana, *The Age of Surveillance Capitalism*.

imbalance will require more than boosting environmental demands and campaigns. However, efforts aimed at addressing this imbalance head-on, for instance, by proposing or strengthening strict rules that limit the direct influence of economic power on the election of political representatives (notably related to campaign funding and publicity), drastically reducing the inequalities in wealth and income, breaking up and putting limits on the size of businesses, and democratising economic decision-making, are all stymied by the economically powerful and their allies in states and governments. Therefore, to fundamentally alter the distribution of economic power, we have to take a strategic approach to political-institutional change.

Strategic collective agency

As discussed above, given the fundamental and systemic obstacles to environmental integration, simply proposing solutions to environmental problems (such as reducing greenhouse gas emissions) is unlikely to lead to a meaningful and lasting reduction of environmental pressures, let alone to the elimination of the systemic causes and sources of those pressures. Addressing the latter requires systemic change, including of the economic, energy, transport, industrial, and agricultural systems, as well as urban development and the development of science and technology, among other. However, thus far, bringing about systemic change aimed at the integration of environmental imperatives has proven to be too difficult because of the power of vested interests and the extent to which these have captured political-institutional systems (notably states), and dominated the media, educational institutions, and other socio-cultural institutions.

This means that we need to think strategically about how fundamental changes may become possible by altering the distribution (or imbalance) of power within a society. Putting forward substantive solutions for the environmental crisis, even if these have a lot of merits, is not sufficient to bring about significant change; we need to create the conditions that make their adoption more feasible. As discussed above, the role and power of the state hold the key to bringing about systemic change. While this is not a novel insight and has been the subject of considerable debate and theoretical reflection in academic and political circles, it has tended to be overlooked by much of the environmental movement. To create the conditions for bringing about transformative systemic change in all of the areas referred to above requires conquering the institutions of the state.

This is, of course, the fundamental challenge that has faced the opponents of tyranny, exploitation, and oppression, as well as the advocates for democracy, equality, and the collective good throughout history. More or less spontaneous rebellion, often out of desperation, has been a common phenomenon, and just as commonly bloodily suppressed. Since the creation of nation-states and the emergence of the idea that the people (not God) were the source of sovereignty, more or less organised and broadly supported political revolutions have put their mark on the history of many countries, including America, and France, Russia, and China. In many cases, the effectiveness of rebellions (including those that occurred during the 2010s under the banner of the Arab Spring) in bringing about a significant and durable change in the allocation and distribution of power has been doubtful or nil. Political revolutions have tended to be much more successful in this respect, but they often simply led to a

change of elite(s) or ruling class, even if in the name of the people. As such, revolutions have tended not to bring about the reallocation and redistribution of power (notably of economic power) that is necessary for the creation of enduring democracy. However, despite these failures, rebellions and/or revolutions are likely to re-occur if political regimes fail to fulfil the functions of the state, especially when living conditions are getting desperate. Continuing environmental degradation and global heating are likely to contribute to the destabilisation of societies and further erosion of the legitimacy of states, creating a vicious circle that leads to an ever-diminishing collective capacity to bring a halt to the planetary tragedy.

But rather than staging revolutions to conquer the power of states, I advocate a different form of strategic collective action. The approach involves a three-step process. First, it involves a process of social mobilisation aimed at conquering the power of the state by the institutionalisation of popular sovereignty. This involves the establishment of Sovereign People's Authorities as the supreme political institutions. Once these are in place, and the balance of political-institutional power has been shifted towards the citizenry, this will make it possible to initiate the kind of systemic changes that were discussed in Chapter 12, with political transformation (redefining the functions and institutions of the state) being a crucial second step. This, in turn, would make it possible to bring about a third wave of systemic changes, including of the economic system (the production system—including energy, industry, transport, and agriculture—and the economic institutions), and socio-cultural transformation (of education, the media, and science and technology systems, and other). As noted in Chapter 12, these transformations need to be undertaken concomitantly with the pursuit of global transformation, notably by cooperating and building international coalitions of states and networks that share a commitment to the principles of popular sovereignty, democracy, sustainability, and global justice.

Conclusion

In this chapter, I have addressed the question of whether it is, or might be, possible for a society to steer itself collectively, consciously, deliberately, and democratically towards a future of its choosing. Looking at the past, it is difficult to find evidence that allows one to answer this question positively and be optimistic. For much of history, this question did not even arise, and societies were ruled by the most powerful who did whatever they wanted, and who were foremost concerned with protecting, maintaining, or expanding, their wealth and power, especially against rivals. With the emergence of the Age of Enlightenment, the idea that humans and societies could be perfected gave birth to a broad range of ideas (influenced by the rise of science and social science) about progress and how it could and/or should be promoted. Although it can be argued that, in some respects and parts of the world, much progress has been made (notably in science and technology, the standard of living of many people, and life expectancy, among other things), in other respects, developments have had many undesired, unexpected, and highly damaging social, economic, political, and environmental consequences that have led to serious concerns about the price of progress and where it leads us.

But what these developments have demonstrated is that whenever steering has occurred it was led by the most powerful groups, not by societies as a whole based on

collectively determined goals or aspirations. Fundamentally, the distribution of power has always been the key to the steering that has occurred. Arguably, the distribution and concentration of economic power have been the most important in this respect as economic power provides the means for also acquiring most other forms of power, including cognitive, political-institutional, and physical power. Power has been used selectively to steer economic development (investments, industrialisation), science and technology (foremost to serve economic and security interests), and the dominant ways of thinking (ideologies, norms, and even values) within and across societies. Although this gives the impression that things just happen and are beyond anyone's control, we should not ignore the extent to which the most powerful can give consequence to their choices. They may not be able to *control* developments and societies (despite their best efforts), but this does not mean that no steering occurs.

The chapter has also revisited and reaffirmed the crucial role of states (and their core functions) in meeting the basic needs of people, and as the most important political institutions of societies that can influence or control the distribution of power. While states have predominantly been used by the economically most powerful to protect and advance their interests, the state's power *can* be used to steer societies in different directions, reshape economic and social institutions, and redefine the core functions of the state, including for social justice and environmental purposes. Not for nothing, states continue to be major battlegrounds as they hold the key to the (re-) distribution of power. This may be an unsurprising finding, but one that is commonly ignored by those who advocate transformative change to save the world.

No meaningful progress in saving the world (humans and societies) can and will be made if this fundamental fact is not recognised and efforts aimed at creating more sustainable and desirable societies remain focused foremost on end-of-pipe technological solutions (including the reduction of CO₂ emissions) and/or the greening of systems, including the economic, industrial, agricultural, energy, transport, urban, and political (state) systems. While fundamental change in all these systems must occur, this will not take place unless and until the power of the state has been brought under the collective and democratic control of society instead of the economically most powerful.

While historically this truth has long been recognised, intuitively and explicitly, by many people and political theorists, and has provided the rationale behind (the calls for) a significant number of revolutions from the 17th century (the English Revolution) onwards, it is not surprising that it has been suppressed by the ruling classes. Also, the fact that many political revolutions have come at a high price of human suffering and life, failed to live up to the hope and aspirations of many or most people, created dictatorships rather than democracies, and have led to the re-emergence of privileged classes and high economic inequality, has helped to thoroughly discredit the idea that humans and societies can be perfected by such means. But although this must be recognised, this does not imply that it does not matter who wields the power of the state. It matters a lot.

Therefore, the question of how the power of the state can be controlled and used to the benefit of societies as a whole, in the short and the long term, remains as valid and important as ever. If revolution is not the answer, then what is? In the final

chapter, I will elaborate on the idea of creating, by strategic action and peaceful means, truly representative Sovereign People's Authorities that can stand in for societies and that are much more likely than the existing forms of liberal democracy, let alone authoritarian systems, to use their power to advance collective interests.

Chapter 14 – Power to the People: The Creation of Sovereign People’s Authorities

Introduction

In the foregoing chapter, I discussed the importance of taking a strategic approach to overcoming the enormous obstacles to meaningful environmental integration based on the recognition of (the distribution of) power as the key to fundamental change and of the state as the main political institution that holds that key. Far from being outdated or redundant, states remain the most important institutions for collective action and for the reallocation and redistribution of power that is necessary to bring about transformative changes aimed at creating more sustainable and desirable societies. It was suggested that the creation of a Sovereign People’s Authority (SPA) could be the first strategic step to bring about a cascade of fundamental changes in that direction. In this chapter, I elaborate on this idea: the rationale behind it, the main elements of a proposal, and some of the counterarguments that are likely to be raised against it. Given the likelihood that the creation of SPAs will encounter considerable opposition, the chapter will also discuss some ideas about how to address this.

Sovereign People’s Authorities

Having established that redistributing power is the key to overcoming the fundamental obstacles to environmental integration, that states are (still) crucially important for meeting the needs of individuals and societies, and that states hold the key to the reallocation and redistribution of power, the question is how to get hold of that key. As discussed in earlier chapters, dominant economic interests have a firm grip on the state and use their control over (most of the) media to maintain the dominant economic paradigm. Liberal democratic governments are unwilling and unable to use the power of the state to remove the barriers to the fundamental changes that are required if societies are to move towards a more sustainable future.

As already indicated above, the main rationale for focusing on political-institutional (state) reform is that all existing political-economic systems are incapable of and unsuitable for adequately advancing sustainability, let alone in ways that societies are likely to deem acceptable or desirable. As I have already extensively discussed the reasons for this before, there is no need to elaborate on this point further apart from noting that, to my knowledge, few ideas have been put forward on how the fundamental obstacles may be overcome. Many calls for action, mass mobilisation, and fundamental change have been made, but to little effect. Given that, in my view, states remain the most important political institutions through which societies can make collective decisions regarding their future, fundamental change at that level is the most realistic as well as a necessary option if the planetary tragedy is to be stopped. What is required is a major reallocation and redistribution of power in the political-institutional sphere that has the potential to tilt the imbalance of power from the existing political-economic elites towards society.

In this section, I elaborate on the idea of creating national-level Sovereign People’s Authorities as a strategic political-institutional change that could bring about

such a shift in power in favour of societies. As discussed in Chapter 5, the idea of sovereignty goes back to the creation of the modern system of states in the 17th century. States are deemed to be sovereign in the sense that they hold supreme power, implying that formally there is no higher power beyond the state and that all states (small and big) are equal in international law. But the notion of sovereignty also has an internal dimension in the sense that, within its official boundaries, the state is the highest authority and holds supreme power. At the time of absolute monarchies, monarchs were the sovereigns and thus embodied the state, as reflected in King Louis XIV's saying "L'État, c'est moi" ("I am the state"). Monarchs justified their sovereignty by arguing that they had been granted this supreme power by God. This idea was challenged by 18th-century revolutionaries, who claimed that the source of the supreme power of the state rests with the people as a whole (the notion of popular sovereignty).¹ The American Revolution played a significant role in giving prominence to the idea of popular sovereignty. In the US Constitution, the Federalists entrenched the principle that the supreme or sovereign power resides in the people at large (as reflected in the statement "We, the people..."), cutting it loose from monarchs altogether.²

However, how popular sovereignty should be applied in political practice has been the subject of long-standing debate. Fundamentally, the question comes down to who speaks or can speak for the people.³ Groups and even individuals (in particular, dictators) have laid and still lay claims to speaking for the people. Notwithstanding Bodin's view that sovereign power must be by definition indivisible, other political thinkers, largely out of recognition that societies are divided and that there are (many) competing claims on what constitutes the public interest, took the view that supreme power could be divided and shared. The idea that the people at large were sovereign was transposed onto a system of government in which different institutions held supreme power, creating a system of checks and balances, laid down in a constitution. Thus, sovereign power was de facto shifted from the people to government institutions, which vary from country to country. In parliamentary democracies, parliaments are commonly formally embodied with sovereign power. In the United States, where popular sovereignty was laid down constitutionally in the institutions of

¹ Although the idea that the people (should) have supreme power can be traced to Aristophanes and Herodotus in the 5th century BC, it was first developed in political theory by Jean Bodin in the 17th century. Bodin defined sovereign power as power that is supreme, absolute, indivisible and perpetual, but acknowledged that, although this kind of power has been granted by God to monarchs, it was in theory compatible with democracy. Bourke, Richard and Quentin Skinner (eds.) (2016), *Popular Sovereignty in Historical Perspective*. Cambridge: Cambridge University Press.

