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Values for Sustainable Future:
Transforming Values in the Context of Climate Change and Global Environmental Degradation

PhD Dissertation

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Introduction

This dissertation is an interdisciplinary project aimed to explore new pressing challenges posed by climate change and environmental degradation. Global environmental crisis tests existing institutions and technologies, political and socio-economic systems. Business-as-usual approach underpinned by the idea of unlimited growth is no longer an option on a planet with finite resources. Humans are facing a multi-layered collective action problem, or rather a Gordian knot of problems, which emerges from unsustainable practices, behavior, and choices of billions of people and millions of businesses. Global environmental crisis reflects the crisis of the Western system of values which let a few countries gain wealth and develop incredible technology over the past few centuries but also created serious social injustices and disrupted a harmonious co-existence of humans and nature.

This project looks at the process of societal transformation that is required as a response to climate change and environmental degradation. This process is strongly influenced by political and economic forces and by technology. But the central component of the societal transformation is a shift in values that would allow the world to enter a more sustainable path to develop in the future, a transition towards sustainability. This project explores to which extent a shift in values could be considered a response to the global environmental crisis. An answer to this broad question that lies on the border of many issue areas and academic disciplines calls for cross-disciplinary inquiries into several key topics.

What is this dissertation about?

Climate change and sustainable development

Melting ice caps, raising sea levels, natural disasters like hurricanes, draughts, floods and a whole wide range of other possible problems threatens to change how the world looks, works and feels as soon as a few decades from now. Some members of the global community, the most vulnerable ones, were already affected by climate change induced sea level rise. In 2009 the community of the Carteret islands received the status of the first climate refuges displaced from their homes by the raising water levels (Box, 2009). Islanders from Vanuatu and the Bay of Bengal have also been forced to move for the same reasons (Kelman, 2008). According to the Forced Migration Review journal, entire island countries which are threatened by sea-level rise in the near future are Kiribati, the Maldives and Tuvalu (Kelman, 2008).

World's top scientists agree that climate change is caused to a large extent by anthropogenic influence (IPCC 2013). The main reason for climate change is the greenhouse effect created by greenhouse gases that are trapped in the atmosphere, such as carbon dioxide (CO2), methane, nitrous oxide, fluorinated gases, and other. These gases are by-products of human activity from industrial, agricultural and other processes. Frequently invoked in public discussions, CO2 is emitted primarily through burning fossil fuels, deforestation and land degradation. Industrial practices and individual lifestyles, the modes of production and consumption, contribute greatly to the global levels of greenhouse gases in the atmosphere.

Climate change is a pressing environmental problem but it is far from being the only one. In this thesis climate change is often used along with global environmental degradation. Environmental degradation is a term used to encompass a variety of challenges, such as biodiversity loss, ocean waste, overfishing, pollution of rivers and seas, desertification, deforestation, and many other local and global environmental problems that contribute to the degradation of the environment. While climate change is, undoubtedly, the one issue that finally managed to attract attention of policy makers around the world to the environmental dimension of human activities and its consequences, it is only one manifestation of the global environmental crisis. And this crisis affects not only humans but also animals and other living things on Earth with which we share the planet but who do not have a say in what is going to happen.

Climate change and environmental degradation as part of the global environmental crisis are closely intertwined with the concepts of sustainable development and sustainability. Sustainable development was defined in 1987 by the Brundtland report[1] as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (UN, 1987). The concept emerged as a response to growing concerns that our planet has only limited capacity to accommodate human activity and growth, pioneered by the 1972 Club of Rome report called *The Limits to Growth*.

Sustainable development has been criticized as an oxymoron, a self-contradictory term (Revkin, 2006) because it incorporates conflicting notions of "sustainable" (associated with finite resources and other limitations of our planet) and "development" (associated with growth and expansion). Identifying the elements of sustainable development, namely its

[1] Our Common Future, a report of the World Commission on Environment and Development, United Nations

environmental, social and economic dimensions, adds even more theoretical richness and practical complexity to the concept (UN, 2012).

As complex or contradictory as it may sound, sustainable development has been gaining more and more attention on the international political arena since the UN Conference on Environment and Development in Rio de Janeiro in 1992. And while the criticism of ambiguity is valid, sustainable development remains the only game in town for those who want to reconcile humans with the environment on a planetary scale. Today sustainable development is more of a paradigm that defines the direction than a narrow concept that can offer practical guidance on achieving specific results.

Sustainability and sustainable development are close in meaning yet conceptually different. Sustainability can be considered more of a normative goal of sustainable development, a solution to the global environmental and social crises. It is inextricably linked not only to the physical limits of the planet but also to the issues of fairness, social justice and greater access to a better quality of life (UN 2011). The fact that there is no commonly agreed definition or vision of sustainability and that it can mean, or require, a whole variety of things (Johnston, Everard, Santillo, Robert, 2007) is troubling. This dissertation is an attempt to contribute to the development of the concept of sustainability by exploring its ethical foundations and values that underpin it.

The failure of international cooperation and the role of individual change

When the first proposal for this dissertation was drafted in 2010 the world (or at least some people concerned with the environment) was recovering from the failure of the UNFCCC Conference of Parties in Copenhagen in December 2009. Global community failed profoundly to engage into meaningful action on climate change, including cooperation under Kyoto Protocol. Civil society organizations, academia and the media criticized stagnating international climate talks and called for alternative solutions. Five years since Copenhagen the world still has no legally binding and meaningful agreement on climate change (current Kyoto Protocol excludes some of the largest emitters).

The next hope for concerned parties would be a meeting in Paris in 2015 to try to sign a new legally binding agreement that would come into force in 2020, after Kyoto commitment periods end. But while there is always hope that international cooperation will eventually

succeed, it is unclear whether it will result in resolving the problem. Climate change and environmental degradation happen because of how societies (some more than others) produce and consume, live and work. These problems are the result of accumulated actions of billions of people, many of whom still do not consider planetary boundaries, pressure on global resources and injustices that it causes and will cause while driving their SUV to a mall to buy over-packaged goods they don't even need that were produced thousands of miles away.

The point is that even if international cooperation succeeds, it will not change people's behavior and preferences overnight. Whatever action the governments take, they will be confronted with public resistance if the public does not agree that these actions are at all necessary. Top-down imperatives are unlikely to work in democratic societies. The problem is that it looks like not only the public but actually many governments are still not sure whether global environmental crisis is actually a threat worth tackling for reasons other than good international political image. A lot of hope is placed on technological advances and market forces to resolve the issue, and societal acceptance of the new reality is supposed to follow by itself.

Bureaucracy and institutional inertia in a response to a problem as urgent as climate change are frustrating. This dissertation is an attempt to look beyond international negotiations into different ways of resolving the global environmental crisis that would place more emphasis on individual changes and societal transformation. It looks into questions that many individuals are unable to answer. Why should *I* do something about climate change if everyone else is not doing anything? How can *my* contribution make a difference? Individual moral motivations to act sustainably are at the heart of a broader societal transformation.

The solution discussed in this research project, a value shift towards sustainability, is not considered to be a substitute for international action but rather a neglected aspect of global change that should be better understood and supported. Societal response, acceptance or rejection of national policies will be comprised of individual responses that are rooted in values. Individual and collective values are also important because, in the end, all governments and institutions are comprised of individuals who have certain power over agenda setting and final results. And the values, beliefs and worldviews of these individuals define the course of action as much as market and political forces.

Ethics and values

Initially, when the discussions about climate change and sustainable development just started, ethicists were reluctant to contribute. For a while it was unclear whether this is the domain of climate scientists or politicians. Economists and legal scholars joined the discussion at early stages and for a long time dominated the debate (Jamieson, 1992). International relations and political science scholars also actively engaged in the process. Only a handful of philosophers wrote on ethics of global warming and later climate change in the 1990s, and most of them focused specifically on the distributional aspects of the challenges. Some argue that this reluctance was caused by the complexity of the new challenge (Gardiner, 2011) but towards the end of the century it became increasingly clear that climate change poses some fundamental ethical questions on which the input from philosophers was badly needed.

Since then a strong, persistent opinion was formed that ethics is central to addressing climate change and the global environmental crisis (e.g. Gardiner, 2011; Pachauri, 2009; Brown, 2014). Since the industrial revolution in the 18th century states that are currently considered "developed" have started industrial processes and other practices that contributed greatly to the accumulation of CO2 and other greenhouse gases (GHG) in the atmosphere. Most of these states were also involved in colonial practices. Rapid development of technology and industrialization in these countries was not matched in their colonies which for centuries remained behind and are currently considered to be "developing" countries.

Since 1992 discussions within the United Nations Framework Convention on Climate Change (UNFCCC) about disproportionate burdens of climate change (least developed countries are also the most vulnerable to the threat) have been centered on questions of justice and distribution of efforts to cap GHG emissions among different states. The discussion resulted in the principle of common but differentiated responsibilities (UNFCCC 1992) that took into consideration historical emissions but also reflected on countries' current ability to pay. Since the rise of China and India in the past 10-12 years this principle and the commitments recorded in UNFCCC were seriously undermined, and it is expected that the Post-2015 Development Agenda will better reflect the current situation.

Ethical dimensions of climate change, as it will be demonstrated throughout this dissertation, are much more diverse than an argument about who should pay for mitigation and adaptation

efforts. These questions extend beyond international climate change and sustainable development politics and challenge the very foundations of how people live and why. Some argue that the global environmental crisis is in fact a reflection of the crisis of the dominant system of values (Pachauri, 2009). How societies operate is to a great extent defined by the values that they share.

The system of values in developed states that brought and continues to bring them prosperity evolved in times of low population density and low technology societies with seemingly unlimited resource availability (Jamieson, 1992). This system is to a great extent defined by capitalist idea of continuous growth reflected in increasing consumption which leads to inevitable depletion of natural resources and environmental degradation. It encourages individualism and praises gains that accrue to individuals or small groups at the expense of others which leads to inevitable social injustices. While it has certainly been conducive to the improvement of the standard of life sometime in the past, in the current situation this system is no longer adequate to resolve global environmental challenges.

This dissertation explores how values could change as a response to the global environmental crisis and how we could move from "the world of more" to "the world of enough". It looks at the Western system of values in order to find out what gaps are there to be addressed and what kind of values could fill in these gaps. In discussing ethical underpinnings of a values shift towards sustainability I take a pluralistic approach to ethics and take into account a variety of normative perspectives. Some values (concerns for posterity) are discussed extensively. It also explores the ways to advance sustainability values to the public.

Defining some gaps in the Western system of values and listing values that should be strengthened places the argument more in line with a cosmopolitan view of world politics which implies that there are some universal values for the world to share. But it is important to note here that this cosmopolitan outlook is limited to the value systems of developed states that I look at, not at all the states in the world. The argument rests on the premise that systems of values of developed states (that differ from each other) are still quite close in shared values and can be approached as a unified system with similar defaults and possible solutions.

Also, it is worth to note that in suggesting a list of sustainability values I by no means aim to argue in favor of any authoritarian and technocratic approach to implementing them. This

dissertation is merely exploring the diverse dimensions of the process which, whether we want it or not, will happen mostly outside of anyone's control. However, each value shift in the past was preceded by some kind of shared meanings and vision of what the change should be about. And this dissertation is an effort to contribute to this vision.

Why focus on developed states?

This dissertation is about developed states and the Western system of values that determines how citizens of these states behave, consume and save, what lifestyles and practices they engage in. Developed states produce much more GHG emissions per capita than the developing states, and that tells us that people's lifestyles in developed states are much more GHG-intensive than the ways of life of people from the developing states. Changing individual behavior, choices and practices in a developed state will have a more visible effect on reducing GHG emissions than similar action in developing countries where individual contributions are already very low.

Per capita emission entitlement approach (e.g. Barry, 1999; Shue, 1999) helps avoid the trap of the biggest puzzle in international climate change politics of the past ten years, namely the sky-rocketing emissions of China and India. China indeed surpassed the US as the largest CO2 emitter in the world in the past couple of years (World Bank 2014). But when analyzed in terms of per capita emissions, China is way behind most developed states (6.2 metric tons per capita compared to 17.6 tons in the US, 16.9 tons in Australia, 14.7 tons in Canada). This consideration, as well as the notion of historical responsibility both point that changes in individual lifestyles, behavior and choices, supported by a value shift, are most likely to have an effect and should be advanced in developed states.

Moreover, there is room for hope that changing values in the western culture could spread to other countries[2]. The group with most GHG intensive lifestyles in developing countries would be the rich, wealthy class who also has strong influence over industrial and business practices. While each country's culture plays important role, it is hard to deny that the Western culture has spread way beyond North America and Europe[3]. The wealthy classes

2 It seems that although different contemporary cultures may rank the importance of various values differently, the structure of values is nearly universal in the modern world. (Dietz et.al., 2005, p.13).

[3] The terms "cultural hegemony" or "cultural dominance" have been widely discussed in the 20th century, following Gramci's introduction of the concept in the 1930s (published in the US in 1971). More on the cultural hegemony of the United States can be found in the work of Artz & Ortega Murphy (2000).

often try to simulate elements of Western culture in their home countries, repeat practices adjusting them to their country's reality. Children from wealthy families in developing states often get education in developed states and bring back western ideas and practices. There are many ways in which culture and values spread, and there is hope that if they change in the developed world, this trend could also take roots in the developing states.

Passive citizens

This dissertation looks at a transition towards sustainability values and sustainable behavior and practices in the hearts and minds of the citizens of developed states. To describe this group of people I will use the term "passive citizens". Passive citizens are typical individuals of all age groups who are indifferent, or not especially concerned about the environment. They have probably heard about global climate change and other environmental issues but these concerns do not take too much of their time or attention. They certainly do not direct passive citizens' lives. These wealthy individuals have jobs or school or other activities that keep them busy. They have houses, cars and money for vacations abroad. These people are not necessarily rich, they are middle class and they have the luxury of choice to change their buying habits and other elements of lifestyle.

The satellites of a value shift

My argument about a value shift towards sustainability rests on the assumption supported by research in social psychology that people's values affect their behavior. But in the process of social change values and behavior are not the only important elements. Throughout this dissertation I also look at the role of norms, attitudes, concerns and beliefs in the transition. These different concepts are used to describe different processes and social practices and taking them into account was important to reflect on the richness of a societal transformation. The term "sustainable behavior" is also frequently used throughout the dissertation. It refers to behavior that is conducive to a transition towards sustainability that takes into account its local and global environmental and social implications.