² König, David (2018), Popular Sovereignty, Encyclopedia.com, <https://www.encyclopedia.com/history/united-states-and-canada/us-history/popular-sovereignty> (Accessed: 16 September 2021).

³ To avoid misunderstandings, by the people I mean *all* the people of a polity, not just the non-elites as some branches of public discourse and literature may suggest. As individuals, all members of a society belong to the people. What is debatable is which members of the society can or should represent the people, most obviously with respect to age restrictions (from the age of 18, 16, 12, or even younger?).

government as a whole, arguably the principle was turned on its head as it became “the duty of every individual to obey the established government.”⁴ This interpretation of popular sovereignty is a travesty of the original idea that governments, in whatever form, are subordinate to the supreme power of the people.

The main reasons why supreme power was assigned to the institutions of government (constitutions, parliaments or other) were twofold. First, in the European context, it ensured that the new property-owning class was able to rein in the arbitrary use of power by monarchs and to secure its own wealth by creating natural or sacred property rights. Property-based criteria were introduced for the right to elect representatives to parliament. Second, this new class (also in the United States) had an even bigger fear for the mob than for monarchs, the general “uneducated and rough populace” that posed a threat to their property, wealth, privileges, and law and order. Interestingly, for much of history, the notion of democracy has been associated with mob rule and regarded as a threat rather than as a desirable political system.⁵ The new political-economic elites preferred to talk about republicanism rather than democracy as the underlying ideology of the new political systems. The label liberal democracy only came into common use after the introduction of universal suffrage in the 20th century. But, formally, in more or less democratic systems, government institutions (often parliaments) have remained the locus of sovereign or supreme power.

In the light of rising public discontent about the prevailing liberal-democratic systems in many countries, growing political alienation and distrust, extreme inequality, and the erosion of democracy and legitimacy, it is time to revive the debate about popular sovereignty and reconsider how this principle can and should be applied in political practice. To that end, I propose to restate the case for interpreting sovereign power, in line with Bodin’s view, as *supreme* and *indivisible* (I think that, in a human and societal context, it goes too far to claim that power can be absolute and/or perpetual). Here, it must be emphasised, the focus is on formal political-institutional power, power that is defined and created by humans (human societies), not by God or any other authority. Simply stated, I define supreme power in terms of having the final say, or colloquially stated, having the power to say that “the buck stops here”. If the people are meant to have sovereign power, they must have the final say on all issues rather than a government (executive power), a parliament and/or a Supreme Court, which, at best, are (very) poor substitutes for the people at large.

In this context, it is important to clarify the link between popular sovereignty and democracy. As discussed in Chapter 5, I concur with the interpretation of democracy

⁴ This was stated by George Washington, who saw the Constitution as “an explicit and authentic act of the whole people [that] is sacredly obligatory on all”. Konig, David, *Popular Sovereignty*.

⁵ In this respect, the new property-owning ruling elites had more in common with Plato and the aristocratic critics of Athenian democracy who deemed democracy the *least* desirable political system. Keane, John, *The Life and Death of Democracy*, 58-61, 81-84, 201-204. See also Winters, Jeffrey A., *Oligarchy*, Chapter 1, especially pp.26-31; McChesney, Robert W. and John Nichols, *People Get Ready: The Fight against a Jobless Economy and a Citizenless Democracy*, 152-162.

as the principle that “humans [could] decide for themselves as equals how they were to be governed”⁶ or, in Robert Dahl’s words, that people have “the inalienable right” to govern themselves.⁷ As Lummis rightly points out,⁸ the idea or ideal of democracy should not be confused with specific political systems and institutions that are commonly labelled democracies, as these are often a poor translation, or even a travesty, of the idea. But this does not mean, as Lummis seems to suggest, that it is not possible to institutionalise the ideal of democracy in stronger and more meaningful forms.⁹ Political systems vary in the extent to which they offer opportunities for citizens to have an input in collective decision-making and thus can be judged to be more or less democratic. The institutionalisation of popular sovereignty as advocated here might be referred to as radical democracy, the label used by Lummis to refer to the core of the democratic idea. But whatever the label used, a system that gives the final say to the people on how they wish to be governed and thus, effectively, how to govern themselves, would be at the higher end of the democracy scale.

Despite the prevalence of liberal democratic systems, the democratic project is far from complete. In many ways, the formal and non-formal rules associated with liberal democracy limit the power of the people to partake in decision making and grant that power to representatives that are far from representative of the general population, even if they are elected by them. These systems have many filters that sift out the poor, uneducated, and so-called irresponsible elements. By contrast, they offer, as discussed earlier in the book, many opportunities to the economically powerful (capitalist interests) and their advocates to influence or even shape the decisions and policies of governments. This power imbalance is also entrenched in formal political and economic institutions, including the mandates of government departments that advocate for particular (industry) interest groups.

Although many contemporary political philosophers and analysts recognise the limitations and shortcomings of liberal democracies, few make a case for institutionalising the principle of popular sovereignty.¹⁰ Most ideas and proposals for stronger democracy involve the introduction of mechanisms for promoting the direct participation of citizens in the decision- and policy-making but within existing systems

⁶ Keane, John, *The Life and Death of Democracy*, 852.

⁷ Dahl, Robert A., *A Preface to Economic Democracy*, 57.

⁸ Lummis, C. Douglas, *Radical Democracy*.

⁹ Barber, Benjamin R., *Strong Democracy: Participatory Politics for a New Age*.

¹⁰ I have come across two publications that, although they do not explicitly advocate institutionalising popular sovereignty, advance proposals for how to make democratic systems *more representative* of the citizens of a country. Callenbach and Phillips focus on the United States and put forward the idea of creating a “Citizen Legislature” constituted by the method of sortition. Callenbach, Ernst and Michael Phillips (1985), *A Citizen Legislature*. Berkely/Bodega, California: Banyan Tree Books/Clear Glass. Landemore discusses the idea of creating more representative bodies under the label of “open democracy”, as well a range of examples. Landemore, Hélène (2020), *Open Democracy. Reinventing Popular Rule for the Twenty-First Century*. Princeton: Princeton University Press. Both publications are highly relevant to what I propose here as they provide solid arguments for why more representative citizens’ bodies are also likely to produce better decisions.

of representative democracy while sovereignty (the supreme power) remains in the hands of parliaments or other government institutions. Many of these ideas advance the notion of deliberative democracy that involves the establishment of (mostly) ad hoc bodies of relatively small groups of citizens ("mini-publics") that, under guidance, discuss a particular issue with open minds and on a level playing field that gives all participants an equal chance to contribute. Such deliberative exercises or experiments have been used to good effect in a range of countries, producing outcomes that have been widely supported and that probably would not have been achievable through the regular (often more adversarial) political institutions and processes. Deliberative approaches seem particularly suitable when highly controversial issues are at stake and that require a willingness to engage with and try to understand, conflicting standpoints and what they are based on.¹¹

However, notwithstanding the merits of deliberative democracy as a process, it is unlikely to bring about a major shift in power within a political system as a whole. The argument that the essence of democracy lies in deliberation (among representatives of the people or in general) misses the point that if within this broader context, a non-representative (let alone a non-elected) person or body has the final say, this is, to say the least, a dubious form of democracy. For instance, it is questionable whether giving the final say to the US Supreme Court (a non-elected and highly unrepresentative body), on all kinds of matters of crucial importance to all US citizens, is democratic, however much the Court relies on deliberation between its members on a level playing field to arrive at its decisions.¹²

As noted above, forms of deliberative democracy have been mostly applied ad hoc to selected issues, at the discretion of extant governments. Arguably, the closest a deliberative exercise got to bringing about major political-institutional change was in Iceland, where, in the wake of the major economic breakdown of 2008, a deliberative process involving a (reasonably) representative sample of all citizens was organised to develop a proposal for a new constitution.¹³ The Icelandic example has been deemed a success both in terms of the process and the quality of the proposed constitution that it produced. But, in the end, it failed because the existing Parliament, which "is, under the current constitution, not truly reflective of a majority of Icelanders", imposed a super-majoritarian hurdle which it could not pass as "the powers that be" did not

¹¹ There is a large literature on this topic. For a few starting points discussing principles, issues, and applications, see Goodin, Robert E. (2008), *Innovating Democracy. Democratic Theory and Practice after the Deliberative Turn*. Oxford: Oxford University Press; Dryzek, John S., *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*; Landemore, H el ene, *Open Democracy. Reinventing Popular Rule for the Twenty-First Century*.

¹² In this respect, I part ways with those who see deliberation as the essence of democracy. Deliberation is an inherent feature of democracy, but who has the final say is definitely a key issue. Of course, the distribution of *all* forms of power is important to democracy (as extensively discussed in this book), but when it comes to formal political-institutional power, who has the final say, is arguably the most important issue for democracy, along with how much opportunity there is for the people to have an input.

¹³ Landemore, H el ene, *Open Democracy. Reinventing Popular Rule for the Twenty-First Century*, Chapter 7.

want to relinquish control. In other words, who has the final say proved to be the decisive factor.¹⁴

Giving the final say to the people requires breaking down such barriers. However, this should apply not just to ad hoc single issues, but to all matters that are of (great) importance to the people as a whole. For obvious reasons, doing so by very frequent referenda would not be practical, apart from their vulnerability to manipulation by non-democratic forces. Allowing all people to participate in online debates and decision-making on issues (internet democracy) is also not practically feasible with very large numbers of people. Also, such debates may be dominated by a highly unrepresentative section of the population and are also prone to manipulation (as illustrated by experiences in the social media like Facebook). Making well-informed decisions based on genuine and open discussion in which consideration is given to a diversity of views, values, and interests, requires more than twittering. Therefore, I propose the creation, in every state, of a permanent citizens' body that has supreme power, and that arrives at decisions through the kind of deliberative processes that have proven their value in previous experiences. I will refer to such bodies as Sovereign People's Authorities (SPAs).

Here, I discuss my main arguments in favour of establishing such Authorities at the apex of existing political systems.¹⁵ Obviously, their creation would have different ramifications for existing systems with their wide variety of political-institutional arrangements. But the main principles and ideas on which the creation of SPAs are based apply to all political systems that claim that their legitimacy is rooted in the sovereignty of the people rather than in God or some other authority with whatever claim to supreme power. First, I outline what I see as the main features of such bodies. Next, I elaborate on my main arguments (linked to intrinsic and instrumental values), followed by a discussion of some of the main counterarguments that might be raised against the idea.

In my view, the three main features of SPAs should be: establishment by sortition and regular rotation; a constitutive (including constitutional) role; a long-term orientation.

First, membership of an SPA should be determined by sortition, that is by random selection from the population as a whole (based on a minimum age limit that

¹⁴ *Ibid.*, 175.

¹⁵ I have chosen the label Sovereign People's Authority rather than that of Sovereign Citizens' Authority for two main reasons: first, the latter has been misappropriated by extreme-right white supremacist organisations that arose in the United States in the 1950s, and that used the expression "supreme citizen" to justify not paying taxes or fines and, more recently, to refuse wearing masks during the COVID-19 pandemic, seeing such rules as infringements on their individual rights as a citizen; second, because the name Sovereign People's Authority better encapsulates the principle that sovereignty lies with the people as a whole (popular sovereignty), not with individual citizens, or monarchs or parliaments. The notion of popular sovereignty has nothing to do with either white supremacy or the idea that *individuals* are sovereign. Meaningful concepts like popular sovereignty (or freedom, justice, sustainability) should not be abandoned because some people abuse them for their own narrow purposes. Rather, they must be reclaimed for the whole of society.

can be altered by the SPA once established).¹⁶ This should be done using sophisticated sampling methods to ensure that the composition of an SPA is as representative of the population at large as possible. This varies with the size of the Authority: a larger number/sample will produce a more fine-grained reflection of the diversity of a population. A body of between 250 and 1000 could be considered sufficiently representative.¹⁷ The length of the term of membership for such authorities is open to discussion. On the one hand, to assist in the development and maintenance of the knowledge, experience, and skills conducive to the operation of such an Authority, it may be argued that a fairly long membership term of, say, six years, with a rotation of one-third every two years, is desirable. On the other hand, a case can be made for having a shorter term of, say, three years, with an annual rotation of one-third of the members to increase the number of citizens who get a chance to participate, and also to reduce the chance of the Authority being captured by particular interests.¹⁸ Frequent rotation would ensure that an SPA reflects societal changes, possibly linked to events and changes in circumstances, views, and demographics. The general idea is to make the Authority as much as possible a dynamic miniature version of society in particular regarding the diversity in terms of age, gender, income and wealth, religion and other self-professed beliefs, education, ethnicity, geography, and possibly other characteristics that, although objective, are likely to influence or shape people's values, ideologies, and views (which arguably are impossible to define objectively). Most likely, this would make it also reflective of the diversity of the values and beliefs held in society. As such, an SPA can be seen as a representative miniature version of society that can stand in for the whole of society when it comes to collective decision-making on behalf of society.

¹⁶ For a seminal publication on the idea of applying sortition to the highest political-institutional levels, see Callenbach, Ernst and Michael Phillips, *A Citizen Legislature*. The authors put forward a proposal to compose the US House of Representatives using sortition. Their proposal was inspired by the shortcomings of the existing US system, which they attributed to the influence of "big money" and special (corporate) interests, as well as an overrepresentation of lawyers.

¹⁷ Callenbach and Phillips argue that a sample (body) of 435 people would be large enough to provide a "transcript" of the (US) nation. *Ibid.*, section 4. Landemore suggests an assembly of between 150 and 1000 and notes that a sample of around 500 is considered the "gold standard". Landemore, H el ene, *Open Democracy. Reinventing Popular Rule for the Twenty-First Century*, 13, 64, 92. Statistically, a sample size of 601 to represent a population of 5 million would give a margin of error of 4% and a confidence level of 95%. Above populations of 20,000, the sample size needed is not much larger. Medallia (2021), Checkmarket. Sample Size Calculator, <https://www.checkmarket.com/sample-size-calculator/> (Accessed: 22 September 2021).

¹⁸ Callenbach and Phillips suggested a turnover of one third every year. One of their main arguments for frequent rotation is that it would significantly reduce the chances (or at least the effectiveness) of bribery and corruption efforts. This is a valid argument, but very short terms imply that members will have little time to learn and apply the knowledge needed to contribute to deliberations and decision-making. Full transparency of all deliberations and communications between council members, as well as strict accountability (of financial transactions, among other) can also reduce the scope for corruption. Callenbach, Ernst and Michael Phillips, *A Citizen Legislature*.

The second feature of an SPA would be that it has supreme power and thus stands at the apex of the political system.¹⁹ However, rather than being involved in day-to-day decision-making on all matters that are presently handled by governments (the executive and legislative branches), the SPA would take on a constitutive role. This means that it would focus on and determine the institutional and policy frameworks within which day-to-day political decision- and policymaking occurs. Institutional frameworks are defined broadly and comprise all the organisations of the state, the rules that prescribe their main roles and functions, but also the constitutive principles, values, and goals on which these organisations, rules and legislation are based.²⁰ Thus, at the most fundamental level, an SPA would write and revise a country's political constitution, define (positive and negative) human rights and obligations, and determine the functions and responsibilities of the state's institutions (legislature, executive, judiciary, police and army). But it would also be able to adopt policy frameworks which the government of the day must respect in the development of policy. Such policy frameworks may comprise fundamental principles, goals and/or limits/boundaries. Policy frameworks may relate to anything that the Authority deems of (great) importance, which may include social (justice) issues, the distribution of wealth and income, environmental boundaries/limits and goals, the principles guiding the development of science and technology, the media, rights related to housing, health and education, and property rights, including to the means of production. An example would be the development and adoption of a Green Plan as discussed in Chapter 1. Not for nothing, these authorities would be called sovereign as they, and no one else (government or non-government body), have the right to determine (and to have the final say on) what is deemed to be of fundamental importance to society.

Third, SPAs would focus on what societies consider important in the long(er) term. It would address the big questions that are too hard for most existing political systems to address, such as the kind of society that people want to live in, collective goods and aspirations, and the conditions that need to be created to promote the flourishing of individuals, communities, and the environment. Thus, its role is to steer societies consciously and deliberately into a direction that is considered collectively to be desirable and/or necessary. This implies that the Authority would (or needs to) avoid getting bogged down in the details of policy development and the day-to-day issues that presently dominate the business of governments and the media. Rather, it would put in place the mechanisms needed to monitor and assess the performance of governments against the fundamental (constitutive) principles, rules and goals that have been adopted by the Authority and hold governments accountable for what they have done or not done to advance these. It is thinkable that an SPA would include in the Constitution a provision for sanctioning (and possibly dismissing) ministers and governments for breaches of these constitutive principles, rules, values, and goals, to

¹⁹ For this reason, I have chosen to label these bodies Authorities rather than Councils. Citizens' Assemblies or Citizens' Juries have mostly had advisory roles.

²⁰ Doremus discusses a similar view related to the role of constitutive law and its importance to environmental policy, emphasising the importance of values that underlie such law. Doremus, Holly (2003), "Constitutive Law and Environmental Policy", *Stanford Environmental Law Journal*, Vol.22, 295-379.

ensure that society's views and values are not ignored or worse, sabotaged, by the government of the day.

These are what I see as the main features of a Sovereign People's Authority. It would be up to an Authority itself to further define the institutional details, including those governing its own role, and for other political institutions and the political system as a whole. Therefore, there is little merit now in elaborating on what these should be. Nonetheless, it is important that a proposal to establish such an Authority is specific enough to enable the citizens to form a well-informed opinion about the status, role, and rationale for its creation. To this end, I will add some further considerations and arguments.

First, it should be emphasised that an SPA, as proposed here, is a new and additional element of representative government. SPAs do not constitute a form of direct democracy that enables the active participation of all citizens in political decision-making.²¹ An SPA represents the whole of society and stands in for society. The individual members of an SPA do not represent a particular group or class of society. They represent society by speaking their own mind which, as pointed out above, is likely to be congruent with that of a segment of the population. The fact that, at the same time, they can speak for themselves and collectively for society as a whole, gives the SPA an important edge over traditional forms of political representation. By contrast, parliaments in most liberal democracies are far from representative of the whole population in terms of age, gender, income and wealth, religion or other self-professed beliefs, education, ethnicity, geography and other more or less objective characteristics that shape or influence people's views, including those concerning their own and collective interests. Moreover, collective decision-making in such systems is dominated by particular interests, such as business groups, occupational and professional organisations, political-ideological groupings, and political parties. Interest groups have long been regarded as the key political actors in liberal democracies, while political parties provide platforms for aggregating rafts of interest groups under a programme and/or particular ideology (view of society). But, as many political analysts have pointed out before, politics in such systems is biased towards serving particularistic and short-term interests at the expense of collective and long-term interests.²² I would add that the governments of such systems almost always

²¹ The importance of this distinction is elaborated upon by Landemore, who rightly points out that *direct* democracy in this sense is only possible in the smallest of polities. Even in ancient Athenian democracy, often depicted as a form of direct democracy, public participation in deliberation and decision-making was de facto confined to a proportion of the population, which was too large (estimated around 30,000) for everyone to *actively* participate. Most of the debate (also in the Assembly, which could comprise up to 8,000 people) took place between a relatively small group of "professional orators" (whom we might call politicians in modern terminology). Landemore, Hélène, *Open Democracy. Reinventing Popular Rule for the Twenty-First Century*, notably Chapter 3.

²² Lowi, Theodore J. (1979, 2d. ed.), *The End of Liberalism: The Second Republic of the United States*. New York: Norton; Dryzek, John S. (1992), "Ecology and Discursive Democracy: Beyond Liberal Capitalism and the Administrative State"; Eckersley, Robyn, "Environment Rights and Democracy".

represent a fraction of the citizens of a country, and in many cases not even a majority of the electorate.

Second, another reason to support the creation of SPAs is that it can help to restore or enhance the legitimacy of political systems. As discussed before, the election of Donald Trump in the US, Brexit, and the rise of populist movements and leaders in many countries can be seen as a decline of trust in political leaders and the legitimacy of political systems (the establishment). As the main political parties and leaders (often across the political spectrum) are often accused of being all the same, out of touch with the common people, or worse, corrupt and/or in the pocket of big business, this produces widespread political alienation and cynicism towards governments and elections ("They do what they want anyway"). This generates not only negative attitudes towards the state but undermines the belief in the value of democracy. These feelings have, of course, been cultivated by a variety of groups, including the extreme right and those who want to minimise unwanted state interference with the free market (big business).²³ Some go one step further and deny even the existence of societies.²⁴ Such moves also include banishing the concept of citizens from the political vocabulary altogether and replacing it with taxpayers and consumers.²⁵

Arguably, to address the issues of distrust, alienation, fractiousness, political polarisation, and the actual corruption (involving money) that characterises many existing political systems, what may be needed is nothing less than a real social contract. The label social contract in this context seems more appropriate than its use to refer to the mythical foundation of societies or nations, or to what political philosophers and their supporters think holds or should hold societies or polities together.²⁶ Arguably the most important rationale for establishing an SPA as a truly representative body that stands in for a society is to find out what it is that binds the members of that society together, and why they form a political community. A common vision of the long-term future of a society, and the definition of its most important values, principles, rules, collective interests, and goals, forged by an SPA

²³ As famously expressed by President Ronald Reagan, who stated in his inaugural address on 20 January 1981 that "Government is not the solution to our problem, government is the problem." Ronald Reagan Institute (2021), Reagan Quotes and Speeches. Inaugural Address, <https://www.reaganfoundation.org/ronald-reagan/reagan-quotes-speeches/inaugural-address-2/> (Accessed: 15 September 2021).

²⁴ Such as UK Prime Minister Thatcher. See p.177n90.

²⁵ In New Zealand, a neoliberal libertarian political party was set up under the name of Association of Consumers and Taxpayers (ACT) to give expression to its view of what politics is about.