ENGOs as the agents of change

Finally, this dissertation looks into the role of environmental non-governmental organizations (ENGOs) in the process of societal transformation. For decades environmental movement

was inspiring political and civil action on environmental issues. Some ENGOs have grown large, rich and powerful, capable of large scale action across borders. They have the ability to change public opinion and attitudes to environmental issues. I have explored whether the work of ENGOs can be conducive to advancing sustainability to the general public and looked at the two global ENGOs, Greenpeace and WWF, to see if that was the case.

The challenge of interdisciplinarity

Climate change and global environmental degradation cannot be resolved with any one discipline. The crisis is a bundle of issues different aspects of which call for technological solutions, advances in science, political will, political innovations, economic measures, and social change. A value shift towards sustainability, though concerned with the societal transformation, also requires an open-minded interdisciplinary inquiry into its origins, state and prospects. A value shift is predominantly about normative change, thus, an input from philosophers is crucial if we want to understand what triggered the transformation and what are its most likely directions. In case of a value shift towards sustainability research in environmental philosophy and ethics can shed light on the ethical foundations of the transition.

A value shift is also a dynamic concept that has an empirical dimension which is researched by social and political science scholars. Social psychologists have long looked into values as pre-determinants of human behavior and analyzed what can trigger large scale social changes. Institutional transformation and the influence of institutions on people's behavior is a domain of political science. Considering that this dissertation looks into global, cross-border challenges, some perspectives from international relations were also employed in this project.

Writing an interdisciplinary inquiry is by no means an easy or straightforward task. Bringing together different disciplines means creating a large pool of mixed vocabulary, when sometimes same terms mean different things or processes. But terms and definitions are in fact a minor concern compared to navigating among various perspectives and assumptions that are taken for granted in some disciplines and dismissed in others. A serious challenge was also to allocate sufficient space to the relevant views of one discipline without compromising the input from others. From the start I have decided to concentrate on the normative dimensions of the shift (because the concept is far from being clear and well-

developed). But at the same time creating a comprehensive normative perspective was impossible without checking against existing empirical social and political research.

Brief outline of the dissertation

This dissertation consists of six chapters. Due to an interdisciplinary nature of this inquiry, the structure of the thesis is different from a standard PhD dissertation. It was impossible to make one literature review, one methodology chapter and one contribution part. The dimensions of a value shift that were considered are too different from each other to be discussed as one issue. Thus, each chapter, except for the first one, attempted to look into each issue are and included relevant literature review, methodology (where necessary) and contribution to the literature.

Chapter 1 discussed ethical dimensions of climate change. It looked to provide a framework of reference for the rest of the dissertation by presenting climate change as the Perfect Moral Storm (Gardiner, 2011). The chapter also explored how a value shift could be a solution to climate change and global environmental degradation. Chapter 2 looked into socio-psychological and philosophical dimensions of values and into their connection with virtues and individual character. This chapter offers an account of sustainability values. Chapter 3 inquired into history of value shifts and into ways of advancing values, including education and communication strategies.

Chapter 4 focused on one specific value, care for remote future people, which is central to sustainability values. It explored normative underpinnings of this value and the place of this concern in political rhetoric, advocacy and education. Chapter 5 analyzed the role of ENGOs as norm advocates in international climate change politics. The changing role of ENGOs in global politics and their influence on public opinion and values was analyzed under scrutiny.

Finally, in Chapter 6 two case studies were selected to see what kind of values ENGOs communicate and advance to the general public. The case studies were climate change campaigns of WWF and Greenpeace and the study was done using software for qualitative analysis, NVivo.

Chapter 1. Ethical Dimensions of Climate Change

Introduction

Climate change is a complex problem raising issues across and between a large number of disciplines, including the physical and life sciences, political science, economics and psychology, to name just a few. But without wishing for a moment to marginalize the contribution of these disciplines, ethics does seem to play a fundamental role.

Stephen Gardiner, 2006

Climate change is one of world's most prominent environmental problems that made its way up to global political agenda. "Prominent" does not mean it is more or less important than other environmental problems caused by human activities (such as biodiversity loss, air and water pollution, deforestation, etc.). All these issues are part of an "umbrella" problem of global human-induced environmental change[4]. For various reasons the issue of climate change was more successful in attracting attention of the public and of policy makers.

The lenses of human-caused climate change provide an excellent snapshot of the global environmental crisis – crisis of human values, systems and ways of living. Solutions to this crisis have to, before anything else, have solid ethical foundations. Climate change-related ethical challenges are also relevant to other environmental problems. Many aspects of climate change-focused ethical analysis may be extrapolated to a wider range of issues constituting a global environmental change[5]. The role of this chapter is to present climate change as part of global human-induced environmental change and an ethical issue that cannot be resolved merely through economic measures or advancements in technology. A necessary, yet often neglected, way of addressing the problem is through the transformation of the dominating system of values in developed countries from "the world of more" to "the world of enough".

Relevance of ethics to climate policy has been stressed by many. The most recent Fifth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) released in

[4] The term "global environmental change" was suggested and used by Jamieson (2007).

[5] Climate change is often used in the same context with sustainability. Sustainable development is viewed as a way to mitigate and adapt to climate change. Therefore, using terms like "sustainable lifestyles" or "sustainability values" for climate change is a way to use synergies from an overlap between sustainable development and climate change discourses.

October, 2013 reaffirmed connections between climate science, policy and value judgments: 'Climate targets generally mean avoiding a warming beyond a predefined threshold. Climate impacts however are geographically diverse and sector specific, and no objective threshold defines when dangerous interference is reached. Some changes may be delayed or irreversible, and some impacts could be beneficial. It is thus not possible to define a single critical objective threshold without value judgments and without assumptions on how to aggregate current and future costs and benefits.' (IPCC 2013, TFE.8)

Along with scientists, some economists also believe in the relevance of ethics to climate politics. Stern Review of the economics of climate change (2006) made explicit that economic models and concepts are based on underlying value judgments. This point was developed by Stern in his later paper where he argues (with regards to future discounting) that 'it is absolutely fundamental […] to recognize that the social discount rates are endogenous, not exogenous […] determined by ethical values that have to be discussed explicitly' (Stern 2008, p.13). Stern goes further in bridging climate economics with ethics and equity in an attempt to inform the discipline of economics about ethical dimensions of climate change and develop relevant economic tools to address the problem (Stern 2012).

Climate ethics branched out of environmental philosophy rather recently. As soon as the issue of climate change surfaced global political agenda in the early 1990s, questions about the ethical dimensions of climate politics, international climate talks and agreements started appearing. Much attention was paid to the principles of justice embedded into climate agreements (such as the principle of common but differentiated responsibilities, "polluter pays" principle, etc.) and to the distributional aspects of climate policies. Scholars working on intergenerational justice and future generations also joined the discussion.

Throughout the 1990s and 2000s philosophers targeted specific issues that fell within the scope of climate change. Various contributions to climate ethics were scattered and lacked coherent analytical framework. In 2006 Stephen Gardiner developed such a framework, an ethical analysis of climate change. He clustered different related moral problems into three groups: global, intergenerational and theoretical issues. Gardiner calls these groups «storms» and, employing a 'perfect storm' analogy[6], argues that it is a combination of these three

[6] The analogy with storms comes from a book by Sebastian Junger (1999), a real story of *Andrea Gail* fishing vessel which was caught up by a rare convergence of three particularly bad storms. This combination of storms was called *the perfect storm* and in the end destroyed the vessel.

particularly bad 'storms' that obstructs us from ethical behaviour, makes us vulnerable to 'moral corruption', and constitutes a Perfect Moral Storm for humankind.

Since its first introduction, the Perfect Moral Storm model has been widely discussed among philosophers (e.g. Pellegrino, 2013; Smead & Sandler, 2013; di Paola, 2013; Preston, 2013, etc.). Gardiner's ethical account of climate change resembles a diagnosis rather than a prescription. The purpose of his book was to identify and to conceptualize climate change as a moral problem in order to open up avenues for future research. This thesis builds on the perfect moral storm model, accepts most of its assumptions and attempts to explore some of the questions that arise from this analysis. The structure of the chapter is loosely based on the structure of the perfect moral storm. It covers the issues of global (intra-generational or spatial) justice, issues of intergenerational justice (with a specific focus on future generations), and theoretical challenges posed by climate change.

I then make an argument about the way to address an ethical challenge of moral corruption. I argue that a solution may be found in the domain of values and virtues. Our existing system of values that caused climate change and created enormous pressure on the environment might also be capable of producing moral guidance on how to get us out of the gridlock by changing which values we prioritize. I also argue that a lot of emphasis is placed on the role of institutional and collective changes, diminishing the role of individual contributions to resolving the problem. I make a case for an underestimated potential that individual value shifts and transformations have for resolving the perfect moral storm.

In short, this chapter aims to (1) sketch the shape of the problem in question to provide a framework of reference for the rest of the thesis (climate change and global environmental degradation as an ethical challenge) and (2) to explore how a value shift could be a solution for the Perfect Moral Storm.

1.1. Global Storm

Global storm is a cluster of challenges posed by climate change that arise *within* a given generation and planetary limits. It includes political, economic, social, technological, as well as ethical issues, such as stagnating international cooperation, high mitigation and adaptation costs, social injustice caused by environmental degradation, lack of immediately available

green technologies required for a transition towards sustainability, and others. One of the most prominent challenges is the failure of international cooperation on climate change.

Brief Account of International Climate Talks

Environmental concerns, raised for many decades, were introduced into international political agenda in 1972 at the United Nations Conference on the Human Environment in Stockholm. The first major breakthrough for climate change happened in 1992 at the United Nations Earth Summit in Rio de Janeiro. It was a meeting at the level of heads of states, with active participation of civil society organizations.

Among most important resolutions of the meeting there was a voluntarily commitment of states to work on creating a protocol which would regulate a reduction of overall CO2 emissions through allocating emissions' quotas per state through the Framework Convention on Climate Change (UNFCCC). The aim was to stabilize greenhouse gas concentrations at a level that would 'prevent dangerous anthropogenic interference' (Article 2, UNFCCC). The following years saw rise and fall of Kyoto protocol. It was adopted in December 1997. Kyoto Protocol had at its core the idea of 'common but differentiated responsibilities' taken from UNFCCC, which implied that developed states (listed in Annex 1) should take the lead in global reduction of CO2 emissions.

Since 1990, main reductions of CO2 emissions happened in Europe, particularly in Sweden, Germany, Denmark and the UK as part of energy security policies and for other internal reasons (Giddens, 2011, 77-87). Most other developed states, however, remained largely inactive, particularly the U.S., New Zealand, Australia, Canada and Japan. Facing a meeting in Bonn in 2001 Bush administration withdrew U.S. support from Kyoto protocol. That was a painful hit for international climate talks (Böhringer & Welsh, 2005) but the Protocol continued to live with major support of the European Union. U.S. behavior with regards to Kyoto Protocol was criticized by many as seriously unethical (e.g. Brown, 2002; Gardiner, 2011).

When time came for the protocol's ratification in 2005 it was clear that even modest targets were hardly achievable anywhere outside Europe. Kyoto protocol was 'toothless', based on voluntary commitments. It was criticized for lacking enforcement mechanisms and adequately robust compliance provisions (i.e. Victor, 2001; Aldy *et al*., 2003). Part of IPCC

Fourth Assessment Report (2007) on Policies, Instruments and Co-operative Arrangements confirms that 'there are no authoritative assessments of the UNFCCC or its Kyoto Protocol that assert that these agreements have succeeded – or will succeed without changes – in fully resolving the climate problem' (p.768).

Among other criticism, Corfee-Morlot and Höhne (2003) pointed at the lack of an explicit long-term goal and no clear direction for national and international policy. Kyoto's framework (Cap and Trade system) was criticized as inefficient and indulgent (Hansen 2009). Den Elzen and Meinshausen (2005) criticized Kyoto targets as inadequately stringent. It was also pointed out that climate agreements do not adequately promote development and/or transfer of technology (Barrett, 2003). Pitzer (1999, 2002) argued that climate agreements were too expensive. Muller (2002) argued that the agreements did not propose adequate solutions that would facilitate adaptation to the forthcoming changes.

During the 2009 meeting in Copenhagen no agreement on how to move forward was achieved. The new Obama administration and U.S. position were heavily criticized (Guardian, 2009). Failure of Copenhagen symbolized a collapse of the very mechanism of international climate negotiations, the failure of states to manage themselves and resolve the problem. The next round of negotiations in Durban in 2011 also failed to deliver a new deal. However, an agreement was achieved among states that a new *kind* of deal was needed.

The Future We Want, an outcome document of the UN Conference on Sustainable Development in 2012 (Rio+20 Summit), reaffirmed that climate change was one of the greatest challenges of our times (Paragraph 190) and called Parties to the UNFCCC and Kyoto Protocol to fully implement their commitments (Paragraph 192). While not offering any break-through solution for climate change specifically (the conference was more generally on sustainable development and not on climate change), Rio+20 developed a common understanding that a new global overarching Post-2015 sustainable development agenda was needed, into which climate change should be incorporated.

In preparation of the Post-2015 Development Agenda since Rio+20 an important process was launched to define Sustainable Development Goals (SDGs), to provide an inspiring yet concise and action-oriented goals and targets to tackle sustainable development. An outcome document released in July, 2014 secured an individual goal (No.13) to "take urgent action to

combat climate change and its impacts". However, the main role of a primary international, intergovernmental forum to negotiate a global response to climate change was acknowledged to be of the UNFCCC.

Why stagnation?

Many studies noted and attempted to explain the stagnation of global climate negotiations. To mention a few, Giddens (2011) argues that states have to cope with *Giddens's Paradox*: 'since dangers posed by global warming aren't tangible, immediate or visible in the course of day-to-day life, many will sit on their hands and do nothing of a concrete nature about them. Yet waiting until such dangers become visible and acute – in the shape of catastrophes that are irrefutably the result of climate change – before being stirred to serious action will be too late' (Giddens, 2011, p.2).