²⁶ Thomas Hobbes, John Locke, and Jean-Jacques Rousseau are modern philosophers most associated with the idea that societies are based on a "social contract", an abstraction rather than an historical fact, that constitutes a political understanding that citizens accept the authority of a government as long as the government protects the interests of its citizens, in particular their security. As such, it is strongly concerned with the moral foundations that underlie societies and how or why these are, or should be, held together. For an overview of social contract theories, see Friend, Celeste (2021), Social Contract Theory, Internet Encyclopedia of Philosophy, <https://iep.utm.edu/soc-cont/> (Accessed: 17 September 2021).

after extensive deliberation, can be regarded as nothing less than a foundational agreement on what holds a specific society or country together, also as a polity. This does, of course, not imply that all members of a society hold the same or similar views on all matters that are considered important, and principles and institutions that recognise diversity are likely to (have to) be important elements of a social contract to keep a polity together. But, at the same time, it should not be assumed that diversity means that the members of a society have no common interests and/or are unable to agree on what such interests are. Given the high level of interdependence between the members of all societies, it is hard to imagine that some groups might consider that they have no common interests whatsoever with the broader society in which they live (apart from living in the same geographical area).²⁷

Here, I will not enter into a discussion of the formal political-institutional ramifications of the establishment of an SPA. These will differ from country to country. But one thing that needs to be emphasised is that these authorities must be allocated supreme power (have the final say) on all matters that are considered to be important by these authorities themselves. Thus, an SPA must have the right to overrule other branches of government, even though these may continue to pass legislation, make and implement government decisions and policies, and pass justice. But they do so based on the constitutive values, principles, rules, and goals determined by an SPA. The legitimacy of an SPA, as a body that stands in for society, is of a higher order than that of governments elected and supported by fractions of the population (often not even a majority). Also, as SPAs would have supreme (constitutional and constitutive) power, no court (however supreme or independent) should have the power to assess and declare decisions of an SPA unconstitutional, as such courts are commonly far from representative or democratically constituted. The only body that should be able to overrule a decision by the SPA is that of the citizenry as a whole. This suggests that it should be possible for citizens to demand a referendum on SPA decisions that prove to be highly controversial. But, in line with the fact that an SPA is representative of the whole of a population, to overrule a decision made by such an Authority through a popular vote (referendum), there should be near-universal turnout (say, at least 90%) and/or a very high level of support among the electorate (say, a super-majority of perhaps 70% or 80% or more of the electorate as a whole, including those who have not voted). In this context, it must be kept in mind that the turnover of a proportion

²⁷ It is thinkable that, in highly polarised societies (politically, ethnically, or otherwise), no such common ground can be found. If so, this casts doubt over the viability of such a polity and could provide a legitimate basis for arguing that it be split up territorially (into smaller states), or functionally (separate political institutions for different groups). The latter form creates all kinds of complications, but it might be better to let people (of different groups) find out the unworkability of such arrangements rather than keep a polity together by suppression and force. Paradoxically, creating such arrangements between highly polarised parties *requires* in-depth deliberation aimed at finding common ground on *what* arrangements are acceptable and could be made to work, *de facto* shaping a new but differentiated polity (akin to, for instance, the EU). In this context, the “subsidiarity principle” is likely to be helpful, as it implies that only matters on which it is agreed that they cannot realistically be handled (well) by smaller polities would be delegated to larger ones. Such a functional approach is compatible with the retention of the final say (sovereignty) by the smaller polities.

of the members of the Authority (annually or bi-annually) may automatically create the support basis for a change that the people advocate.

No doubt, there are many grounds on which the creation of SPAs can be challenged and will be opposed. As noted above, many issues would need to be resolved before proposals for their creation can be submitted for approval to citizens, and the conditions for their creation will differ from country to country. Having presented my main arguments for their establishment, I will now discuss some of the general counterarguments that can be expected.

Arguably, the first objection that a proposal to create SPAs is most likely to provoke is that it is too risky to allocate supreme power (sovereignty) to a group of people who are unlikely to have the knowledge and expertise that is required to make sound decisions on the common and long-term interests of a society. Members of an SPA may be biased and prejudiced and not have the personality, motivation, knowledge and/or skills that are needed to scrutinise and debate issues rationally and collectively. As a result, it might be said, they are likely to make decisions that are poorly grounded in knowledge, incoherent, flawed, ineffective and ultimately disastrous for the whole country. As an SPA would be assigned supreme power, this argument must be taken very seriously. But there are at least three grounds for rejecting these objections.

First, democracy is not "rule by the wise", most knowledgeable, or "the best". In ancient Greece, the term for "rule by the best" was aristocracy, not democracy. In the same vein, rule by scientists ("the brightest minds in the country") and/or by experts in all kinds of fields is also not democracy but technocracy. Simply stated, democracy means rule by the people. Democracy is not about having the correct (degree of) knowledge, or even about having a minimum of knowledge or expertise. This applies even to existing liberal-democratic systems. Most elected parliamentarians are not scientists or experts and have limited (scant, if any) knowledge and understanding of the most important issues that affect a country. A cynic might note that rare is the politician who has any expertise other than knowing how to make promises and then break them. The point is that government and politics are not about rule by "the best" or having the best knowledge. It is foremost about competing interests, power, and making decisions that keep those who govern (and/or their party) in power, among other by waging ideological battles, using propaganda and public manipulation (public relations) and, not seldomly, dirty and ugly means. This may sound cynical or realistic, depending on one's views. In more sympathetic terms, one could say that governing is about trying to satisfy many different demands that are often incommensurate and conflicting and not easy to accommodate given the available means. It is about compromise ("the art of the possible") and keeping key constituencies happy. Still, it is mostly a matter of muddling through while boasting about what has been achieved and downplaying or hiding what has not. But the argument that a lack of knowledge on the part of members of an SPA makes them unsuitable for high-level governance or government is not very persuasive as it is also very (or even more so) applicable to politicians and parliamentarians.

Of course, this does not mean that science, knowledge, and experts do not have an important role to play in the decisions to be made by an SPA. On the contrary, it is

crucial that an SPA is supported by a comprehensive body of scientists, researchers, and analysts who can provide it with high quality, non-partisan, data and information, analyses, reports, and advice. The staff of this body needs to be drawn from a wide range of disciplines linked to the three dimensions of sustainability (ecological, resource, and social). They must work in interdisciplinary teams to avoid cognitive capture by a particular discipline, and develop transdisciplinary and holistic ways of looking at, and explaining reality. Special care should be taken that staff are not captured by conventional (neo-) classical/neoliberal economists or scientists and experts who have connections with vested economic interests. The SPA's body of researchers and advisors must be independently funded (beyond the control of the government of the day) and accountable to the SPA, which must have a final say over appointments and dismissals. Supported by such a body, it is likely that SPA members will be able to make better-informed decisions than existing governments that rely on partisan advisors, politicised bureaucracies, private consultants, partisan think tanks that have their own political-ideological agendas (often funded by billionaires and corporations), and PR advisors whose main concern is to maintain or boost the government's popularity and status in the polls.

However, public policymaking is not simply a matter of applying science and expertise. Equally important is the role of values and interests in shaping options and influencing decisions. But a significant difference between existing decision-making processes in liberal democratic (or authoritarian) institutions and the proposed SPAs lies in how values and interests influence and shape those decisions. The main strength of an SPA lies in its ability to stay out of the day-to-day political fray (partisan and petty politics) and to focus attention on issues that (assumedly) are most important to the whole of society, to take a long-term view, to engage in open discussion on a level playing field with people who have different views, to try to understand what lies behind those differences, and to work together on finding common ground and developing shared goals.²⁸ This is not, in the first instance, a matter of using one's particular views, interests, or expertise to determine how all kinds of problems should or must be solved, but to engage with others in developing an overarching constitutive framework (a social contract) that provides direction and guidance to policies and institutions.

There are, therefore, good grounds for arguing that the decisions of an SPA, supported by a body of advisors as described above, and based on the common ground created by the (deliberative) interaction between the wide range of values and interests in society, will be superior to those made by most existing governments, both in terms of their knowledge and their support basis.

A second counterargument that the proposal to create Sovereign People's Authorities based on sortition is likely to provoke is that this would undermine the legitimacy of existing democratically elected institutions (such as parliaments and presidents). Being ruled by a non-elected body might be seen as less democratic than

²⁸ It should be noted that, in larger bodies, deliberation would probably need to be stacked, with discussions taking place in small groups that feed (through representatives) into more encompassing scales. Landemore, H el ene, *Open Democracy. Reinventing Popular Rule for the Twenty-First Century*, 64-65.

being ruled by governments that the people have actively chosen through the act of voting.

This counterargument is valid if one assumes that electing representatives is the *only* way to give form to the idea of democracy. But, as argued above, the idea of democracy should not be confused with particular institutions such as voting for parliaments, presidents, or other institutions. If democracy is defined as letting the people decide how they wish to be governed or to govern themselves then this can take many different forms. Theoretically, I must admit, this definition opens the door to accepting that people may choose to be governed by authoritarian leaders. This has already been the case in countries where such leaders have been elected, even though this always raises questions about the way elections have been conducted and whether the results have been tampered with. But, as discussed before, questions can be raised about how democratic the electoral system is in many countries, in particular, if a large proportion of voters (often even a majority of the electorate) has not voted for the party or parties that have won an election via non-proportional voting systems. If being elected by a majority of the people (including those who do not vote) is used as a yardstick of democracy, then many governments, even in liberal democratic political systems, do not meet that criterion, and hence have doubtful legitimacy. Instead, the people may choose to be represented by an SPA knowing that it will be (much) more representative of the population as a whole than existing parliaments. Of course, establishing such an Authority will need to be based on voting and the people must have recourse to abolishing or changing this institution (via constitutionally entrenched rules) if they are dissatisfied with its performance. But as a highly representative SPA can be seen as standing in for the whole of society (compared to a fraction or fractions on which most elected parliaments are based), it has a stronger claim to being called democratic and to being assigned sovereignty than many existing parliaments and governments.

Another, but perhaps more reluctantly or cautiously formulated counterargument may be that an SPA is likely to include (a large proportion of) “common people” who would not have a clue about how to perform the tasks that are expected from them, and that are likely to cause chaos, disorder or worse. This argument has its source in the negative view of democracy and its association with mob rule referred to above. It reflects not only an elitist view of who is suited to partake in political decision-making, especially at the highest level, but also a fear for what might happen to the elite(s) and their property if the people were to have the final say.²⁹ That governing is the proper domain of the higher classes and/or people with outstanding leadership qualities is a view that is still strongly entrenched in many societies, even among the so-called common people. This is a persistent remnant from the long history of non-democratic rule by kings and queens, oligarchs, and elites, and of the view that some people have a natural right or are born to rule over others.

Despite the persistence of this belief, there are good reasons for discarding it. First of all, democracy is not about giving people the right to just choose between

²⁹ It is *this* view that creates a distinction between the people and the elite(s), which is reciprocated by the slogan “power to the people” which is commonly interpreted as taking it away from the elite(s).

leaders or elites. From a (radical) democratic perspective, all people already have political rights and do not need to be *given* such rights. The idea that some people (can) grant these rights to, or withhold them from, others is fundamentally undemocratic. Second, this view tends to overlook the fact that all leaders and members of elites are also human, with all their flaws and idiosyncrasies that unavoidably affect their decision-making. Look closer, and all leaders are very normal or common people (sex scandals are highly revelatory in this respect). They may have a big mouth, rhetorical skills, or the personality of a bully, but they are not fundamentally better people than others. Arguably, what distinguishes good leaders from bad leaders is a sense of morality, duty, and service to the common good. It is not the ability to take the people with them, which many dictators have been (and still are) able to do with their personal skills and the help of propaganda and PR. But political leaders and elites do not have a monopoly over morality and a sense of duty and service to the common good (possibly even less, as they are foremost concerned about protecting their own and sectional interests and power). Such qualities can at least as much be found among the (potential) members of an SPA who have been called to this duty, many of whom are likely to regard it as a privilege and will give their utmost best in this role. Moreover, the functions and processes of an SPA, as described above, aim to cultivate a culture and sense of common purpose. Third, as SPAs are highly representative of the people at large, they will be able to draw on a (far) wider range of knowledge, expertise, and qualities (based on occupations, talents, areas of knowledge and experience) than most existing parliaments (in which lawyers tend to be over-represented).

A final counterargument that I address here is that it is unlikely that, even if an SPA is established, it will be willing to undertake the kind of systemic or transformative changes that are necessary to move towards more sustainable societies and a less unsustainable world. This argument is based on the assumption, which is also shared by some advocates of sortition, that such a body will reflect the same spread of views and opinions as those held in society.³⁰ In other words, an SPA will be as fragmented, divided, conservative or progressive in its views as the rest of society. Why then would an SPA be willing to undertake fundamental, transformative change, or be capable of forging agreement for such change among itself?

This is a valid question, and I do not deny that I have concerns on this front myself. The creation of an SPA does not guarantee that transformative change along the lines that anyone thinks is necessary will be implemented. As SPAs are sovereign institutions that will make up their own mind about what is necessary or desirable to advance the perceived common and long-term interests of a country, no one can be certain about what such authorities will do or decide. Yet, I can think of three main reasons for being optimistic.

First, public surveys indicate that in many countries a majority of people are seriously concerned about environmental problems and trends. In 2019, a Gallup poll put the percentage of Americans prioritising the environment over the economy at 68%. Since 1985, in the US, the environment has typically scored higher than the economy as a priority, except for the period between 2009 and 2013, but in 2019 the

³⁰ Callenbach, Ernst and Michael Phillips, *A Citizen Legislature*.

margin was the highest since 2000.³¹ In September 2020, a global opinion poll indicated that in 20 countries, including the US, European countries, Australia, Canada, Brazil and South Korea, a median of 71% of people assigned priority to the environment over economic considerations.³² In 2019, in a special Eurobarometer poll, 72% of interviewees of the 28 EU countries indicated that governments did not do enough to protect the environment.³³ In 2021, with the effects of climate change making themselves increasingly felt around the world, across the G20 nations, 73% of people believed that human activity had pushed the Earth close to tipping points, and 74% agreed that “countries should move beyond focusing on gross domestic product and profit, and instead focus more on the health and wellbeing of humans and nature.” There is also widespread agreement (75%) that the COVID-19 pandemic has demonstrated that rapid behaviour change is possible, and 71% thought that the pandemic “provided a unique opportunity to make societies more resilient.”³⁴

While such data need to be treated with caution, they do indicate that in many countries the public is well ahead of governments when it comes to assigning priority to environmental protection and that, if an SPA were to be created from a cross-section of citizens, its members are likely to give a higher priority to environmental protection and sustainability than most members of existing parliaments and government.

Second, as mentioned above, the rationale for establishing SPAs is to develop a framework for decisions and policies aimed at creating a long-term view of a desirable society based on shared principles, interests, and goals. This makes it highly likely that the agenda and work programme of the Authority would focus on long-term environmental sustainability and what is needed to protect and advance the interests of societies as a whole on that basis. Therefore, an SPA will not be a very conducive platform for promoting the interests of particular (sectional) interest groups, something that dominates much of the business of existing political systems. Apart from enshrining this focus on the common and long-term interests of society constitutionally, it is important that the institutions, procedures, and support structures that guide the operations of an SPA are designed to create an organisational culture that cultivates and maintains that focus. This applies also to the role, work, and capacity of the advisory and administrative bodies on which the Authority relies, and the expertise and orientation of their staff. In this respect, it also helps that, across global publics, most people hold scientists in (some or high) esteem,³⁵ something that is likely to improve if and when SPAs will be able to rely on

³¹ Saad, Lydia (2019), Preference for Environment over Economy Largest since 2000, Gallup, <https://news.gallup.com/poll/248243/preference-environment-economy-largest-2000.aspx> (Accessed: 5 October 2020).

³² Funk, Cary, *et al.* (2020), Science and Scientists Held in High Esteem across Global Publics, <https://www.pewresearch.org/science/2020/09/29/science-and-scientists-held-in-high-esteem-across-global-publics/> (Accessed: 22 September 2021).

³³ European Commission (2020), *Attitudes of European Citizens Towards the Environment*, 67.

³⁴ Watts, Jonathan (2021), "Humans 'Pushing Earth Close to Tipping Point', Say Most in G20", *The Guardian*, 16 August 2021.

³⁵ Funk, Cary, *et al.*, Science and Scientists Held in High Esteem across Global Publics.

the advice of their own independent scientists. Given the rapidly deteriorating environment and the fact that independent scientists are increasingly leaving their ivory towers and calling for radical action, it is also likely that this will influence the assessments and views of the members of an SPA.

Third, although members of an SPA are likely to bring with them their biases and possibly poorly informed opinions, and different values and views on what is important in life, society, and the world, a reliance on the principles, rules and procedures of deliberative democracy, as already practised on many occasions in ad hoc issues as mentioned above, will be conducive to the development of open-mindedness. This is likely to extend to what people may initially consider to be radical and/or unrealistic views. Assuming that at least a proportion of the members of these authorities will hold (fairly) radical views and ideas, these will also get a chance to be aired and debated on a level playing field.³⁶ Again, this is not a guarantee that such views and arguments will carry the day, but they are much more likely to be taken seriously in these forums than in the existing political arenas and media of most countries. We cannot assume that, magically, all members of an SPA would leave behind their ideologies, biases, and interests, and suddenly accept that transformative change is needed in the interest of the common good, nationally, and globally. However, properly conducted, deliberative rules, methods, and procedures ("discursive designs")³⁷ can go a long way towards creating the conditions for open-minded discussions based on different perceptions and interpretations of problems or issues, sources or causes, and potential approaches or solutions. Arguably, apart from being remunerated for their work, the greatest potential reward for members would be the reputation that they acquire and leave behind for what they have contributed to the common good of the country.

There are, therefore, good reasons for thinking that the major shift in political-institutional power that the establishment of SPAs will bring about will create a greater openness towards fundamental or transformative changes aimed at advancing more sustainable and desirable societies as defined by society rather than by the most economically powerful and existing governments. While there is no guarantee that such an Authority *will* undertake such changes, it is much more likely to do so than existing political institutions dominated by particularistic and short-term interests. At

³⁶ That the youngest generations (the millennials and generation Z) have more radical views on societal matters has been revealed by several polls that indicated that 75% of these groups in the UK believe that the climate emergency is "specifically a capitalist problem", that 72% back "sweeping nationalisation" and that 67% "want to live under a socialist system". In the US, in 2018, only 45% of young Americans saw capitalism favourably, down from 68% in 2010. Jones, Owen (2021), "Eat the Rich! Why Millennials and Generation Z Turned Their Backs on Capitalism", *The Guardian*, Publication date: 20 September, <https://www.theguardian.com/politics/2021/sep/20/eat-the-rich-why-millennials-and-generation-z-have-turned-their-backs-on-capitalism> (Accessed: 21 September 2021). The fact that many of these generations will bear the brunt of the growing social and environmental problems no doubt plays a role in their disenchantment, which is likely to flow through to a Sovereign People's Authority (if established) on which they will also be represented.

³⁷ Dryzek, John S. (1987), "Discursive Designs: Critical Theory and Political Institutions", *American Journal of Political Science*, Vol.31, No.3, 656-679.

the very least, one can argue that the creation of SPAs would allow societies to get their best shot at the environmental crisis. It is sometimes argued that a country gets the leaders that it deserves. If SPAs are established, one would be justified in saying that societies may get the future that they deserve.

Establishing SPAs: agency and strategy

Ultimately, whether fundamental transformations aimed at creating more sustainable societies occur depends on agency (the choices made by individuals and groups), power (the resources actors have at their disposal to give consequence to their choices), contingency, and (strategic) action. As discussed in this book, although a growing number of people may support environmental protection, the odds are stacked heavily against them. The prevailing institutions pose big obstacles to environmental integration, tilting the playing field in favour of non-environmental interests, while the economic power of environmental advocates pales in comparison to that of those interests. This power imbalance has led, and some might say forced, environmental advocates to focus their efforts on environmental problems or issues that offer the best chances of mobilising and using the power resources to which they have the most access: cognitive and social power. By skilfully using the tendency of the media to focus on emotive and dramatic stories and events, at times, environmental activists have been able to force the hand of governments to act on particular issues, for instance, to ban certain dangerous chemicals, stop development projects, or to protect some species, forests, or natural areas. In recent years, climate change (global heating) has become one of the main foci of environmental action aimed at forcing governments to adopt more ambitious targets and actions to reduce greenhouse gas emissions.

Although the efforts of environmental activists and movements are highly laudable, sometimes heroic, and at times effective, they have thus far failed to bring about the fundamental or transformative changes that are required to address the causes and sources of environmental pressure and problems. Although, on some issues, victories may have been scored and some progress made, environmental pressures continue to build up, new problems keep on emerging and, overall, environmental degradation continues unabated. There is, therefore, a strong need to revisit the focus and actions of the environmental movement.

One option, advocated by many radical environmental advocates, including eco-socialists, is to put forward ideas and/or demands for the abolition of capitalism which is rightly considered to be a (or even the) main source and driver of environmental decline. As I have indicated in Chapter 7, I agree with the assessment that capitalism is incompatible with meaningful and long-term environmental protection, and it will therefore have to be abolished and replaced by a different economic system. The same applies to the system of large-scale industrial production, which developed in a symbiotic relationship with capitalism from the 18th century. To make production and consumption compatible with ecological systems and processes, and with resource use practices that can be considered socially necessary or desirable, will require a major transformation of economic institutions, technologies, and practices.

However, as both capitalism and industrialism are deeply entrenched in the dominant political-economic systems of countries around the world, demands for

immediately abolishing these systems seem to stand little if any chance. Moreover, at this stage, there is no widespread agreement, or even clarity, on the (kind of) systems that can or should replace them. The idea or expectation that the working class or the labour movement can or will be the most important agent of change, whether by revolution or reformist means, is no longer realistic. Although, strictly defined, most people in modern societies are still workers, the proportion of people that identifies themselves as such, and that supports the labour movement, has sharply declined. Moreover, the political-institutional power basis of trade unions has been severely curtailed by neoliberal reforms of labour legislation that make it very difficult for the movement to regain political ground. Also, whatever remains of the labour movement, including the social-democratic parties that were behind the expansion of the welfare states in many countries in the 19th and 20th centuries, has watered down their political-ideological aspirations and poses no threat to capitalism or industrialism. Therefore, while these fundamental changes are necessary, such demands are unlikely to gain much traction and provide a basis for effective social mobilisation. To make such changes possible, fundamental change of a more realistic and strategic nature is required.

In this context, it is important to unmask the unfruitfulness of some other often heralded calls for action to address or solve the environmental challenge. It is often argued that we are all responsible for environmental problems and pressures through our individual choices, actions, and behaviour. The corollary to this argument is that, if we want to solve these problems, we all need to change our behaviour and opt for environmentally responsible products, services, behaviour, and practices. Conveniently, this argument disguises the fact that some people are far more responsible than others, in particular those who have the power to make political-economic decisions that have major environmental impacts, including on investments and finance, production, science and technology, energy and transport, and defence spending, among other. By far most people have no role or influence in such matters and have very little practical choice when it comes to dealing with the outcomes/products of these decisions. Moreover, if they do have a choice (for instance, not to travel by car or aeroplane), the positive effects of the decisions made by a (very) small fraction of the population or consumers, are completely negated by the (big) majorities that continue on the business-as-usual path. Effectively addressing by far most environmental problems requires real collective action based on collective decisions that are binding upon all members of society.