An important role in Kyoto's failure was played by the rise of 'BRIC' emerging economies in the late 1990s – early 2000s, particularly China. In 1992 Brazil, India and China were reckoned as developing states that had no obligations to reduce their CO2 emissions. A rapid growth of these economies in the years following the Earth Summit dramatically changed the situation and created serious obstacles on the way to a global climate agreement. During the 2000 U.S. presidential election television debates candidates were asked what they would do about global warming. George Bush said:

'I'll tell you one thing I'm not going to do is I'm going to let the United States carry the burden for cleaning up the world's air, like the Kyoto treaty would have done. China and India were exempt from that treaty. I think we need to be more even-handed' (quoted in Singer, 2002).

Another important view was proposed in May 2010 by a group of fourteen academics in a study that became known as the Hartwell Paper. The paper criticizes Kyoto protocol for its scope which is much broader than a single agreement (Hartwell Paper, 2010, p.7). At the COP in Copenhagen in 2009 the agenda of the meeting included environmental issues from deforestation, oceans, biodiversity loss to poverty eradication, health, and others. Authors suggest reconsidering the very perspective that is taken on climate change problem. Managerial approach applied to climate change was criticized before (Jamieson, 1992).

Hartwell Paper's authors argue that climate change cannot be resolved using conventional approaches as it is a "wicked" problem (as opposed to "tame" type of problems).

It is argued that "climate change was represented as a conventional environmental 'problem' that is capable of being 'solved'" (Hartwell Paper, 2010, p.15). Kyoto approach was constructed by borrowing from past successful practices and regimes dealing with ozone, sulphur emissions, and nuclear bombs. That was not unreasonable, to look into past treaties that worked and rely on them to create a framework to resolve climate change. However, analogies between climate change and other, previously managed problems were structurally unsound (Prins & Rayner, 2007; Rittel & Webber, 2006). Previous problems could have been characterized as "tame" problems, which are "complicated, but with defined achievable states".

On the contrary, climate change is a "wicked" problem, "comprising open, complex and imperfectly understood systems". Some other 'wicked' problems are poverty, drugs, terror, and cancer. The nature of any 'wicked' problem is that it cannot have a definitive formulation, one can never know when there is enough knowledge to stop looking for more and there is no end to interacting open systems (Hartwell Paper, 2010, p.16). Politicians get frustrated by problems of this kind and "declare war" on them. General public is initially stirred but soon grows weary of 'wicked' problems as they prove to be intractable.

Different interpretations of stagnating international cooperation on climate change recognize one thing: for some reasons the world does not do the right thing about climate change. Something is obstructing us from ethical behavior. Gardiner's Perfect Moral Storm analysis attempts to answer this question from the perspective of ethics.

Key ethical dilemmas

Most ethical concerns of spatial distributive dimension of climate change justice focus on fair allocation of burdens and benefits of climate change mitigation and adaptation activities among states[7]. How should quotas for CO2 emissions be distributed among countries? What would be the ethical basis for this distribution? What principles of fairness should guide a

[7] While there is also literature looking at individual responsibility for climate change, in this section I will follow Gardiner's reading of a global dimension of climate change in a system constituted by states.

global climate agreement? These are just a few opening questions, which capture key concerns of the debate.

One of the most prominent ethical concerns behind climate change mitigation and adaptation is to ensure that past emissions of developed countries, as well as the current distribution of wealth across countries, are taken into account. Political philosophy scholars distinguish between 'time-slice' and 'historical' principles of fairness[8] that can be applied in order to fairly distribute burdens and benefits of combating climate change. Time-slice principles look at the existing distribution in a given moment of time and judge it as just or unjust. Historical approach implies that a given situation should not be judged as it is in isolation but analysed as part of past processes that shaped it.

The Fourth Assessment Report of IPCC (2007, p.15) states that "global atmospheric concentrations of CO2, CH4 and N2O have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values". Burning fossil fuels and changes of land-use patterns are identified by IPCC as the key causes of global increases in CO2 concentrations. IPCC Fifth Assessment Report (2013) confirms that "it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century" (IPCC, 2013, p.12).

Economic growth since late 18th century was defined by burning fossil fuels. Since the first industrial revolution in Great Britain, coal remained an essential pre-requisite for industrial development in the 19th century and still plays an important role in energy generation and steel production worldwide. Growing importance of oil was determined by technological advancements of the 20th century. Benefits from past emissions materialized through industrial economic growth in the current level of wellbeing in developed states. Developing countries did not enjoy economic growth based on burning fossil fuels and hardly contributed to the pre-1992 level of CO2 emissions in the atmosphere.

One way of conceptualizing existing situation is by imagining the capacity of our atmosphere to absorb CO2 as a sink, a common resource for all people on the planet which is limited (Singer, 2002, p.27; Traxler, 2002, p.101). Developed states have already used most of their

[8] These specific terms were propose by Nozik (1974, p. 153) and applied to climate change by Singer (2002). Also Shue makes a similar point by distinguishing between 'fault-based' (or causal, or historical) and 'no-fault' (ahistorical) principles of justice in the context of climate change (1993).

allowance, their share of emissions. In fairness, they are now supposed to stop using the sink and let developing states use their part of the resource without restrictions. Not only this is not happening, atmospheric pollution with greenhouse gases is associated with costs that are most likely to fall disproportionally on the poor and more vulnerable states.

The costs of past emissions are predicted to materialize in a form of natural disasters, sea level rise and significant environmental changes globally. Developing states are more likely to face and suffer from these changes for at least two reasons. First, poor countries are more vulnerable to possible climate change caused natural disasters due to their geographical location and lack of means to cope with those dangers (Gardiner, 2010, p.14). Secondly, as major reductions of CO2 emissions imply cuts in burning fossil fuels, poor states would be deprived from using the same technology that brought prosperity to the rich states in the past, at least to a full extent.

Historical principles of justice require that "polluter pays" and "one cleans one's own mess". As Shue puts it, "moral responsibility for contributing to the solution of the problem is proportional to the causal responsibility for creating the problem" (1993, p.52). If we take past emissions into account, historical principles of fairness require developed states to take action on climate change and assist developing countries in meeting their needs, too.

One common objection to this view has to do with ignorance and intentionality. Negative effects of burning fossil fuels were unknown in the past. It was not before the first report of IPCC that the world became fully aware of causes and possible effects of climate change and could no longer claim ignorance. Therefore, developed countries whose growth was based on harmful technologies cannot be held responsible for doing so before 1992 as they were not aware of possible consequences.

Several philosophers argued that ignorance cannot justify lack or absence of action from those who caused the problem due to the scale of harmful consequences imposed by climate change onto developing states (Shue, 1993; Jamieson, 1992). Developing nations are deprived from their share in a common resource that could be vitally important for their very survival. On this note, Gardiner argues that "if the harm inflicted on the world's poor is severe, and if they lack the means to defend themselves against it, it seems odd to say that the rich nations have no obligations to assist, especially when they could do so relatively easily

and are in such a position largely because of their previous causal role" (Gardiner et al., 2010, p.15).

Time-slice principles of fairness look at how to justly distribute climate change burdens among states judging from the present moment (and putting aside past responsibility). Philosophers produced a lively debate exploring different ways of sharing the costs of climate change. For example, Shue (1993, 1999) proposed an emission allocation scheme that distinguished between luxury and subsistence emissions. Poor states which should be given a margin to grow up to the level of subsistence emissions, while rich states should work on a drastic reduction of their luxury emissions (which are emissions above subsistence level) in spite of an overall increase in developing states.

Baer argues that "the fundamental principle of fairness in the governance of a commons is equality in decision-making and use; and in particular equality among people, not countries" (Baer, 2002, p.396). Baer, therefore, is in favor of equal per capita allocation of quotas. Singer in *One Atmosphere* (2002) explores equal share for everyone, aiding the worst-off and the greatest happiness time-sliced principles of fairness. He supports, after a detailed analysis, the principle of equal per capita future entitlements to a share of the capacity of the atmospheric sink, in spite of it being excessively harsh on industrialized nations. Jamieson (2005) also supports as the most plausible the principle of per capita distribution, while exploring also distribution on the basis of productivity, existing emissions or a combination of these principles.

Both historical and time-sliced principles of fairness suggest that developed states have the responsibility to act on climate change. Ethicists seem to agree on who should, in fairness, carry the burden of climate change mitigation and adaptation. Yet, this convergence does not translate into relevant political decisions. Even though what needs to be done is clear, world leaders protect status quo and at best agree to incremental steps in the right direction. These actions, considering the urgency of the problem, are not sufficient and might as well count as non-existent.

Climate change requires re-thing the very bases of how the world works, how economic growth is produced, how wealth is created. Environmental challenge is broad and structural in nature. Behind a simple call for justice that requires developed states to act on climate

change there is a Gordian knot of social, political, economic, and technological issues. There is no one simple or even comprehensive solution; there are too many angles and interests. Conceptualizing the complexity in clear moral terms to understand what is it that obstructs us from ethical behavior is an important step in resolving the problem. I now turn to Gardiner's analysis of the global storm that explains what makes climate change such an intractable problem.

Global Storm

Global storm arises from three important characteristics of climate change: dispersion of causes and effects, fragmentation of agency, and institutional inadequacy (Gardiner, 2011, pp.24-29):

- **Fragmentation of agency**. Climate change is truly a global phenomenon. CO2 emissions are produced by a variety of individual and institutional actors.
- **Dispersion of causes and effects.** Negative effects of emissions will appear in the form of natural disasters and other changes across the planet, not necessarily in the same geographical area where the emissions were produced. The first two characteristics of climate change pose substantial difficulties in terms of identifying specific 'polluters' or culprits and victims to establish a causality chain and draw the link of responsibility.
- **Institutional inadequacy.** Existing international system as constituted of states has not yet produced an institutional structure (global governance) which could adequately cope with the climate change challenge.

This sketch explains the key reasons for why climate change is so hard to grasp. When culprits are as ambiguous as "rich states" or "transnational corporations" and victims as vague as "poor states", "vulnerable communities" or "marginalized groups", it becomes about everyone and no one. Achieving any concrete steps to restrict emissions becomes almost impossible as these groups of actors are too large, diverse and difficult to manage in light of an institutional inadequacy.

The failure of global cooperation on climate change is another important aspect of the global storm. To better explain it Gardiner invokes game theory. International cooperation on environmental matters is frequently conceptualized as the Tragedy of the Commons model

(Hardin, 1968). Tragedy of the Commons (ToC) is essentially a Prisoner's Dilemma involving a common resource. It is rooted in a contradiction between self-interest and collective interest of rational actors, opens possibilities for free-riding and poses major obstacles for collective action.

Applying the logic of ToC to international cooperation on reducing CO2 emissions generates two claims. On the one hand, it is collectively rational (for states) to restrict overall greenhouse gas effect and, therefore, collective emissions, to benefit from decreased or deferred climate change. Each agent prefers the outcome when everyone restricts their emissions. On the other hand, it is individually rational (for each state) not to restrict their emissions as doing so would impinge their economic development as emissions are still associated with growth (Gardiner, 2011, p.26).

One way to deal with collective action problems such as Tragedy of the Commons at an international level is by appealing to a broader context of cooperation[9], like trade or security issues. Appealing to leverages outside the scope of the issue in question (climate change in our case), states need to agree upon certain enforceable sanctions (which Hardin calls 'mutual coercion') and create, at least for this issue, an effective system of global governance. As demonstrated in the brief overview of international climate talks earlier, for the past twenty years states were unable to agree on a binding global climate deal that would ensure compliance across countries.

Mainstream climate change politics is focused on a quest for a single overarching climate deal[10]. However, such an agreement as a solution to climate change is viewed with skepticism by many scholars. Elinor Ostrom, Noble Prize winner in economics in 2009, suggests that rather than a single overarching binding agreement, a combination of overlapping policies at city, subnational, national, and international levels is more likely to succeed in resolving climate change (Ostrom, 2000; 2012). Ostrom argues in favor of a polycentric approach at different levels of society that would reflect positions of local, national and regional stakeholders. The most important management decisions, she argues, should be taken as close

[9] Another solution proposed by Hardin (1968) is to privatize the common resource. In case of climate change this solution can prove to be unrealistic because the "common resource" is the capacity to absorb GHG emissions. For a detailed account of environmental economics and economic solutions to the tragedy of the commons see Freeman (2001).

[10] For example, the 2014 Climate Summit organized by UN Secretary-General Ban Ki-moon aimed to mobilize political will for a universal and a legally-binding comprehensive agreement in 2015 (IISD 23.09.2013; see recent updates from IISD Reporting Services for more examples).

to the scene of the events and actors involved as possible. Polycentric and grassroot-initiated climate change politics is gaining increasing prominence globally[11].

While sharing the view that international cooperation on climate change and other environmental issues is important, I tend to support Ostrom's polycentric approach when it comes to more concrete steps in addressing the problem. This approach provides avenues to better incorporate concerns from various levels, tailor solutions to local needs and enable democratic participation in resolving the problem which is relevant for all yet takes different forms for different groups in different places. Polycentric approach helps avoid the gridlock of international climate talks as it implies that there is no *one* solution that would be panacea from disaster. Many solutions have to be sought after and applied where necessary.

For example, this dissertation focuses on the crisis of values that caused and was given an edge by the global environmental crisis. I discuss how a value shift could be a solution. The problem is specific to rich states and upper classes in some developing states. In the developed states it is also important to highlight upper and middle classes who have luxury of choice to behave, consume and act sustainably. It makes sense to talk about a voluntary value shift as a way to go only for these actors. It is not a "one-fits-all" global idea but a tailored solution that can be implemented at local, municipal, regional, national, and international levels, although it cuts through social classes rather than through the levels of governance.

1.2. Intergenerational Storm

Global dimension of climate change, considered on its own, already appears complicated and challenging enough. But it cannot fully explain what prevents us from ethical behaviour on the problem. What really confuses the picture is the intergenerational aspect of climate change. One point about twenty years of stagnation in cooperation on climate change has to do with the fact that the world community continuously postpones action. International diplomatic practices seem to enable and reinforce the delay. As Gardiner terms it, the nations "pass the buck" of dealing with the problem onto future people.

Just like in the case spatial dimension of climate change, three characteristics lead to an intergenerational storm: dispersion of causes and effects, fragmentation of agency, and

[11] One example could be a recent publication of the Oxford Martin Commission for Future Generations (2013) that calls to create a C20-C30-C40 Coalition to counteract climate change; a new coalition made up of G20 countries, 30 companies, and 40 cities.

institutional inadequacy (Gardiner, 2006, p. 90). However, temporal reading of these characteristics is very different from the spatial one.