In the same vein, activities aimed at creating more sustainable communities, while highly valuable for both social and environmental reasons, can only go so far in moving societies and countries towards sustainability. Community-based efforts involving ecological protection and restoration, the promotion of waste reduction and recycling, the reduction of pollution, the banning of pesticides and the promotion of organic growing, encouraging the uptake of sustainable transport and energy alternatives, sustainable housing projects, among other things, are very laudable in that they generate positive energy and provide foci for people who want to do their bit for the environment, and as they often produce tangible results and improvements for communities and local environments. Also, they can show what is possible and can

or needs to be done at the local level. However, without fundamental changes in local and national-level institutions and policies in areas such as energy, transport, industry, and urban and regional development, they are little more than plasters on festering wounds. At worst, they can create the impression that local authorities and vested economic interests are committed to creating sustainable communities while in practice economic growth and development remain the highest priorities. Therefore, local agency and efforts aimed at environmental protection and improvement need to be complemented by action aimed at fundamentally changing the systems that generate unsustainability. Changes at the individual, group, local and individual business levels must be supported by transformational policy and institutional changes at the national level if they are to bring about meaningful change at a country, and possibly international, level.

Calls for fundamental change often emphasise the importance of building a broad-based social movement (a “big tent”) that brings together advocates for change on a (very) wide range of social and environmental issues, including indigenous people, the whole spectrum of environmental groups, the labour (trade union) movement, the social and environmental justice movements, the gender-based movement, and others. One of the most inclusive examples on this front is the World Social Forum, which aims to provide an international counterweight, or at least an alternative voice, to the Davos meetings of the World Economic Forum, which is widely seen as a platform for debating global issues controlled by the global political-economic elite (the “1%”). While the World Social Forum is more an arena for exchanging views and ideas than a medium for organising global action, advocates for transformative change increasingly emphasise the need for creating a broad programme of demands based on a values-based vision of the world supported by such inclusive social movements.³⁸ It is thought or hoped that such an alternative vision and programme has the potential to be supported by a majority of the population, and therefore will be transformative.

While, again, I applaud such efforts and largely agree with many of the substantive ideas that are contained in such proposals, I have my doubts about the construction of (very) broad-based programmes and visions as strategies for bringing about fundamental change. For a start, the broader and more diverse the groups involved in debating and constructing such visions and programmes, the more difficult it becomes to reach an agreement on more than either very general principles or rather technical ideas or proposals. Or they become catalogues of a large number of demands without a coherent cognitive framework and strategic thinking about priorities and how to bring about change. Also, the logistics of involving perhaps thousands of people in such exercises are not only daunting but vulnerable to accusations of manipulation and distortion by self-selected leaders. While arguably

³⁸ See, for instance, Klein, Naomi, *No Is Not Enough: Defeating the New Shock Politics*. Monbiot also points out the importance of developing and spreading an alternative “story” of how societies and the world can or should be to replace the dominant neoliberal view of the world Monbiot, George, *Out of the Wreckage. A New Politics for an Age of Crisis*.

this is inherent to any broad societal movement, it does raise the legitimate question of to what extent the demands expressed can be regarded as reflecting the most important needs and priorities of the people as a whole.

Green parties arguably are the political spearheads of the social and environmental movements, putting forward comprehensive programmes for institutional and policy changes that are supported by a proportion of the population in many countries. However, although they provide platforms for highlighting social and environmental issues and how they can, should, or must be addressed, the efficacy of green parties in bringing about fundamental change has proved to be very limited at best. This is not surprising, of course, as in most countries they have remained relatively minor parties and have not acquired a political position that enables them to push through transformative change. And if they do gain more seats in Parliaments and get into a position where they can become a plank of the government, the need to compromise means that fundamental change remains beyond reach, with the result that the internal divisions within these parties become sharper, their environmental credibility gets compromised, and their electoral support basis weakens. Practically, green parties are and remain trapped within political-institutional systems that are unable to undertake systemic change. As made clear earlier in the book, they operate within these systems and are constrained by their limitations. Again, the most that they can achieve is to put some plasters on some wounds.

This critical assessment of what may be regarded by many as the most important or promising agents of change in the 21st century indicates that the prospects of bringing about transformative change through these groups and movements are small. This highlights the need for radically rethinking how fundamental change aimed at creating more sustainable and desirable societies can be achieved. As discussed earlier, I do not take the view that societies cannot be steered in a particular direction. History, including that of the last fifty years, has demonstrated that this is possible, as reflected by the neoliberal revolution that has taken place around the world. This was not a case of drifting or evolution, but the result of well-organised and well-funded strategic action by very powerful groups in societies. To dismantle the fundamental changes that this movement has been able to put in place requires an equally well-organised and smart strategic campaign aimed at tilting the imbalance of power towards those who can legitimately speak for the common and long-term interests of societies as a whole. The creation of SPAs proposed here can provide, in my view, a focus for social mobilisation and strategic action that offers a more promising prospect for fundamental change. As explained in Chapter 13, this is based on an assessment of the existing distribution of power, the relative strengths (power base) of social and environmental movements, and the crucial role of the state in tilting the balance of power one way or the other. But rather than working for change through existing political institutions, it puts forward an addition to those frameworks that has the potential to bring about a major shift in political-institutional power, based on the principle of popular sovereignty. The proposal puts the focus squarely on the importance of completing the unfinished business of democratisation by putting an end to the rule by elites or fractions of the population.

This proposed course of action implies a shift from social mobilisation behind a broad programme of (more or less fundamental) changes agreed upon by a wide range of groups or social movements towards society-wide mobilisation behind a single proposal for radical political-institutional change, the establishment of a Sovereign People's Authority. Still, getting this through will require a massive effort, but the chances of rallying a large proportion of society behind such a proposal are, I think, considerably better than any of the calls for action that have been emanating from the social movements mentioned above. It also implies that, for the time being, factional battles within and between these social movements are put on hold, and that they recognise the importance of establishing an SPA as a common cause that, once established, will greatly enhance the chances of any of their particular concerns being heard.

Thus, environmental advocates and social activists should align themselves in the broadest possible coalition and give priority to the creation of an SPA. This does not necessarily mean giving up all other actions and campaigns aimed at environmental protection, but these must be used to point out the need, and support the demand, for an SPA, and not detract from it. Rather, social movement advocates should assign priority to discussing the specific form and functions (formal/legal powers, resources etc.) that an SPA should have so that a concrete proposal can be presented to the public and become a key demand to governments. Focusing on just one key demand (for an SPA with specific terms) would not only be less demanding in terms of achieving agreement compared to putting together a broad package of reforms that would address the particular concerns and priorities of a wide range of groups; it can also function as a focus for mass social mobilisation. By its very nature, the idea of constitutionally enshrining the principle of popular sovereignty in the form of an SPA with supreme power, exercised by the people directly, has the potential to be readily understood and supported by a big majority of the population, also across the left-right divide. In other words, it enables social movements to maximise social power, their main source of power.

The demand for the creation of an SPA must also be backed up by a well thought out strategic plan about the specific ways, means and tactics by which the demand is to be advanced. As noted before, spontaneous mass demonstrations may be impressive and even bring about the fall of rulers or governments, but they often fail to achieve the structural changes that are needed to advance the broad cause(s) of a popular movement. That does not mean that the social media, flash mobs, and other modern ways of deploying social power do not have a place. But these may be counterproductive if they result in gratuitous violence and looting, provoking harsh reactions from the police or even the army, and a loss of support from the public. By contrast, if a political system allows for public referenda, social mobilisation could be channelled by using the formal legal proceedings for organising a referendum to demand the creation of an SPA. This would be most effective if a government can be committed to holding a binding referendum, but it would even be useful to have a non-binding referendum that could generate a large majority in support. Such an outcome might be difficult for a government to ignore. But if they do, the movement could make the introduction of a legally binding referendum a core issue in the next

elections, pressing political parties to commit themselves to introducing such a measure and encouraging voters to vote for the parties that do express a firm commitment on this point. Talented strategists, media specialists, and PR experts are likely to be able to add many ideas and suggestions about keeping the demand for the creation of an SPA on the public and political agendas. There is no reason not to use such expertise given the inequality in power (including media power) that exist and that will be used by vested interests against such a proposal.

Of course, these suggestions do not and cannot offer a guarantee that SPAs can be created in a particular country or context. For a start, although the reaction of the authorities and elites in a country is likely to be negative, fierce, and hostile, it is unpredictable what form(s) this reaction will take. As the Icelandic experience, discussed in this chapter, has shown, it is likely that, also in liberal democracies, existing political institutions (parliaments, including the main political parties) will block radical political-institutional reform that diminishes, let alone takes away, their sovereign power. One cannot exclude the possibility of repression in a variety of ways, including by the use of anti-terrorism legislation, declaring such proposals a threat to the sovereignty and/or security of the state, or to the country's vital economic interests. Such attempts at repression could perhaps be challenged in court (in countries that provide this option), but in (increasingly) authoritarian or dictatorial political systems all legal avenues towards fundamental change may well be blocked. If existing political regimes use the arms of physical power (army and police) to suppress the demand for creating a Sovereign People's Authority, one cannot exclude the possibility that highly frustrated and angry masses of people will take to the streets trying to force a political change. But one might think or hope that the idea of giving supreme power to the people (society as a whole) rather than an elite or dictator would also find appeal within the armed forces, the members of which, after all, have their social roots in, and are part of, society.

In this context, contingency can play an important role. It is probably true that the situation in some countries makes them more prone to fundamental change than others. In this respect, it is worth spending a few words on the United States, which seems to be in the thrall of a process that is tearing the country apart. Political polarisation, economic stagnation and decline, the coexistence of extensive socio-economic misery with obscene wealth, the COVID-19 pandemic, structural racism, and last but not least, the Trump presidency, have all contributed to a sharpening of divisions within American society and politics. Even though Trump's successor, President Biden, has restored an air of respectability to the office, these sharp divisions are hard to overcome. The political-economic system is so compromised that it seems near-impossible to change it through formal political processes. The country is now paying the price for the radical neoliberal policies and institutional changes that have eroded the socio-economic basis that provided a degree of social cohesion to American society in the decades following WWII. In this situation, the idea of creating a Sovereign People's Authority may well find fertile ground and attract support from across American society. But, of course, the political-economic hurdles to creating such an Authority in the US are formidable and overcoming these would require strategic coalition-building across the political divide.

In China, arguably, the creation of an SPA should be quite straightforward. Being a “People’s Republic” all that is needed is to have the (2980) members of the National People’s Congress (NPC) selected by sortition (rather than elected indirectly) along the lines proposed earlier in this chapter, and to make this the sovereign political institution. The President, CCP, and the government’s administrative bodies would then become the executive arms of government, accountable to the NPC and operating within the long-term (green) plan that the NPC would develop and adopt. In many ways, China should have much less difficulty with the adoption of the type of (green) economic planning approach that must replace capitalism, apart perhaps from the democratic element. But what may be needed first is a severe economic downturn, perhaps combined with some major (environmental and/or social) disaster(s) that would compromise the legitimacy of the CCP and its supreme leader.

The same may apply to many other countries. As the Covid-19 pandemic has demonstrated, major threats and disasters may trigger people to reconsider globalisation and the degree of interdependence and vulnerabilities that it has created, reflect on the desirability of the path societies are on, and think about a possible reset of dominant values, practices, and routines. It is not unlikely that further disturbances related to the effects of global heating, environmental disasters, and/or another financial-economic crisis or collapse and the serious socio-economic consequences thereof, will raise further doubt about the capabilities of the existing political systems to cope with the mounting problems. This is likely to make the situation in countries more conducive to the kind of political-institutional changes proposed here.

Conclusion

In this Chapter, I have made a case for creating what I refer to as Sovereign People’s Authorities. The case is based on two main grounds. First, the view that is highly unlikely that the fundamental (transformative) changes that are required if societies are to become less unsustainable can and will be achieved, or even pursued, within the existing political-economic systems, whether (more or less) democratic or authoritarian, capitalist, socialist, or mixed. Given the highly unequal power structures that come with these systems, environmental and social advocates cannot bring about significant and enduring change within these systems. In the past, this might have led to calls for revolution. But, apart from the enormous human costs that tend to come with political revolutions, they do not necessarily lead to more sustainable or desirable societies. Therefore, the second ground on which the case for creating SPAs is built is the idea that radical democracy is likely to offer a more promising basis for moving societies in a more desirable direction. The form of radical democracy advocated here is based on the principle of popular sovereignty. Thus far, this principle, although recognised as the source of legitimate political power in most (even authoritarian) political systems, has been interpreted in ways that de facto assign supreme political authority to political institutions rather than to the people (society) at large. By establishing SPAs, societies effectively claim their sovereign rights, which strictly speaking they already have and do not need to be given or granted, as most states in the world already accept popular sovereignty as the basis for their legitimacy. It is just that the existing political institutions that have been derived from this principle have

come to be seen as the only way in which the principle can be (practically) implemented, and that virtually all political discourse is entrapped by this political paradigm.

The chapter has elaborated on some of the main features of SPAs, including the selection of members by sortition (random selection) and the regular turnover of membership, their focus on formulating the long-term and common interests of societies as a whole, and their constitutive powers (the power to establish other political institutions, their mandates, and to determine the main principles, goals and rules on which policies must be based). Their composition by sortition ensures that an SPA will be a highly representative "mini version" of society that can legitimately claim to stand in for society as a whole to decide what is most important to that society. Thus, SPAs set the overarching framework for day-to-day policy development and decision-making by existing governments that may (except for changes introduced by an SPA) continue to operate based on competition between particular interests and factions that push their own wheelbarrows. However, the government of the day will also be responsible for achieving or advancing the goals and targets contained in the overarching policy framework developed and adopted by the SPA. Accountability to the SPA on this front (backed up by sanctions) will ensure that the common and long-term interests as specified by this mini version of society will carry the weight that they deserve.

Although the establishment of SPAs does not guarantee that an Authority will choose to introduce transformative systemic changes aimed at moving towards sustainable societies, there are reasons to believe that they will do so. These relate to public surveys that indicate that, in many countries, the protection of the environment is a higher priority for most people than continued economic growth, to the rationale for creating SPAs in the first place, and to the ways the discussions in these authorities will be guided by principles and rules developed by deliberative democracy theories and practices. These have already proven their value as guides towards developing a better (shared) understanding of, and common ground on, controversial issues. In combination, these reasons make it much more likely that the common and long-term interests of society, as defined by society itself, will get the attention and weight that they deserve compared to what existing political systems can deliver.

However, establishing SPAs will be far from straightforward given the expected opposition from vested interests and their formidable economic, political-institutional, cognitive, and physical power resources. Breaking through these barriers will require a very broad but well-focused and well-organised coalition of forces in civil society, and a strategic approach to social mobilisation aimed at holding a binding referendum (or several referenda) on a well-thought-out proposal for creating an SPA. Yet, if ever there was an idea on which a large majority of citizens should be able to agree, it is that a society should be allowed to decide for itself how it wishes to shape or influence its future. However, it must be acknowledged that the creation of SPAs would constitute only a first, albeit crucial, step in a long process of fundamentally transforming societies and steering them into a sustainable and desirable direction

Conclusion

The aim of this book was to explain why countries and governments, and the world as a whole, have failed to effectively address the environmental challenge, and to explore what, if anything, can be done to halt the unfolding planetary tragedy. Even though environmental problems have been on the public agenda for at least 50 years, the process of environmental degradation has continued unabated and has reached a point where serious concerns have arisen about the future of humanity and many other species on Earth. What makes this a tragedy is that, although few if any people deliberately seek environmental destruction, *collectively* they seem to be unable to stop that process.

The main argument of this book is that this failure can be attributed to three main categories of interrelated factors: First, the way the environmental challenge has been predominantly interpreted, by governments as well as most people, fails to recognise the deep and interconnected nature of the challenge. Second, linked to the first point, there has been a failure to recognise and address the *systemic* sources and causes of environmental problems. Third, both of these failures have their roots in issues associated with power and (collective) agency that stand in the way of overcoming or eliminating the systemic obstacles to taking a more effective approach to the environmental challenge.

To clarify and support the first point, Chapter 1 introduced and discussed the notion of environmental integration. As humans do not possess a built-in (genetic) environmental compass that determines or guides their interactions with the environment, they need to learn how to adapt their thinking, behaviour and practices to environmental conditions to prevent causing serious harm to the ecological processes and systems on which their well-being and survival, as well as that of numerous other species, depends. This requirement implies building and continuously improving knowledge and understanding of the environment, appreciating its (intrinsic) value, and recognising the importance of putting limits and constraints on human interactions (rules, institutions). As humans live in and depend on, groups (and societies) to meet their needs, the environmental challenge is a collective one. Societies need to develop, adopt, adapt, and implement, common frameworks for protecting the environment to ensure that all members of a society contribute to, rather than ignore, obstruct, or even negate, environmental protection efforts.

Although such an approach to the environmental challenge may be daunting or even seem too big and complex for modern societies to handle, it is not impossible. Chapter 1 also presented an environmental integration matrix that can assist in making this challenge manageable. The matrix identifies six areas or sub-challenges that, although interrelated, provide foci for integration in different (cognitive, policy, and institutional) domains and internal (environmental) and external (non-environmental) areas of those domains. Integration efforts undertaken in these six areas must be, at a minimum, complementary to be effective. That taking such an integrated approach is not impossible, theoretically and practically, has been demonstrated by the integration of neoliberal principles into, and across, virtually all cognitive frameworks, policy areas and institutions of capitalist societies.

However, as demonstrated in Chapter 2, even in countries that have often been characterised as environmental leaders, no government has consistently pursued such a comprehensive and integrated approach to the environmental challenge, even though the Netherlands and Sweden have come closest to doing so. In most countries, environmental integration efforts have been partial, reactive, ad hoc, fragmented, half-hearted, weak, and often short-lived. By the turn of the millennium, in most countries, the environmental integration efforts of governments had dwindled, despite rhetorical commitments to sustainability or sustainable development.

Chapter 3 explored a range of possible explanations for this failure. First, it looked at the field of comparative environmental policy and politics, much of which is aimed specifically at explaining differences in environmental performance between countries. However, it was found that many of these explanations are based on a rather narrow interpretation of the environmental challenge (treating it as a set of separate issues) which results in distorted and often inflated assessments of the environmental performance of countries. Moreover, many of these academic efforts only scratch the surface when it comes to looking for the sources and causes of environmental degradation. Nonetheless, some of the explanatory factors that are often identified, especially in the political-institutional and socio-cultural realms, provide useful starting points for digging deeper into underlying, systemic issues. However, the chapter also introduced two other (sets of) factors, derived from other fields of study, that are often ignored by comparative environmental policy and politics analysts but that potentially offer deeper explanations: political-economic factors, and the role of power and agency.

Chapter 4 looked at socio-cultural factors, including the ways the environment is treated in religions and secular belief systems, and at the role of science in environmental matters. It also discussed the rise of the environmental movement and whether there has been a shift in public views and attitudes towards a new environmental paradigm, as claimed by some researchers. While this overview of belief systems and the social basis for environmental protection indicated that, in general terms, in many countries around the world, support for environmental values has increased, this has neither been translated into strong demands for a comprehensive and integrated (holistic) approach to environmental integration nor in a fundamental shift in the dominant values or paradigm towards non-materialism. To a large extent, this can be attributed to the role of power and agency, in particular, that of dominant economic interests, in the battle for the hearts and minds, keeping most people addicted to consumerism and the idea of continuous technological and material "progress".

Chapter 5 delved into the importance of political institutions as obstacles or conducive factors to advancing environmental integration. It focused, in particular, on the state and on what have long been considered the four core functions of the state. The pursuit of these functions, related to providing security, the protection and advancement of economic interests, the management of demands and conflicts, and social integration, often produce adverse environmental effects. Although, in most countries, environmental protection has been added (relatively recently) to the functions of the state, it has not been assigned the same status and priority as the four

traditional core functions. Attempts to attach environmental concerns and interest to these core functions, notably in the realms of security and economics, in the hope that this will lead to them being assigned greater importance, have often led to what can be referred to as reverse environmental integration, the adaptation and subordination of environmental concerns to core security and economic priorities. Also, within the institutional framework of the state, environmental agencies have commonly been given narrow mandates, relatively little power, and inadequate resources to fulfil their tasks. As a result, they have lacked the power and capacity to vigorously pursue environmental integration in what are traditionally labelled non-environmental policy areas. The chapter also discussed claims about the relative merits of more or less democratic or authoritarian states regarding their capacity to (better) deal with environmental demands. It was found that, even though liberal democratic systems have systemic obstacles and limitations to environmental integration, they have tended to perform relatively better than authoritarian states, while the arguments that are often held up in favour of authoritarian systems are based on implausible assumptions that are not supported by the facts.

To better understand why states have not assigned greater importance to environmental values and interests, let alone given them priority status, Chapter 6 looked at the links between politics and economics. Although political and economic systems are often treated as separate and independent spheres, they are strongly interrelated. Economic systems depend for their functioning on the state, while economic systems and actors (who have accumulated economic power) heavily influence and shape the institutions of the state and how the state fulfils its functions. This helps to explain why economic interests tend to receive privileged treatment, or even priority, by the state. However, the nature of this relationship is likely to differ between political-economic systems. Based on the distinction between “more or less” democratic and authoritarian political systems, and three categories of economic systems (capitalist, socialist, and hybrid forms), six types of political-economic systems can be identified, five of which have existed (or still exist) in the real world. It can be argued that some of these systems contain fewer institutional obstacles to environmental integration or offer more scope for removing such obstacles. However, although this may be true at the institutional level, the physical production systems on which they are based also need to be considered. The industrial production system, on which most of the world now depends, is inherently unsustainable. The question arises whether any of the six political-economic systems identified offers a (better) basis for developing less unsustainable (or ideally sustainable) production systems.

Chapters 7 to 9 discussed and assessed the potential of greening the political-economic systems identified in Chapter 6. Chapter 7 focused on capitalism and claims that it can be greened. Based on a discussion of the five core features of capitalism (the profit motive, competition, the need for capital accumulation, commodification, and the tendency towards overproduction and crisis) it is not difficult to conclude that capitalism is inherently incompatible with long-term environmental protection. To survive, these features make continuous economic growth imperative, and necessary for businesses to disregard or trivialise, as much as possible, adverse social and environmental effects. The main ground on which the claim that capitalism can be

greened is based—the idea that technological innovation can generate a continuous increase in resource efficiency, and continuously reduce resource use and adverse environmental effects in absolute terms—is a belief that is untenable empirically and logically. And as industrialism has developed hand-in-glove with capitalism, both needing continuous economic growth, it is also hard to see how a no-growth production and consumption system can be created in a capitalist economy.