Temporal dispersion of causes and effects is determined by basic mechanisms set in motion by the greenhouse effect. Climate change is a severely lagged, resilient, seriously back-loaded and substantially deferred phenomenon. Resilience implies serious repercussions for our ability to manage the problem in case of delays in action. Back-loading poses epistemic difficulties for normal political action as it makes hard to grasp the connection between causes and effects. It undermines our motivation to act. Deferral effect puts into question the ability of standard political institutions to act: decision-making horizons are so far defined by election cycles and politician's career length[12]. Climate change, however, requires a far longer political commitment.

Institutional inadequacy in case of temporal dimension of climate change means that our institutions are relatively short-sighted. History of United Nations, currently responsible for facilitating climate change talks, does not go back for even seventy years. There are no guarantees with regards to how long it will last in the future. Climate change is a problem that requires a long-term political commitment measured in hundreds of years, not in decades. An argument that we are well-equipped institutionally to tackle long-range future issues is rather problematic.

It is not certain also that states act in the interests of both present and future generations of its citizens. Gardiner argues that states are biased in favor of present generation, which benefits from cheap energy and consumption choices, for example. The back-loading aspect of climate change makes it tempting for each consequent generation to also postpone action, while negative effects of climate change are more likely to fall on future people. Gardiner calls this dangerous dynamics 'intergenerational buck-passing' (Gardiner, 2011, p.35). Buck-passing leads to the accumulation of emissions and abuse of resources, which amplify risks for future people.

Temporal fragmentation of agency presupposes that the agency (humankind) can be broken down into generations. In principle, generations cannot act as a single agent, which has

[12] For more literature on a clash between short-termism of political institutions in liberal democracies and the long-term nature of such problems like climate change see, for example, Wissenburg (1998), Shearman and Smith (2007).

serious implications for the collective action problem in question. Generations cannot coexist in time to get together, negotiate and find the best solution for everybody. Following this logic, Gardiner formulates the situation as a Pure Intergenerational Problem (PIP).

The Pure Intergenerational Problem

PIP is an analytical game theoretical model with a structure similar to the Prisoner's Dilemma or to the Tragedy of the Commons. It attempts to explain cooperation over very long periods of time among actors who are generations (not states, as in spatial reading). PIP captures a contradiction between individually and collectively rational choices that the generations of humans can make. Collectively it is rational for most generations to cooperate and restrict overall emissions to avoid climate change consequences and possible extinction of the human race. Individually for each particular generation it is rational to maintain their level of wealth and continue with their growth and emissions, no matter what others do. The logic of PIP reveals why each generation tends to postpone action, even if cooperation across time would be beneficial for humanity as a whole (in the context of climate change meaning survival).

Gardiner claims that PIP is essentially worse than Prisoner's Dilemma because its agents do not coexist in time. For each generation it is a one-shot game. Future generations who become vulnerable as a result of present generation's actions have no leverage over these actions. This makes standard solutions such as cooperation on issues outside the scope of the problem or notions of reciprocity unavailable. In fact, "current populations might not even be motivated to establish a fully adequate global regime", since given a temporal dispersion of effects such a regime may be not "in *their* interests" (Gardiner *et. al.,* 2010, p.92).

Moreover, the context in which the PIP is considered makes it even more complicated. Climate change is not a static phenomenon. Present and consequent generations contribute to it at a rapidly accelerating rate. Lack or absence of action of the present generation, therefore, might make some future generations suffer unnecessarily.

Gardiner formulates the PIP but does not propose any solutions to it. His purpose is to conceptualize climate change as a moral, ethical problem (or rather – problems) and to open up avenues for further inquiry. Gardiner appears skeptical about the role that institutions can play in resolving the PIP (Gardiner, 2011, pp. 173-174). He criticizes contemporary institutions for their short-term outlooks and the current international system for the lack of

ability to create an institution that could carry on commitment to resolve climate change over long periods of time.

I agree that contemporary institutions may be found unfit to tackle climate change on many grounds. An intergenerational perspective helps explain stagnation of international climate talks and delays in achieving a global agreement. No contemporary institution can claim to be able to ensure everyone's participation, enable achieving a global agreement, enforce sanctions and monitor compliance over as long period of time as harmful physical consequences of climate change may be taking place in the future. Thus, even if a climate deal is achieved, this would be a chimerical solution to the problem due to long-term structural weaknesses of the international institutional system.

This is not to say that international cooperation or institutions are unimportant in resolving climate change. They are in many ways central to generating and implementing solutions. My problem is more with expectations: so much is expected from a global agreement, so many efforts are put into achieving it which could have otherwise been re-directed towards resolving "smaller" issues that are part of the problem. The PIP clearly reveals the weakness of contemporary institutions to respond to climate change, and I would like to propose a solution that places less emphasis on institutions as they are and focuses on how to tackle broader conditions that result in an institutional inadequacy.

One way to move forward is to change the game's structure to avoid falling into the PIP trap in the first place. This can be achieved by changing incentives (and associated pay-offs) for cooperative behavior. Incentives are rooted in a value system, which determines what we consider right or wrong, more or less important. Introduction or development of new concerns and values should affect the choices we make and decisions we take as individuals and as part of collective entities.

A unit of analysis in the PIP is a generation. The present generation should change its way and the future generations should follow the example in order to resolve the problem. Thus, my solution focuses on the members of the present generation, currently living people (from upper and middle classes in developed states and upper classes in some developing states) who are economically, physically, politically able to choose a more sustainable way of living. In chapter 4 I develop this argument in more details.

1.3. Theoretical Storm

The last cluster of factors that obstruct ethical behavior on climate change is called theoretical storm. Climate change in its complexity and scope is a new type of problem that contemporary moral and political theories are poorly equipped to address. Among theoretical challenges posed by climate change there are questions of intergenerational equity, global justice, decision making in the context of scientific uncertainty, future persons whose existence and preferences are contingent on the choices that we make, human relationship to animals and nature (Gardiner, 2011, pp.213-214).

Gardiner subjects contemporary political institutions and theories to a test. “Suppose that human life on this planet were subject to some serious threat. Moreover, suppose that this threat was both caused by human activities, but also preventable by changes in those activities. Add to this that the existing social and political systems had allowed the threat to emerge, and then shown themselves to be incapable of adequately responding to it. Then ask two questions: Would such failure license a criticism of the existing social and political systems? If so, how serious a criticism would this be?” (Gardiner, 2011, p.217). When a question is framed this way, the answer seems to inevitably license criticism of existing social and political systems.

Moreover, the charge of a global failure can be applied to the philosophies that stand behind these systems. Gardiner argues that moral and political philosophy is at a stage of an initial diagnosis for the problem. It is established, for example, that climate change is unjust to the global poor, to future generations, to nature. Contemporary moral and political theories, however, do not offer an in-depth analysis of what exactly had gone wrong and what it would take to get it right. These answers are much needed, though. Philosophers should take climate change seriously and develop guidance on how to deal with a new kind of long-term problems (Gardiner, 2011, pp. 244-245).

It might be objected that robust methods to address long-term problems like climate change exist and are well developed outside philosophy. Economics has standard methods for addressing the future, such as, for example, social discount rates (SDRs). These seemingly neutral and objective elements are integral parts of most models that project long-term costs

of climate change. But if one looks closer at the assumptions underlying these indicators, it becomes clear that they are based on value judgments (Stern, 2008, 2012).

Assumptions about how much we value future people and projects are codified in numbers and not discussed explicitly. These judgments were originally developed for models that very modestly incorporate intergenerational justice concerns and certainly were not designed to accommodate the "greatest externality" of climate change (Stern, 2006). The conclusions of the Stern Review, and especially the low discount rate employed by Stern, prompted a response from another prominent climate economist, William Nordhaus (2007), who argued against the low SDR and its implications to the model as a whole. The discussion which became known as a Stern-Nordhaus debate is well presented in several studies (i.e. Ackerman, 2007; Weisbach & Sunstein, 2009).

Resolving climate change through economic measures has been at the center of world community's attention since the issue had reached global political agenda. This focus is not surprising considering the fact that economics was among few disciplines that already had at least some tools to develop guidance on long-term problems, unlike moral and political philosophy. However, continuing preoccupation with economic solutions facilitates moral corruption by hiding ethical arguments behind economic concepts and technicalities (Gardiner, 2011, p.298). Economists have to develop new tools to incorporate ethical challenges created by climate change (Stern, 2012).

1.4. Moral Corruption and Changing Values

A combination of global, intergenerational, and theoretical storms makes us vulnerable to moral corruption. Gardiner distinguishes moral corruption from general corruption in (climate) politics. While general corruption manifests itself through acts such as bribes or nepotism, moral corruption is a more subtle form. It shows in how we talk and think about moral problems such as climate change, whether we recognize that there is an ethical problem at all. It "strikes at our ability to even understand what is going wrong in moral terms" because our everyday moral thinking is vulnerable to external manipulation (Gardiner, 2011, p.306). Moral corruption is about justifying lack of action, about convincing ourselves that there is nothing wrong or that there is nothing we can do.

Climate change involves serious asymmetric vulnerability. Those who are already affected or will be affected by climate change and by power asymmetries are poorly placed to defend themselves against these asymmetries. Global storm, therefore, threatens that the rich would take unjust advantage of the poor; intergenerational storm that the present generation would unjustly benefit at the expense of future generations; and that humans would take unjust advantage of nonhuman animals and the rest of nature (Gardiner, 2011, p.304). It is, thus, crucial to recognize an ethical problem behind climate change, to understand and resist the temptation of various forms of buck-passing (Gardiner, 2011, p.308).

Formulating the notion of moral corruption that helps us conveniently turn a blind eye to the climate change challenge, in my view, is the most significant input of the perfect moral storm analysis into explaining why we do not do what we have to about the problem. It explains why we find justifications for actions that benefit present people but threaten the very survival of future generations. Moral corruption is less obvious than spatial and temporal moral dilemmas discussed earlier which makes it even more difficult to address. How do we recognize and resist global and intergenerational buck-passing?

The first step would be to ground the notion of moral corruption into existing debates in moral and political philosophy and ethics. As rightly pointed out by Di Paola (2013), Gardiner (2011) assumes that moral corruption emerges in a situation when "moral requirements [imperatives to engage into pro-environmental action] are otherwise clear" (p. 308). In other words, Gardiner says that we know what has to be done but we do not do it because we become morally corrupted. But it does not seem like existing moral theories have much guidance to offer regarding what has to be done or what the right thing to do is; a lot of action seems to be based primarily on our moral intuitions rather than strong established principles. Gardiner contradicts himself in a way with this assumption after outlining the theoretical storm which implies the lack of clarity regarding these very requirements.

Moral corruption is closely connected to individual moral character, to values and virtues[13]. Ways of talking and thinking about moral problems at their basis, at the level of ethics itself, moral corruption stems from the system of values in which we operate and make moral judgements. Our values define what we consider right or wrong, good or bad, more or less

[13] With regards to virtues, my thinking goes a lot in line with Di Paola's (2013, 2014) argument that to defuse a perfect moral storm, individuals must resolve in favor of ant-climate change practices and hold strong, exercising strong ethical virtues.

important. Individual values and virtues determine our predisposition to act in certain ways on moral problems. Moral corruption is about defaults in ethical decision-making process, a process that is strongly influenced by values.

The dominant system of values in the develop states emerged in times when the world was fragmented, when the notion of global problems did not exist. As Jamieson (1992) puts it, current system of values 'evolved in low-population density and low-technology societies, with seemingly unlimited access to land and other resources' and 'is reflected in attitudes toward population, consumption, technology, and social justice, as well as toward the environment' (Jamieson, 1992, in 2010, p. 83). Jamieson argues that our dominant system of values is inadequate and inappropriate for guiding our thinking about global environmental problems, in particular human-induced climate change. This system, therefore, should be transformed; it should evolve in line with the evolving nature of problems that human kind faces.

I fully share this view of a necessary value shift propose by Jamieson. However, a few points should be kept in mind. How society operates as a whole is combined of billions of individual decision-making processes. Not all individuals have political power to influence the way institutions and states act on climate change. Yet, those who are more affluent are still individuals who make ethical (or not) decisions. And, most importantly, most individuals in developed states have power to change their contribution to climate change or global environmental degradation from miniscule to less than miniscule. And cumulative effect of billions of miniscule changes will be substantial for the planet, for nature, and for humans. Therefore, in this dissertation I focus on individual ethical decision-making processes as key determinants of an overall vector of action on climate change and global environmental crisis which can enable a value shift towards sustainability.

Individuals are vulnerable to moral corruption, apart from other factors, due to lack of comprehensive moral guidance (arising from theoretical storm). While in general it is agreed that 'someone should do something' about climate change, what exactly the right thing to do would be is not that obvious. For instance, the example of Dashwoods' moral corruption analysed by Gardiner (2011) in *Jane Austen vs. Climate Economics* raises quite a straight-forward moral judgement of actions of John Dashwood, who abandoned, in spite of a death-

bed promise to his father, his half-sisters and step-mother. It is easy to say what Mr. Dashwood did wrong and what the right thing to do in that situation was.

Compare Dashwoods' example with a story of Jane Smith, a passionate climate change campaigner and advocate from the US, who has to travel a lot across country and around the world to follow international climate meetings and spread the word about climate change. Jane travels to most of those meetings by plane, even to those not very far away, as her time is precious, and planes are faster than other means of transport. Jane's actions contribute directly to the cause of the problem she campaigns against. Like John Dashwood's deathbed promise, Jane is bound by her commitment to campaign against climate change. Yet, when it comes to her daily work and travel, she finds arguments to make choices that, in essence, go against this moral commitment.

Intuitively, we feel that something is wrong with Jane's story. But we cannot see as clearly as in Dashwoods' case what exactly the right thing to do is. We cannot judge easily in hundreds of other daily situations when our choices matter. John can walk to work but he prefers the comfort of his SUV. He does not think climate change is a reason strong enough to make him change his mind. Why should it be him, John, giving up his comfort while his neighbour Peter gets to keep his car? Besides, even if his whole neighbourhood stops driving, climate change would not stop.