In theory, it is thinkable that a socialist economic system can function without a need for continuous economic growth and industrialism. Defined in terms of anti-capitalism, a commitment to more egalitarian societies, and an economic system based on rationality and planning, there is no a priori reason why a socialist system could not incorporate a commitment to genuine environmental sustainability (on all three dimensions). However, as discussed in Chapter 8, socialist systems that have actually existed have all demonstrated a strong commitment to economic growth and industrialism.

The fact that actual socialist systems have all made economic growth and industrialism priorities can in part be attributed to the historical, political, and social context in which these systems were created. If environmental integration based on a strong interpretation of sustainability were to be built in as a core element, or even a lexical priority, of a newly established socialist system, it could be a sustainable alternative. However, another element that has been missing from actual socialist systems is democracy. Democracy is an essential condition for enabling environmental feedback in any political system. Democracy, in the eyes of many people, has also intrinsic value that should not be cast aside for instrumental considerations. The importance of democracy has been recognised by advocates of eco-socialism, many of whom have put forward ideas for extending democracy to the economic realm. However, as yet, there appears to be no agreement within the eco-socialist school of thought about what a desirable post-industrialist production system and society would look like.

Chapter 9 discussed whether two types of hybrid political-economic system, social democracy and the post-Mao Chinese authoritarian hybrid, both characterised by a mix of capitalist and socialist features, offer a potential basis for more effective environmental integration. Social democratic regimes, which prevailed in many Western countries in the three decades after WWII, are often held up as promising models for steering economies and societies towards a sustainable and socially desirable future. Social democracy, based on a recognition of the important role of the state in the protection and advancement of the collective interests of society, appeared to offer a good basis for assigning greater importance to environmental protection. But actual social-democratic systems did not (and arguably could not) abolish the inherent contradictions of capitalism and the mechanisms that bring about the accumulation and concentration of economic power. Instead, social democracy proved to be a highly effective manager of capitalism, arguably saving it from being abolished in the aftermath of WWII. But when the contradictions of capitalism reasserted themselves in the 1970s and 1980s, this enabled neoliberal forces to reimpose control over economic institutions and policies, and to roll back the social welfare state as well as the much weaker “environmental state”.

With the introduction of capitalism in post-Mao China, the primacy of economic growth and industrialisation were even further entrenched. By creating a capitalist class and “private” development interests within the state at the local, regional, and national levels, the economic growth imperative was strengthened. But the Communist Party retained state ownership over strategic economic sectors and ultimate control over the economy. In theory, therefore, the Chinese political-economic system should be more capable than social democracy to (try to) reform and shape capitalism to make it compatible with long-term environmental protection. However, as the Chinese political-economic system remains trapped in the inherent imperatives of capitalism and industrialism, increasingly interwoven at the international level, it is as incompatible with long-term environmental protection as liberal-democratic capitalist systems are. Moreover, the authoritarian nature of the regime makes it less sensitive to environmental feedback and more inclined to, and capable of, suppressing demands for systemic change, which has already become highly apparent.

As it can be concluded that all existing political-economic systems are inherently incapable of assigning environmental imperatives the priority that they require, the question arises whether it might be possible to create institutions and policies at the international level that do so. Arguably, states should be able to recognise that they all depend on protecting the global environment for their well-being or even survival. Recognising this, one would expect them to be willing to collectively impose rules and constraints on environmentally damaging practices that apply to all states, creating a level playing field. Chapter 10 analysed environmental integration efforts at the international (especially global) level, based on the matrix put forward in Chapter 1. It was found that these efforts have been (relatively) most successful in the cognitive realm (notably in the form of the adoption of sustainable development as a globally dominant discourse), but less so in the policy domain, and hardly in the institutional realm. Chapter 11 discussed possible explanations for the lack of significant progress at this level. The discussion of Realist, Institutional, and Global Political Economy perspectives found merit in all three when it comes to identifying major obstacles to, and limited scope for, moving towards the creation of effective global institutions and policies. Although a fourth school of thought, Cosmopolitanism, is more optimistic and offers valuable normative guidance that is largely missing from the other three perspectives, it needs to be imbued with a greater dose of realism offered by the other perspectives. However, as international environmental integration efforts are subject to the same kinds of forces and obstacles that stand in the way at the (nation-) state level, and have additional limitations, we cannot and should not expect too much from efforts at that level.

The analysis of obstacles to environmental integration undertaken in Chapters 4 to 11 leads to the conclusion that, without fundamental systemic change, the process of environmental degradation is bound to continue, at all levels. Chapter 12 explored the kind of systemic changes that would be required to halt this process and to put societies on a less unsustainable and socially more desirable path. Although the specific changes need to be determined by each country (society) in its own political, economic, social, and environmental context, it is possible to identify, in general terms,

what kind of systems and institutions are required to advance environmental integration. Moreover, based on the analysis of obstacles in the earlier chapters of this book, there is a need for exploring what systems would not contain these obstacles and would enable societies to explore and discuss for themselves the kind of societies they would want to steer towards. The chapter presented my views and ideas on political, economic, and socio-cultural transformations, while also recognising the need for global transformation. A common element underlying these ideas is that, realistically, these transformations can only be achieved via a bottom-up process in which states play a key role.

The rationale for this view was elaborated upon in Chapter 13, which revisited the crucial role of power and agency in the development of societies. It began with the general question of whether it is possible for societies to collectively steer themselves into a direction of their choosing, looking at historical precedents and a range of philosophical perspectives. It was found that, whatever steering has occurred, this has been undertaken foremost by (power) elites, with outcomes that are highly debatable in terms of their effectiveness as well as desirability. Not much evidence can be found to support the idea that such steering has occurred on a democratic basis, although arguably social democracy took steps in this direction.

Power, then, is the key to steering societies. To steer societies into a direction that can and will be considered desirable and in the interest of the society rather than of a political-economic elite, societies must find a way to significantly redistribute power and subject it to democratic control. States still hold the key to the distribution of power. As sovereign institutions, formally, they make binding decisions on behalf of all citizens, including about economic institutions and the allocation and distribution of economic power. Also, as most people and communities have become highly dependent on national and even international economic systems for meeting their basic needs, states are still crucially important. This primacy of politics over economics has long been undermined by economic elites. They have been able to capture the institutions of the state and shape these in ways that serve their interests. This basic truth tends to be hidden from the public by the elites (notably by using their disproportionate cognitive power), although occasionally its rediscovery has provided (and still provides) a basis for political revolutions and rebellions. However, revolutions and rebellions have often failed to deliver the better societies that they promised, while causing much human suffering. This raises the question of whether and how fundamental political-economic change can be brought about via a different process.

This question led me to put forward the idea of creating national-level Sovereign People's Authorities (SPAs). As this label suggests, these bodies would hold supreme power based on the principle of popular sovereignty. Rather than allocating sovereignty to state institutions that are often highly unrepresentative of the people as a whole, the members of these Authorities would be selected by sortition, a method that ensures that such bodies are as representative as possible for the whole of society and can stand in for society in collective decision making. SPAs would have constitutive power and lay down the fundamental rules of the political system and determine the most important principles and goals (policy framework) considered to be in the common and long-term interests of society. As such, they are responsible for forging

a real social contract that identifies what binds a society together. The social contract developed and adopted by an SPA would provide the framework for the development of day-to-day policies by elected governments. Thus, SPAs will be able to do what existing governments (of all types of political-economic systems) are unable to do: to democratically steer into a direction that society itself considers to be necessary and/or desirable in its long-term collective interest.

Addressing some of the objections that are likely to be raised against this proposal, I concluded that these are not very convincing and are more applicable to existing political systems. Rather, SPAs, supported by strong administrative and advisory capacity, are likely to deliver better collective decisions grounded on a superior knowledge basis, more thorough processes of open-minded deliberation based on the diversity of values that exists in society, as well as offering remedies for the bias of short-term and particularistic interests, and for the extreme polarisation and levels of political alienation that afflict many existing countries. As SPAs decide for themselves what is in the common and long-term interests of their societies, there is no guarantee that environmental imperatives will be assigned priority. Nonetheless, there are good reasons for thinking that they will, and are much more likely to do so than existing political systems.

Although there is no doubt that this proposal will provoke strong negative reactions, especially from dominant interests and the establishment, the idea that the people should reaffirm their sovereignty (which theoretically they already have) should have appeal across the political spectrum. The possibility of getting a proposal through more or less democratic political systems should be reasonably promising. Nonetheless, it will require major and concerted action by advocates across a wide range of social, environmental, and political movements that are willing to treat this as a political priority. But it will be (much) harder in authoritarian systems, and it cannot be excluded that this can and will only happen through old-fashioned revolutions, with all the associated costs. It is not unlikely that the political viability of the idea will increase when the process of political, economic, and social disintegration, in part because of rising environmental pressures that governments are unable to contain, will reach a stage at which existing political-economic systems lose the remnants of their legitimacy.

Whether SPAs will be created, and whether they will use their sovereign power to undertake the fundamental changes that are required, as described in Chapter 12, are questions that cannot be answered with certainty one way or the other. Moreover, as moving towards sustainability is also a global challenge and requires transformative change in most countries, there is a long way to go. The creation of SPAs would be a first but crucial step towards fulfilling the promise of democracy as well as the *possible* creation of sustainable societies and a sustainable world. But if their establishment is thwarted by the dominant elites, possibly with the use of force and oppression, or if SPAs are unable to push through the systemic changes that are needed, it is hard to see how the unfolding planetary tragedy can be stopped.

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A Planetary Tragedy addresses the question of why some 50 years after the environment became a topic of public concern, efforts to address environmental problems have by and large failed and the world appears to be heading for a disastrous future. Although over these years, governments have adopted a raft of national and international measures to combat environmental issues, most of these have proven to be inadequate and the rate of environmental degradation has continued unabated.

The book critically surveys and analyses the environmental performance of countries, in particular some that have been regarded as environmental leaders and identifies and discusses three broad reasons for this failure. First, the way environmental problems have been predominantly interpreted, which largely ignores the deep and interconnected nature of the environmental challenge; second, the failure to recognise, let alone address, the systemic sources and causes of environmental problems; third, the power structures in the prevailing political-economic systems, which make it virtually impossible to fundamentally change those systems and to put societies onto a path towards sustainability.

Covering an extensive literature, the book draws on research, theories, findings, and ideas from the fields of environmental politics and policy, including comparative, international, and global analyses and perspectives, environmental sociology and history, economics and the environment, political and social theory, and environmental management. It puts forward a framework that can assist in taking a comprehensive and integrated approach to the environmental challenge, discusses the strengths and weaknesses of a range of theoretical perspectives, clarifies key concepts and factors central to better understanding the systemic issues and obstacles lying at the heart of the environmental challenge, and puts forward ideas on how to strategically address the enormous imbalance of power that stands in the way of transformative change. The main suggestion is the creation of national-level Sovereign People's Authorities based on the principle of popular sovereignty that will enable societies to democratically steer themselves towards a sustainable and desirable future.

About the author

Born in the Netherlands, Ton Bührs graduated with a Drs in Political and Social Sciences from the University of Amsterdam. He moved to New Zealand in 1984 and completed a PhD in Environmental Policy and Politics with the Department of Political Studies at the University of Auckland. In 1991, he joined Lincoln University, where he was an Associate Professor in Environmental Policy and Politics until his retirement in 2014.