Yet, emissions from John's car are going to contribute inevitably to future natural disasters. How do we judge his actions? Is there any strong moral argument that would classify John's position as right or wrong? And would future people affected by negative effects of billions of decisions, like John's one, judge these actions like we, John's contemporaries, do? Unfortunately, at the moment no solid moral guidance was developed to speak against or in favour of John's actions. We cannot say what the right thing to do is for an individual on climate change for at least two reasons.

First, the link between individual contributions to climate change causes and their effects is obscured. There is a problem with our conception of responsibility. As Jamieson notes, "our current value system presupposes that harms and their causes are individual, that they can readily be identified, and that they are local in space and time" (Jamieson, 2010, p.83). If Ann harmed Mary, she has to be held responsible and answer for what she did. In climate change

this conception of responsibility does not work. Billions of miniscule and seemingly random individual contributions, like Jane's and John's ones, inflict serious harm for geographically and temporarily remote people, for non-human animals and nature. The conception of individual responsibility should be strengthened and better developed in climate change context.

Secondly, we have no or very little moral motivation to make sacrifices for the sake of remote future people. Climate change would affect most persons three of four generations away from our own. There is no way we can ever know them, or even their parents. While being naturally inclined to take action for the sake of our children and grandchildren, our family or community, we are much less motivated to make sacrifices for people (even our descendants) to whom we have no personal connection or affection. It is crucial to develop a strong moral argument in favour of including concerns for distant future people into individual ethical decision-making processes.

These two points will be developed in the following chapters of this dissertation. For now, it is important to conclude that we need a transformed value system that would be able to underpin strong moral guidance for climate change and global environmental crisis. And to develop this new value system it is necessary to start with gaps that current system has, specifically the two above mentioned points. Lacking values should be identified and developed. They should become part of individual ethical decision-making processes. The following chapters look into how this integration can be achieved.

Conclusion

This chapter provides a basis for the following parts of the dissertation. The purpose of this chapter in the overall dissertation structure is to explain my standpoint on climate change and define my conceptual framework for the following analysis by engaging with existing literature. The chapter is supposed to serve as a reference point for the rest of this dissertation.

My conceptual framework is based on a Perfect Moral Storm analysis developed by Stephen Gardiner (2004, 2011). Gardiner was the first climate ethicist to propose a comprehensive and well-argued ethical position on climate change, explaining what factors obstruct us from ethical behaviour on the problem. Gardiner's main thesis is that climate change can be

presented as combination of global, intergenerational and theoretical storms that together converge into a perfect moral storm which makes us vulnerable to moral corruption.

First, I provide a brief overview of international climate talks. This account is important to highlight key benchmarks in a stagnating process and demonstrate how little the world progressed on climate change in the past twenty years in terms of real action.

Then I follow perfect moral storm's structure and present global, intergenerational and theoretical dimensions of climate change. I dedicate a section to the Pure Intergenerational Problem (PIP), probably Gardiner's most important theoretical contribution. In Chapter 3 I will look in more details into the question of future generations and attempt to propose a solution to the PIP.

The last section is about moral corruption and its connection with values. I argue that moral corruption is intimately linked to the dominant system of values and through this link it can be approached, understood and addressed. This section prepares a ground for Chapter 2, in which I will look closer at the process of transforming value systems, unfold the concept of sustainability values and engage with literature in virtue ethics.

Chapter 2. Unfolding the Concept of Sustainability Values

Introduction

Our dominant value system is inadequate and inappropriate for guiding our thinking about global environmental problems, such as those entailed by climate changes caused by human activity.

Dale Jamieson, 1992

The IPCC 5th Assessment Report released in 2007 clearly states that "there is […] high agreement and medium evidence that changes in lifestyle and behaviour patterns can contribute to climate change mitigation across all sectors" (IPCC, 2007, p. 59). In a press conference following the release of the Report IPCC chair and Nobel Prize winner Rajendra Pachauri drew attention to this point by transforming it into a simple advice: "Don't eat meat, ride a bike, and be a frugal shopper" (AFPresse, 2008). "Today we have reached the point where consumption and people's desire to consume has grown out of proportion," said Pachauri just before the climate summit in Copenhagen in 2009. "The reality is that our lifestyles are unsustainable" (Guardian, 2009).

Pachauri, however, looked beyond lifestyle and behavioural changes. He argued that the western society must undergo a radical value shift if the worst effects of climate change were to be avoided. According to Pachauri, a new value system of "sustainable consumption" was urgently required and the necessary value shift would take a generation to take hold. He suggested that the section of society that will make the change happen is essentially young people. As Pachauri puts it, "they will be far more sensitive than adults, who have been corrupted by the ways we have been following for years now" (Guardian, 2009).

Values are often considered to be the domain of humanities and social sciences and are often dismissed as something too vague and hard to get a grasp on. Much less expected, thus, are references to values from a world leading climate scientist and the most authoritative report on the subject. It took this call almost two decades (since climate change was recognized to be a global threat) to be expressed at such a high level. The idea of a value shift as a response to global environmental change emerged some time ago. The quote that opened this introduction belongs to Dale Jamieson, who argued in 1992 that the dominant values which

emerged in a low-population-density and low-technology societies with seemingly unlimited access to land and other resources were inadequate in a new context of global environmental crisis (Jamieson, 2011, p. 83). Jamieson argued that "unless we develop new values and conceptions of responsibility, we will have enormous difficulty in motivating people to respond to [climate change]" (Jamieson, 2011, p.84).

Some attempts to come up with a set of universal values that could help prevent the global environmental degradation were made at different points of time. The most successful was the case of the Earth Charter which was signed in 2000 after a six-year-long consultative process. More than a decade since its inception, the final text of the Earth Charter was adopted in Paris. This document is "a declaration of fundamental ethical principles for building a just, sustainable and peaceful global society in the 21st century" (Earth Charter, 2000). The Charter employs the term 'principles' which can be easily read as values: "prevent harm as the best method of environmental protection" (n.6) or "care for the community of life with understanding, compassion and love" (n.2). Earth Charter "challenges us to examine our values and to choose a better way" and is considered by many to be a powerful source of global ethic (Dower, 2005).

However, it is important to highlight that the Earth Charter was never adopted by states, despite numerous attempts (Earth Charter Initiative, 2008). One interpretation of this failure is that it is impossible (or a least very difficult) to agree on a set of universal values because values, deeply embedded in culture, differ so much from state to state. Nevertheless, global climate change is a challenge that affects all nations and peoples, and there is hope that it can become common ground on which states will eventually agree on a set of shared values. A more pessimistic view, however, would be to suggest that states are too much part of the problem, of the global political and socio-economic order that has driven humanity to the crisis in the first place. Asking these actors to agree on values that threated to overturn their very foundations might be an impossible task.

Another important initiative to develop some kind of guidance for the transition towards sustainability was the work of the Global Scenario Group, an independent international and interdisciplinary body founded in 1995 to examine world prospects and ways of fostering a more sustainable and equitable future. In 2002 the group published a report called *Great Transition: The Promise and Lure of the Times Ahead*. The Report constructed several

possible scenarios of how the world might develop in the context of global environmental crisis.

The possible scenarios included *Market Forces* (markets drive world development), *Policy Reform* (coordinated government action is initiated for poverty reduction and sustainability), *Barbarization* (two scenarios that feature institutional collapse or an authoritarian response) and the *Great Transition*. Authors make a case for the Great Transition scenario, which would heavily rely on "an engaged and aware public, animated by a new suite of values that emphasizes quality of life, human solidarity and environmental sustainability" (Global Scenario Group, 2002, p. 53). Authors argue that values and knowledge are critical dimensions of the transition and call to shift from individualism and consumerism towards post-consumerism, social solidarity and ecology (Global Scenario Group, 2002, p. 55).

Transformation of values is a long-term social, political and economic process whose outcomes we cannot really sculpt or fully predict. Global discussion about large-scale responses to climate change is still dominated by neo-liberal economics and by incremental market-based solutions and influenced by strong belief in technology. But the idea of a value shift as a global response to the environmental crisis is gaining more prominence in academia, civil society and policy-making. In order to become a serious alternative to the mainstream thinking, however, the idea of a value shift should be much better developed theoretically and supported empirically. There is a need to further develop calls for *a* transformation into more concrete theoretically grounded claims, that can only emerge as a result of interdisciplinary research in philosophy, social psychology, political and social sciences, as well as to an extent in natural and medical sciences.

This chapter attempts to take stock of theoretical and empirical studies of values in the context of sustainability. Two disciplines, philosophy and social sciences, tackle values more than others. In philosophy, environmental and virtue ethics contributed greatly to a normative perspective of what should change as part of a transition towards sustainability. On the empirical side, among social sciences, some great work was done in by social psychologists side to locate and measure values as part of human motivations and predicators of behavior. As the review shows, however, not much work was done on neither side to suggest how a shift towards sustainability values should look like or how it can be facilitated.

The main research question that this chapter addresses is what new values should emerge and spread to help achieve sustainable development. I explore how a value shift towards sustainability values can happen at the individual level, in the hearts and minds of Passive Citizens of developed states. I address the question of an individual value shift through a virtue-oriented environmental ethics approach, which focuses on moral character and on developments of new forms of goodness as a response to global environmental crisis. I also argue in favour of inclusion of two new concerns in the scope of sustainability values.

2.1. Key definitions

Values, personal and group values, system of values

Values are an abstract concept. Its definition varies from discipline to discipline. In order to be clear in which sense the term is used throughout this dissertation, let us look at a definition of values from the New Shorter Oxford English Dictionary (1993):

> a. The worth, usefulness, or importance of a thing; relative merit or status according to the estimated desirability or utility of a thing.
>
> b. Estimate or opinion of, regard or liking for, a person or thing.
>
> c. The principles or moral standards of a person or social groups, the generally accepted or personally held judgment of what is valuable and important in life.

In this dissertation, I consider values in the sense closest to the third definition. I view values as principles and moral standards that can be held both by a person and by a group. There are, thus, personal values and group, or collective, values. Personal and group values are closely connected and influence each other. Keeping that in mind, I focus on personal values as a crucial component of individual moral motivation to act sustainably. Collective values and norms certainly shape individual behaviour to a great extent, but they are not the only and often not the main force. Personal values, in the end, are those that underpin individual choices.

An individual or a group have a system of values. One definition of a system of values (or a value system) is “a hierarchically-ordered, always open set of morals, ethics, standards, preferences, belief systems and world views that come together through self-organizing

principles to define an individual, a group or a culture" (Dawlabani, 2013). Systems of values vary across the globe (Appleton, 2013) and characterize the diversity of groups and cultures in the world. One could speak about a Western system of values or about a system of values of an African tribe, about a Chinese or a corporate system of values. As outlined in the Introduction to this thesis, unless specifically stated otherwise, by 'our' or 'dominant' system of values I refer to the Western system of values that is typical to most developed states. This system values individualism and rationality and produces such consequences as materialism and consumerism.

In the environmental context, the concept of values is widely used across several disciplines: environmental philosophy, environmental economics, and social psychology. Economic theory based on a rational actor model does not offer much insights into *why* people prefer what they prefer, focusing rather on decision-making with given sets of preferences. It is, therefore, not helpful for my argument. But philosophy and social psychology produced a large body of literature on personal values: from normative and empirical perspectives respectively.

Environmental and sustainability values

Although the term is frequently used, there is no one agreed definition of environmental values. In philosophy, the term often refers to a discussion about intrinsic and instrumental value of nature. This is a rich debate which I, however, do not intend to cover here because it is focused on only one moral principle: how should we value nature. While I do favour the views that nature has intrinsic value, I am interested in a broader set of moral principles that can guide a transition towards sustainability. In social psychology environmental values are embedded in two out of three value orientations: biospheric and altruistic (and not in a materialistic value orientation). These are values that are conducive to environmentally friendly (or sustainable) behaviour.

Environmental values at a conceptual level concern various aspects of human relationships with the environment but they do not necessarily emphasize a long-term commitment. In the context of long-term global challenges that humankind faces, it might be more appropriate to talk about sustainability values that would incorporate both the environmental dimension and the long-term commitment aspects of a necessary value shift. Sustainability values are

environmental and other values that help present generation meet or adjust their needs in a way that would not compromise the ability of future generations to meet their own needs. At the core of sustainability values there is human concern for environmental degradation and a long-term sustained commitment to diminish destructive human influence on nature to live in harmony with it.

Value shift

The inquiry presented in this chapter has less to do with a static conception of values or system of values and much more with the dynamics of a value shift. A value shift implies a change in values, transformation of value systems, emergence of some new and elimination of some old values. Value changes are an integral part of the development of our society throughout time. Plenty of references to values as elements of major transformations can be found in early and modern theories of sociocultural evolution. However, in these theories values are primarily used as explanatory factors enabling or impeding social or cultural changes. Little attention is paid to the values themselves, to how they change, what factors influence that change and whether can they be changed at will. Not to mention that these theories do not consider global environmental context.

There are at least two views in the literature on how values change that can be helpful in understanding a transition towards sustainability. From a post-materialist perspective, a fundamental shift in values is achieved with the process of industrialization. As Ronald Inglehart (1997) argues, "individuals pursue various goals in hierarchical order—giving maximum attention to the things they sense to be the most important unsatisfied needs at a given time" (Inglehart, 1997, p. 991). Industrialization process changes those unsatisfied needs and people's priorities. Environmental concerns are part of post-materialist values. This view puts more emphasis on the context and on external forces and less on individual reflection and transformation.

Some concerns about this view should be raised. According to this theory, developed states already passed industrialization phase and have post-materialist values, including environmental values. Yet, these states continue to contribute to the global environmental degradation at a far higher rate than developing states through their unsustainable consumption and production practices. That probably means that post-material values are not

enough to address global environmental crisis. Moreover, a post-materialistic interpretation of values is a rather deterministic view. According to it, values follow almost automatically from economic changes (industrialization) and are not considered to be a product of conscious individual or collective deliberation processes.

Yet, the role of collective deliberation and individual reflection processes in a value shift cannot be undermined. John Dewey (2008) in his works from 1925 till 1953 explored the role of deliberation in the processes of intelligent conduct and practical judgment. Deliberation can lead to reflection and changes in values. Yurgen Habermas (1991) emphasize the influence of discourse on changing values. In *Theory of Communicative Action* Habermas (1981) argues that our speech acts inherently involve claims open for criticism and justification, among which are claims to moral rightness, ethical goodness or authenticity, personal sincerity, and aesthetic value. In line with this view, McCarthy (in Habermas, 1991) argues that "when serious questions of value arise, deliberation on who one is, and who one wants to be, yields ethical advice concerning the good life".

This way, our values and sense of identity are developed through interactions with others, whose views we respect. The emphasis that we place on values is shaped and re-shaped throughout the course of one's life. In this way also communities develop commonality in their values (see Dietz et al, p. 363). This view of a value dynamics takes into account social context and interactions but at the same time stresses the importance of reflection in individual transformation. Values, therefore, are a combination of individual reflection and social interactions and practices. I would also add here the role of personal experience[14] which is very important in shaping one's attitudes and beliefs that in turn influence our values.

To illustrate an individual value shift that includes all three components (deliberation, self-reflection and personal experience) consider an example of an average urban dweller[15] from a developed state; born, raised and living in a city. In her life she did not spend much time in the nature outside the city. She has no particular affection or strong feelings about nature. She feels sorry when she reads about poaching elephants or about oil spills in the ocean that kill

[14] Thomas Heberlein, for example, stresses the role of direct experience in shaping environmental attitudes, which are closely connected to values as the next section will explain (Heberlein, 2012, pp. 24-25).
[15] According to World Health Organization, in 2010 more than half of all people on Earth will live in cities (WHO 2013).

sea life but these concerns are not long-lasting and she tends to forget about them soon after she finishes the reading.

Imagine that this person was invited by someone she cares about to a one month hiking trip in the mountains. She agrees more because she does not want to upset the person who invited her and less because she feels like she needs to go 'into the wild'. During this month of exposure to nature, most of urban dweller's ideas about hiking and nature are challenged. Her personal experience affects her beliefs and attitudes: some change, some are replaced and some new ones emerge. She reflects on how she feels and how the world around her is. She discusses it with the person she cares about and that person supports the fact that she enjoys herself during the trip.

This personal experience, discussions with others and personal reflection can eventually change the place of the value of nature and wilderness in the system of values of the urban dweller. With stronger concerns for wilderness it is more likely that she would oppose construction of a dam that would flood the area where she hiked. More broadly, this person will be less inclined to engage into behaviours that negatively affect wilderness. Although this example is theoretical and not based on a specific story, it does not look improbable in a real life. But there are some well-known and documented cases of individual value shifts in the literature.

One of the most famous ones is the story of Aldo Leopold, an American author and environmentalist, whose values and attitudes underwent serious transformation during his life and work in Wisconsin (Aldo Leopold, *A Sand County Almanac,* 1949). Leopold went from eliminating wolves and in the early years of his career in New Mexico to developing wolf restoration programs and wilderness preservation management plans later on in his life. A life-time of self-reflection and personal experience is certainly different from one trip, a superficial discussion or a quick thought. Value changes require an in-depth reflection, critical thinking and time.

Finally, individual transformation is only one part, or dimension, of a value shift. In order to account for a more complete picture, three dimensions of a value shift could be considered: individual, collective and structural. Individual dimension of a value shift is about changes in personal values that happen through reflection, deliberation and personal experience.

Collective dimension refers to changes in group values – groups being as small as a family or friends circle to as big as a nation or humanity. Group values are closely connected to social practices and norms, mechanisms that determine how a value is reflected in actual behaviour of a group. Finally, by structural dimension I mean a set of institutional factors (formal and informal) that affect values – such as political or economic systems, laws, corruption, and other. All three dimensions are mutually reinforcing and influence each other.

Out of these three dimensions this chapter focuses on the individual value shift. Individual value changes remain at the centre of a value shift. This dynamic should be better understood in order to develop a more solid argument in favour of a value shift as a solution to global climate change. If we do not know how values change at an individual level, what factors and processes are the most influential, how long it takes and how it manifests itself, collective changes will remain an unmanageable mystery and the need structural changes will remain unclear. However, collective and structural dimensions are also very important in the shift and will be considered under more scrutiny in Chapter 4 of this dissertation.

2.2.How do values influence behaviour? Insights from social psychology.

Calls to change values are linked to the expectations that more sustainable values will result in more sustainable individual behaviour and choices. This is indeed an underlying assumption of my work: values interest me less as an abstract philosophical concept but more as a pre-condition, as a determinant of individual moral motivations to act sustainably, as a premise for individual behaviour, choices, and decisions. This assumption is strongly supported by research in sociology, particularly in social psychology.

Values, Norms, Beliefs, and Attitudes

In discussions about how society should react to global environmental problems concepts such as ‘norms’, ‘attitudes’, ‘concerns’ and ‘beliefs’ frequently appear along with ‘values’ and ‘behavior’. Often some of these terms are used interchangeably. Yet, these concepts have different depth and underlying dynamics, which means they need different time periods to change. This section briefly discusses conceptual differences between these terms, their implications for the core argument of the dissertation and explores findings of social psychologists that confirm the link between values and behaviour.

In social psychology, **values** are "concepts or beliefs about desirable end states or behaviours that transcend specific situations, guide selection or evaluation of behaviour and events, and are ordered by relative importance" (Schwartz & Bilsky, 1987, p.551). Values are conceptually distinct from **concerns**. Concerns are based on values, they reflect both the sense that something is important and a belief that it might be at risk (Dietz, Fitzgerald, Shwom, 2005, p. 351).

Values are also not the same as **beliefs**. Unlike values, beliefs are tied to a specific object, represent our understanding of the world and do not need to be correct (they are about how individuals perceive facts). For example, two persons can have opposite beliefs about the impacts of climate change on wilderness. **Worldviews** are generalized beliefs. A belief could be that oil spills lead to losses of marine life and a worldview would be that human actions harm the environment. There are also **needs** that refer to biologically based demands of the individual and **preferences** that reflect ranking of possible outcomes from a decision. Preferences often come in conflict with one another, and then our values are invoked to help make a decision (Dewey, 2008).

However, two concepts closest to values are attitudes and norms. Thomas Heberlein (2012) argues in *Navigating Environmental Attitudes* that **attitudes** are among the most used and least understood terms applied to describe our views of the natural world. Like values, they are invisible and can only be "guessed by reading mind" (Heberlein, 2012, p.14). An important difference between attitudes and values, however, is that attitudes always have an object. Attitudes are positive or negative evaluations of something quite specific (Dietz Fitzgerald, Shwom, 2005, p.346). Thus, one might hold a value of compassion and support the work of animal shelters (attitude towards a specific object: animal shelters). Values are "the basis for many attitudes and play a major role in discussing pro-environmental behaviour" (Heberlein, 2012, p.15). However, here is what social psychologists think about *changing* attitudes:

> Attitudes are generally stable, which makes them important. Some change, but only slowly. They're more likely to change at certain stages in life. The social context, rather than information alone, has much to do with that change. … Attitudes of the young replace the old. Attitudes sometimes change rapidly when a new attitude object is hooked to stronger attitudes and values… Society changes and attitudes change with it,

> but they change in ways we cannot predict or control. The point to remember is that although attitudes change, we cannot change them at will. (Heberlein, 2012, p. 162)

Values and attitudes are also different from **norms**. Norms, social or personal (or legal, for that matter) come with an 'ought-to' component (Marini, 2000), telling us what we *should* do. Norms are visible in behaviour of groups or individuals and usually come with formal or informal sanctions (like a feeling of guilt if one breaks one's personal norm or societal depreciation if a social norm is broken). Norm are much more visible and clear than attitudes, they have direct implications for individual behaviour as they set a context for action. Norms are "the heavy hitters for changing environmental behaviour" (Heberlein, 2012, p. 162). Values and attitudes, on the other hand, one has to guess.

While the link between norms and behaviour is well-established, a connection between values and norms is less clear. Intuitively, for example, one could link a norm not to litter to a collective or personal value of clean environment. But how exactly the two concepts are connected and influence each other is far from clear. At most one can say that values play a role in establishing norms and are reflected in norms, but social psychology does not say much on this relationship. Connection between environmental values and norms could be an interesting avenue for further research.

Thus, norms are crucial in shaping individual and group behaviour (Sunstein, 1996; Heberlein, 2012). Why then does this dissertation focus on values, whose relationship with behaviour is not straightforward, rather than on norms that are much more in power to determine specific individual behaviour? To that I would answer that a global environmental crisis, including climate change, poses a fundamentally new kind of problem, which calls us to look deeper than behaviour, attitudes, or norms. Something is wrong with people's mindset and thinking at a more fundamental level, and that is the level of values. If we do not decide what is (or should be) important, valuable in a new context of global environmental degradation, there will be no basis for new pro-environmental norms, attitudes or behaviour to evolve.

Values and Behaviour

While it is important to keep conceptual linkages between values, attitudes, norms, and behaviour in mind, the one connection that is of primary importance to this dissertation is a

causal link between values and behaviour. Social psychology research shows that there is a "moderately strong relationship at the individual level between various measures of values and measures of environmentalism, including reports of actual or intended behaviour" (Dietz, Fitzgerald, Shwom, 2005, p. 365). Social psychologists moved beyond discussing values in general and developed a framework to distinguish between at least three value bases for environmental concern: self-interest, humanistic altruism, and biospheric altruism (Stern et. al., 1993; Stern, Dietz 1994).

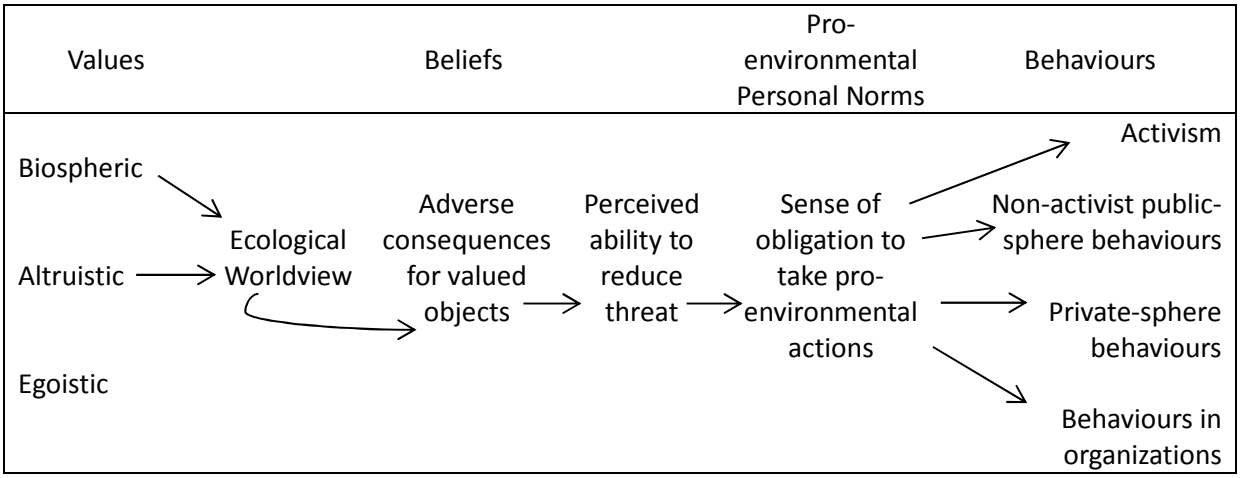
Self-interest (also call egoistic or materialistic value orientation) presupposes that one cares about the environment to an extent that it influences oneself or those one cares about. Humanistic altruism (altruistic value orientation) broadens the scope of concern from one's self and family to a larger community, like citizens of the same town, or nation, or to humanity in general. Based on humanistic altruism, our concerns for the environment would include, for example, issues of global social justice linked to environmental problems. In case of climate change and raising ocean levels, concerns for inhabitants of SIDS (small island developing states) can be linked to the value of humanistic altruism. Finally, biospheric altruism (biospheric value orientation) extends concerns beyond benefits to humans towards other species or ecosystems. Unlike the first two approaches which are anthropocentric and focus on the instrumental value of nature, biospheric altruism presupposes nature's intrinsic value.

How do these value orientations affect behaviour? Various studies (Schultz & Zelezny, 1999; Schultz et al., 2005; Nordlund & Garvill, 2003; Axelrod, 1994; Dietz et. al., 1995; Kalof et. al., 1999; Lindeman & Sirelius, 2001; Nielson et. al., 2004) indicate that altruism is a predictor of environmentalism (and, therefore, of sustainable behaviour). Thus, if one's value orientation is towards humanistic or biospheric altruism, there are much higher chances that the person would take decisions good for the environment and engage into sustainable behaviour than if one has a more self-interested, or egoistic, value orientation[16].

In 1999-2000 several studies (Stern et. al., 1999; Stern, 2000; Fransson & Garling, 1999) developed a theory which bridges values and behaviour through beliefs and personal norms, a

[16] However, as Corral-Verdugo (1997) and Dietz and co-authors (2005) point out, there is a gap produced by methodologies of measuring values between actual and self-reported behaviour. As most studies measure values by means of surveys, following Schwartz & Bilsky (1987), 'few studies examine actual behaviour and the link between self-reported behaviour or behavioural intentions and actual behaviour is far from perfect' (Dietz et. al. 2005, p.338).

Values-Beliefs-Norms Theory of Environmental Concern and Behaviour (VBN). VBN suggests that there is an indirect link between values and decisions about the environment: values influence our worldview (general beliefs) about the environment, which in turn influences our beliefs about the consequences of environmental change on things we value. Beliefs affect our perceptions of our own ability to reduce threats to things we value and then influence our norms about taking action. Environmental behaviour follows out of the sense of obligation to take pro-environmental actions. Below is a graphic representation of the VBN theory adapted from Stern (2000):



Graphic representation of VBN theory adapted from Stern (2000).

VBN theory not only acknowledges a link between values and behaviour, but also recognizes several types of environmentally significant behaviour: activism, non-activist public sphere behaviours, private sphere behaviours (such as consumer choices) and behaviours in organizations. This distinction is helpful in addressing a common idea that activism is the main form of environmentally significant behaviour (for example, Guardian, 2010). This point is central to the following chapters of this dissertation, which explore how a value shift can be achieved through bottom-up political action (Chapter 3) and through the efforts of ENGOs (chapters 5 and 6).

At this point, it is important to clarify that out of four types of behaviour the one most relevant for my argument is private-sphere behaviour. This is daily routine and private choices of a Passive Citizen. These are the lifestyles that Pachauri urged to change in his speech after the release of the IPCC report in 2008. It is a cumulative effect of private-sphere behaviours at the scale of a nation or the globe that contributes greatly to the global environmental change. Activism and non-activist behaviour in a public sphere, as well as

behaviours in organizations are certainly also very important manifestations of environmental concern but it appears that they go one step beyond private-sphere behaviours in terms of levels of commitment.

For instance, it is likely that a person who behaves environmentally friendly in an organization or advocates environmentally significant behaviour in her community most probably makes pro-environmental choices in her private life. But that does not mean that a person who chooses an environmentally friendly lifestyle through her private sphere decisions will automatically engage into environmental activism or behave the same way in an organization. Sustainable behaviour is primarily a private-sphere behaviour that is conducive to maintaining sustainability.

To summarize, social psychology tells us that values indirectly influence behaviour. It also tells that changes in values, norms and attitudes happen incrementally slowly and are most of the time out of our control. Their dynamics and mutual influence, however, can be traced. That is promising, because it leaves hope that a better understanding of underlying mechanisms of this dynamics could inform normative perspectives on value transformation and result in more realistic, tailored approaches to achieving a value shift and sustainable behaviour. Having this perspective in mind, let us turn towards normative discussions with regards to how values should or could change.

2.3. Values, virtues, and moral character

While social psychology perspective certainly enriches the discussion, it provides an empirical description of a situation and not a direction towards which individuals or society are supposed to move to respond to the global environmental crisis. To understand how values *should* change, what is the right, or good, thing to do about environmental problems as an individual, or how we ought to live in a new environmental context one should look into environmental philosophy, and more specifically, into ethics.

There are three dimensions of ethics. Meta-ethics concerns the nature of ethics and moral reasoning. Normative ethics is interested in determining the content of our moral behaviour. Applied ethics deals with ethical issues that arise in more specific realms of human action; for example, business or medical ethics. Environmental ethics (part of applied ethics) is certainly relevant in the context of environmental change. However, the role of normative

ethics cannot be overstated neither, as it attempts to answer more general moral questions like "What ought I do?", "What kind of person should I be?" or "How should I live?"

There are three approaches to normative ethics, namely deontology (or Kantian tradition), consequentialism (or utilitarianism) and virtue ethics[17]. Deontology addresses the above mentioned questions by emphasizing *duties* or *rules*. Consequentialism does the same by focusing on the *consequences* of actions. Virtue ethics addresses these questions from the perspective of *moral character* and *virtues*, capturing individual transformation in terms other than purely rationality-based Enlightenment ideas and utility calculation.

In his book *After Virtue: a Study in Moral Theory* (1981) Alasdair MacIntyre argues that the Enlightenment's Project of establishing a secularized morality free of metaphysical and religious assumptions has failed. He argued that an authentic moral life can neither be based on exact cost-benefit calculations, nor on proper application of rules and principles. MacIntyre insists that moral life is a matter of exercise of the virtues. Jamieson (2007) makes a case for virtues in addressing global environmental change, arguing that contemporary moral theories have major difficulties is addressing the problem. This argument goes in line with Gardiner's Theoretical Storm.

Jamieson suggests that moral philosophers, irrespectively of their preferred approach, should take the notion of virtues more seriously. "Focusing on the virtues helps to regulate and coordinate behaviour, express and contribute to the constitution of community through space and time, and helps to create empathy, sympathy, and solidarity among agents" (Jamieson in Gardiner et. al., 2011, p. 320), something that other moral theories fail to account for. Di Paola (2013) makes a case for "virtues for the anthroposcene" and underlines the role of active, virtuous engagement as part of an ethic for the Anthroposcene based on individualized, self-starting, self-regulating, metropolitan, reticular, resolute eco-system stewardship. In order to explore the transformation of personal values and individual motivations to act sustainably, virtue ethics appears to be the most promising approach of normative ethics.

[17] Some scholars (Nussbaum, 1999) argue that separating virtue ethics into an independent approach is misleading as both Kantianism and Utilitarianism contain treatment of virtue.

Virtue ethics and virtue-oriented environmental ethic

Virtue ethics is rooted in Ancient Greek philosophy and its founding fathers were Plato and Aristotle. It suffered momentarily eclipse during the nineteenth century but then re-emerged in Anglo-American philosophy in mid-twentieth century (Anscombe, 1958) as a response to increasing dissatisfaction with the forms of deontology and utilitarianism then prevailing[18]. Three main concepts of virtue ethics are *arête* (excellence or virtue), *phronesis* (practical or moral wisdom) and *eudaimonia* (usually translated as happiness or flourishing).

Virtue is defined as a character trait, a multi-track disposition that cannot be attributed on the basis of a single action but is rather embedded in a certain mindset and concerned with other actions, emotions, choices, values, desires, perceptions, attitudes, interests, expectations, and sensibilities (Hursthouse, 2003). **Moral wisdom** can be best understood by thinking of what a morally mature virtuous adult has that virtuous children or adolescents are lacking (both have good intentions but virtuous adults have more knowledge about what exactly the right thing to do is). Finally, **flourishing** is an idea of good life, a sort of end goal, a supreme good. It is agreed that living life in accordance with virtue is necessary (or sufficient) for flourishing.

Until recently virtue ethics and environmental ethics were developing in parallel, not informing each other much. In a book *Character and Environment* (2007) Ronald Sandler combines developments from the two ethics and develops a pluralistic, virtue-oriented environmental ethic that accommodates the richness and complexity of our relationship with the natural environment. Sandler argues that in the face of longitudinal collective action problems such as most of contemporary environmental challenges there is a need for "an ethic […] that emphasizes sustained commitment, the development of communities of agents, and the importance of doing one's part even when others fail to do theirs" (Sandler, 2013). Sandler argues that attempts to improve society, including its relations with the natural environment, will "amount to mere moonshine if its citizens lack the character and the commitment to make them work" (Sandler, 2007, p.2). He, thus, places the main emphasis on

[18] This had a reinvigorating effect on the other two approaches, which started to address topics such as motives and moral character, moral education, moral wisdom or discernment, friendship and family relationships, a deep concept of happiness, the role of the emotions in our moral life, etc. Thus, Kant's long-neglected *Doctrine of Virtue* was re-discovered; utilitarians have also developed consequentialist virtue theories. Virtue theory, therefore, refers to an account of virtue within deontological and consequentialist approaches to normative ethics – which should be distinguished from virtue ethics, a normative approach to ethics (Stanford Encyclopaedia of Philosophy, *Virtue Ethics*, 2003).

the constancy and centrality of a person's character in orienting her life, in addition to her episodic actions.

Sandler develops a virtue-oriented environmental ethic that is constituted of two central components: a theory of environmental virtue and an approach to environmental decision making. In his theory of environmental virtue Sandler proposes an account of what makes a character trait a virtue[19] and a typology of environmentally responsive, environmentally justified and environmentally productive virtues:

Environmentally responsive, Environmentally justified, Environmentally productive	
Land virtues	Love Considerateness Attunement Ecological sensitivity Gratitude
Virtues of Sustainability	Temperance Frugality Farsightedness Attunement Humility
Virtues of communion with nature	Wonder Openness Aesthetic sensibility Attentiveness Love
Virtues of respect for nature	Care Compassion Restitutive justice Nonmaleficence Ecological sensitivity
Virtues of environmental activism	Cooperativeness Perseverance Commitment Optimism Creativity
Virtues of environmental stewardship	Benevolence Loyalty Justice Honesty Diligence

Sandler distinguishes among virtues of sustainability (dispositions to maintain or promote a limited-term sustainability for at least a few generations), virtues of communion with nature

[19] "A character trait is a virtue to the extent it is conducive to promoting eudemonistic and non-eudaimonistic ends grounded in agent-relative and agent-independent goods and values" (Sandler, 2007, p. 37)

(dispositions that allow people to enjoy and be benefited by the natural environment), virtues of environmental stewardship and virtues of environmental activism (dispositions conducive to maintaining opportunities for those goods and benefits) (Sandler, 2007, p. 6). The land virtues are character traits that make human beings good "citizens" of the biotic "community" (Sandler, 2007, p. 83). Virtues of respect for nature are character traits that are virtues largely because they are conducive to promoting the good of lining things (Sandler, 2007, p. 72).

Environmental virtues, Sandler notes, are not limited to character traits that enhance our experience in environmental contexts (like openness, appreciation, receptivity, love, and wonder) but include also traits which are favourable to effective efforts for securing environmental goods, resources, and opportunities (like temperance, fortitude, commitment, optimism, and cooperativeness). Among environmental vices there are dispositions that are detrimental to maintaining environmental health at the levels needed to provide the goods necessary for human flourishing (like greed, intemperance, or profligacy), dispositions that prevent us from realizing benefits that the natural environment can provide (like arrogance, hubris, or intolerance), and dispositions that are detrimental to the protection and maintenance of environmental goods (like apathy, pessimism, or misanthropy).

The second component central to Sandler's virtue-oriented environmental ethics is an approach to environmental decision making that consists of virtue-oriented principle of right action and virtue-oriented method of decision making. Sandler's agent-relative target principle of right action states that an action is right to the extent that it better hits the targets of the operative virtues taken together (i.e. it is more virtuous) than the other courses of action available to a particular agent under the circumstances (Sandler, 2007, p. 94).

This principle of right action supports a virtue-oriented method of decision making in which "action guidance is accomplished through the application of the operative virtues or v-rules to a situation, appropriately informed by moral wisdom and assisted by a counsel of mentors, the study of models, and collaborations with others" (Sandler, 2007, p. 102). The virtue-oriented method of decision making includes several key elements: v-rules (virtue-rules that embody the substance of virtues); the use of mentors, models, case studies, and collaborative discourse; and moral wisdom. This approach to ethical decision making goes in line with my interpretation of a value shift as a process of deliberation, self-reflection and personal experience.

V-rules, according to Sandler, correspond to substantive specifications of particular virtues (Sandler, 2007, p. 98). For example, a disposition to avoid compromising the availability of environmental goods (one of the virtues of sustainability) can be matched by a v-rule "do not compromise the availability of environmental goods". V-rules are accessible by moral education and self-reflection; they can be taught, learnt, and applied in concrete situations by those who do not have corresponding virtuous dispositions. V-rules can also be derived through individual and collaborative reflection (Sandler, 2007, p. 98). Sometimes different operative virtues (v-rules) favor contrary course of action. In such cases, where an agent has difficulty identifying which v-rules to apply or which actions to take, "she can look to role models, advisors, case studies, and collaborators for assistance" (Sandler, 2007, p. 98).

In guiding our actions, virtue-oriented ethical theories are often criticized for not providing a finite set of rules or principles that can be applied by anyone in any situation to produce a unique prescription for action (Hursthouse, 1996; Solomon, 2003). There is no one overarching rule or guiding principle that determines the right thing to do; each case must be examined individually. It is different from a "scientific model" advocated by many Kantians and utilitarians to a great extent because it accommodates pluralism in the expression of virtue. Sandler argues that facts about each situation and the operative environmental virtues influence greatly how a person is disposed to act in that situation and what actions hit the target of environmental virtue the best for a particular agent (Sandler, 2007, p.101).

Sustainability virtues and sustainability values

Sandler's method of decision making based on v-rules, moral wisdom, counsel of mentors, the study of models, and collaborations with others resembles the account of an individual value shift as a process of change of personal values based on self-reflection, deliberation, and personal experience outlined earlier. The two have self-reflection and deliberation through discussions with others in common. The process of changing values and virtues are very much alike, although it is important to keep in mind that virtues and values are different at a conceptual level.

Values are deep-down underlying beliefs, principles, and moral standards, whereas virtues are dispositions to act, character traits. Thus, one can value loyalty (in others, in herself, as an idea: loyalty as a value) and be loyal (to others, to one's ideal's, etc.: loyalty as a virtue).

Holding a value of loyalty, a person does not necessarily have to be loyal herself in a concrete situation. Yet, if she holds a virtue of loyalty, that means she tends to be loyal.

Unlike virtues and vices, values cannot be categorized as morally 'right' or 'wrong', 'good' or 'bad' categories, unless considered in a specific context. Depending on one's value orientation, one can value material possessions or power, for example, which is the one value orientation least conducive to environmental behavior. So, these values are not good for the environment, but they are not right or wrong considered on their own, out of context.

While values are a more fluid concept (a list of values is not cast in stone; some values can disappear in course of time and some can emerge in a new context), virtues and vices are more pre-determined. The work that was done in virtue ethics resulted in cataloguing lists of virtues and vices[20] which cover all possible character traits and dispositions. In a new environmental context, one could say that a virtue is underdeveloped in the sense that it is not strong or prominent enough in our moral decision-making – but it is not possible to say that completely new virtues have to emerge to address the problem[21].

Looking back at the list of environmental virtues drawn by Sandler, it seems fairly easy to match each virtue with a related value. For example, a person can have a virtue of compassion – or value compassion; she can be tempered (a virtue) – or value temperance, etc. However, there are some values that are hard to match with specific virtues: for instance, values of wilderness, clean and healthy environment, or animal well-being. Therefore, while each virtue can be related to a value with the same object, not all values can be related to one specific virtue with the same object.

If virtues and values are so closely connected at a conceptual level, is it possible to say that they influence each other? I would like to suggest that they do. Let us take an example of compassion. If a person has a virtue of compassion, she is not indifferent to the sufferings of other living beings, including non-human animals. It is highly likely that the person with such a disposition is going to value animal well-being and try to behave in a way to avoid or end animal suffering (take an injured or freezing street dog to a vet or a shelter, oppose tests on

[20] Louke van Wensveen (1999), for example, compiled the first list of environmental virtues
[21] Although Allen Thompson (2012) argues that individual responsibility should be a completely new environmental virtue

animals, etc.). This way, the virtue (of compassion) determines the value (of animal well-being) and the following behavior.

Consider another example: a young mother who always wanted to have a baby and finally gave birth. She wanted a child because she holds family values, including the one that values procreation. Yet, with the birth of her child, the mother discovers that in order to bring-up a good child she herself has to become more patient, tempered and farsighted – meaning, she has to develop more strongly virtues that she did not have to be able to keep up with her values. Thus, values set a direction for the development of virtues. This way, at least in theory, values and virtues can influence each other, and it works both ways. However, although there is a connection, it is not strong enough to argue that one is instrumental to fulfilling the other. In practice values and virtues are mostly mixed and hard to disentangle.

So, values and virtues are connected and influence each other. Can more be said about a connection between sustainability values and sustainability virtues? Sustainability values were defined earlier as environmental and other values that help present generation meet or adjust their needs in a way that would not compromise the ability of future generations to meet their own needs. Sustainability values help achieve and maintain sustainability. Some of these values are already part of our value system; some will emerge naturally in a changing environmental context or will have to be developed (see Section 2.4.). Virtues of sustainability in Sandler's account of environmental virtues are dispositions to maintain or promote limited-term ecosystem sustainability for at least a few generations, such as temperance, frugality, farsightedness, attunement, and humility. I would add perseverance to Sandler's list because it is the quality essential to sustaining a long-term commitment in a new environmental context.

By exercising sustainability (and other environmental) virtues a person can fulfil (act in accordance with) her sustainability values. By acting sustainably, she will get moral satisfaction from exercising her virtues. Even if her action was not sufficient to produce an overall outcome to fulfil her value (her personal sustainable lifestyle or other efforts did not result in reducing biodiversity loss, for example), she will still find comfort in knowing that by exercising her virtue she did the best she could to fulfil her value. This point matters greatly to our moral motivation to act sustainably.

On moral motivation to act sustainably

Moral motivation to act and think sustainably is at the core of the puzzle underlying this dissertation. Why do some people act sustainably and others do not? Is acting sustainably a morally right or good thing to do in a changing environmental context? To what extent are moral motivations internal or external? And, finally, how these motivations can be triggered to respond to global environmental degradation? I argue that moral motivations are rooted in our system of values and that a new system of values based on sustainability values can result in stronger moral motivations to act sustainably and help overcome moral corruption (Chapter 1). Moral motivation to act sustainably in a situation is underpinned by a combination of a value (or values) and a virtue (or virtues) that both define what is important, or valued, to the person and a disposition, a moral vector, to act in accordance with this value. Thus, in order to act sustainably (for moral reasons) one needs to have both values (to define why an action is important) and virtues (to guide this action).

Particularly in case of lifestyle changes, when people need to alternate their daily routine and behaviour, there is a strong need for virtues like, for example, perseverance, commitment, farsightedness, and ecological sensitivity. If a person decides to reduce her consumption of meat due to economic reasons, because it is too expensive, it is one motivational setting. She cannot afford meat – that is why she does not have it. This behaviour does not demonstrate any environmental virtues at play. Compare this setting to a situation when a person refuses to eat meat for ethical reasons: she values animal well-being more than she values a good steak. She likes meat and she wants it but she has to use her will power to refrain from eating it. Her will power includes virtues like perseverance, commitment, compassion, and care. These virtues do not all necessarily have to be present in her character, but if the value of animal well-being motivates the person enough, she will develop virtues that she maybe did not have before to live in accordance with this value. Thus, in order to develop moral motivations[22] to act sustainably on a large scale, it is crucial to address both values and virtues underpinning them.

In the next section I propose to add two more values to the set of sustainability values that help enlarge the scope of our moral motivations to act sustainably. However, our dominant

[22] Moral motivation, like virtues and values, can be a result of internal and external processes. A person can develop moral motivation internally through self-reflection and contemplation but also under the influences of external factors, like counsel of mentors and deliberation. Thus, it is important

system of values, although inadequately focused on materialism and consumerism, can still offer some guidance and moral reasons to act sustainably. The problem is that these considerations are not always invoked in our daily decision making. We tend to not see or ignore moral implications of our actions. As Bendik-Keymer argues, we often act wantonly and, juggling with multiple priorities, do not always take time to think about moral consequences of all our actions (Bendik-Keymer, 2012, p. 265). It is not because we are bad people – it happens because we are busy and have other priorities than the environment.

Consider, for example, a person who prefers to drive to work instead of using well-maintained affordable public transport. If she is asked to change her habit because this behaviour is "bad for the environment", this would bring about one result (most probably the call will not be followed-up). If the same person is told that with a 90 per cent probability her driving today is going to kill a child in the year 2114[23], this would produce a very different response[24]. A person who is faced with concrete moral implications of her actions is most probably going to consider changing her behaviour. The problem is moral corruption: as long as the problem does not affect us personally, we tend to ignore often obvious moral consequences of our actions or postpone thinking about them. As institutions have little say in changing this situation at the moment (Chapter 1), an individual transformation and moral stand with regard to daily choices, actions, and behaviour are crucial in addressing global environmental problems.

Consider another situation where individual moral stand is crucial: bullying at school. For example, in a class there is a victim of bullying, of whom (seemingly) everybody makes fun. As a member of this class, will you engage into bullying just because everyone is doing so, although you have no special bad or good feelings about the victim? You might realize how engaging in bullying is wrong and unfair but the group puts a lot of pressure on you. It is this moment when one's virtues, one's moral stand and values really are at play. We can easily apply this analogy to climate change and global environmental degradation. We know that our actions are wrong and bad for the environment. We are hurting nature. But everyone is

[23] This is, of course, a stretch as we cannot attribute exact environmental consequences to particular individual actions. But if we consider just the two important claims: our individual actions produce GHG effect and this effect is going to cause large-scale environmental catastrophes and changes that will take lives of millions of humans, then it is possible, for the sake of experiment, to allow such an assumption.

[24] I did this thought experiment many times with my colleagues and friends, asking this question at presentations of my work, and always the answer to the second framing was first surprised silence (because people are not used to thinking of their decisions from this angle) and then agreement to reduce their wasteful driving.

doing so, and it is very hard to take a different moral standing, especially when status quo is comfortably backed up by the old values.

2.4. Addressing gaps in the system of values

Following Dale Jamieson's line of argument (1992), our dominant value system emerged in times of low population density and low technology societies with seemingly unlimited lad and resource availability. In a new environmental reality, featuring resource scarcity and environmental degradation, the old system of values has to adapt. The old system of values can be characterized by at least one key problem and two more specific missing elements that undermine global response to environmental change and lead us to moral corruption. The biggest problem is materialism and the two missing elements, or values, are (1) a concept of individual responsibility for global environmental change and (2) care for remote future generations.

Consumerism

Modern Western system of values has a strong materialistic component. Material production is the key element of economic growth that indicates well-being. Yet, as findings from the World Values Survey[25] indicate, "income and happiness tend to track well until about $13,000 of annual income per person (in 1995 purchasing power)… [a]fter that, additional income appears to yield only modest additions to self-reported happiness" (The Worldwatch Institute, 2004, p.166). Realization that individual, national, or global well-being cannot be measured in terms of economic growth (understood as additional material production) lead to the development of other indicators of wellbeing, based on human capabilities rather than on availability of material goods (Sen, Nussbaum, 1993).

People with materialistic value orientations tend to report lower levels of well-being compared to people with social or self-realization value orientations (Kasser, 2002, p.22). Strong prevalence of materialistic value orientations among people in developed states is widely recognized as the key problem to achieving not only sustainability, but human flourishing in general. As Sandler (2007, p.58) argues, materialistic dispositions are not conducive to living well. Consumptive dispositions are detrimental to human flourishing

[25] World Values Survey is a set of surveys of life satisfaction on more than 65 countries conducted between 1990 and 2000

because they foster rapid and unsustainable diminishment of basic and non-basic environmental goods on which people depend.

Sandler understands consumptive dispositions like greed, intemperance, profligacy, and envy as environmental vices. More specifically, his account of consumptive dispositions includes:

(1) Materialistic evaluative dispositions – i.e. prioritizing possession and accumulation of material goods in evaluations of people, relationships, careers, and so on;
(2) Affective dispositions toward the possession or accumulation of material goods – i.e. being desirous of possessing or accumulating material goods;
(3) Emotional dispositions oriented around the presence or absence of material goods – e.g. distress, anxiety, or sadness regarding their absence;
(4) Practical dispositions toward possessing and accumulating material goods – i.e. prioritizing doing that which is considered conducive to amassing those goods (Sandler 2007, p.56).

Sandler argues that these dispositions are environmental vices and proposes to address the problem via such virtues as moderation, self-control, simplicity, frugality, and other character traits that oppose materialism and consumerism, "inasmuch as they favour practices and lifestyles that promote availability of environmental goods" (Sandler 2007, p.70). Transformation of individual and collective value systems, thus, has to address consumerism and materialism. Sustainability values have to include moderation, self-control, simplicity, and frugality as values conducive to diminishing the importance of materialistic values for individual well-being

Individual responsibility

One of the first philosophers to challenge the existing conception of responsibility applied to environmental problems and question the notion of individual responsibility for changing climate was Dale Jamieson. In 1992 Jamieson argued that the old conception of responsibility which presupposes that harms and causes are individual, easily identifiable and local in space and time collapses when applied to global environmental problems. Although a causal link between climate change and anthropogenic CO2 emissions is consensually established and supported by all IPCC reports, any individual contribution is so incrementally small and harms are impossible to track or link to any individual causes. Conventional morality, thus,

struggles to hold anyone responsible for the global environmental change, although everyone's accumulated actions are causing it (Jamieson, 1992). Pointing out that a new concept of responsibility is necessary, Jamieson, however, does not develop one, only stressing the need for new values.

In the 1990s and early 2000s discussions about responsibility for climate change were framed almost exclusively in terms of rich and poor states' duties and obligations, invoking ethical considerations of past emissions and current ability to pay (Shue, 1993, 1999). Responsibility was assigned to states and collective entities rather than individuals. As Steve Vanderheiden (2008) argues, the only responsibility of individuals in this respect is to convince their governments act against climate change.

A 2010 article *It's Not* My *Fault* by Walter Sinnott-Armstrong supports this view. His pre-assumption is that individual emissions are incrementally small and harms are unidentifiable, therefore, could be disregarded as a ground for placing the blame and for individual responsibility. Sinnott-Armstrong argues that individuals have no moral obligation to act individually against climate change, however, are expected to urge their governments for new laws which would bind individual actions, making unsustainable practices illegal.

There are two points about this view that are worth emphasizing. First, Sinnott-Armstrong's idea of individuals delegating responsibility to their governments is only applicable to democratic states. Most developed states that are responsible for existing levels of GHG in the atmosphere, as well as for their increasing levels, are democracies. But the argument does not hold for hybrid and other regimes, such as China or Russia, for example – both of which are among top GHG emitters, known for low public awareness about climate change and for their unsustainable practices.

The second point is that Sinnott-Armstrong's view in a way goes against our moral intuitions. By claiming that individuals have no moral responsibility to change their behaviour and unsustainable choices, this view discourages individual action and behavioural change. To those who are concerned about climate change and environmental degradation and want to do something about it it offers only one option of acting through representatives. It ignores the fact that in case of climate change each and every single member of developed Western

society contributes to the common problem through his or her lifestyle and choices and is in capacity to reduce this contribution.

Understanding responsibility for climate change and global environmental degradation, in my view, should include both notions of responsibility of states and of individual responsibility. States' responsibility is certainly very important; yet, if it is the only one considered, this hands-off approach would diminish any moral incentives for individuals to act more sustainably, more responsibly towards the environment. One promising way of enhancing moral motivation for sustainable action on the basis of individual responsibility is by bridging the two through virtue ethics.

Responsibility has long been understood as an environmental virtue in general, a good-making trait of character (Williams, 2008). Allen Thompson looks more specifically at a virtue of being responsible for the (changing) condition of the global climate (Thompson, Bendik-Keymer, 2012, p. 203). Thompson is interested in how the forms of human excellences (goodness) can transform under the influence of environmental and cultural change. His starting point is Jamieson's thought outlined earlier about the lacking concept of individual responsibility. Then Thompson brings together Marion Young's (2004) conception of political responsibility and the notion of radical hope as a virtue (Lear, 2006) to argue that "our thinking about the moral responsibility for global environmental conditions may undergo a radical change… it is intimately connected with the promise of novel forms of human goodness emerging … from our best response to the global environmental crisis" (Thompson & Bendik-Keymer, 2012, p. 205).

Young's account of political responsibility, on which Thompson builds his argument, deserves attention here as it really improves understanding of how responsibility for global problems could work. As people have "difficulty reasoning about individual responsibility with relations to outcomes produced by large scale social structures in which millions participate, but of which none are the sole or primary cause" (Young, 2004, p. 374), Young distinguishes between standard liability model (what Jamieson call old conception of responsibility) and the model of political responsibility. While most accounts of collective responsibility seek to distinguish those to be held responsible from others, who by implication are not responsible, political responsibility, on the other hand, is a responsibility for what we have not done as part of a group.

If traditional blame model of responsibility assumes that background situation is morally acceptable, the model of political responsibility often brings into question precisely the background conditions (like the moral status of consumerism). Political responsibility is more forward-looking than liability model as it seeks to bring about results rather than recon debts. Responsibilities compared to duties carry a considerable discretion, and while one *must* carry out one's responsibilities, *how* one does so is a matter for judgement (Young, 2004, p. 377). Finally, and most importantly, political responsibility is a personal responsibility for the outcomes produced by a group, which is essentially shared and distributed. Thompson applies this logic to environmental domain and argues that humans have a shared moral responsibility for global climate change.

Sustainability values have to include individual responsibility for climate change. The virtue of individual responsibility helps capture the moral dimension of individual choices. To contrast, consider two sets of moral motivations. First, a person who changes her habits and routine to be more environmentally-conscious because she feels this is the right thing to do for the environment and for herself to be a better person. Second, a person who changes her habits and choices because she knows that she can be punished for not doing so. While behavioural change might occur more rapidly on a larger scale if people follow the liability model of responsibility, long-term solution to the problem can only be sustained if people act in moral agreement with their concept of responsibility. This point will be discussed in more details in Chapter 3.

Care for future generations

I propose an addition to Jamieson's account of what is missing from our system of values. Apart from a concept of individual responsibility, an important lacking component is care for remote future generations. This claim arises from the reading of the term 'future generations' as remote future people, persons we will never know or meet because they will live hundreds of years from today (see Chapter 1). This reading is different from frequently deployed interpretation of 'future generations' as young people, as our children and grandchildren.

Focus on remote future people breaks the chain of natural care and affection one has with regards to her family, children, and grandchildren. While we tend to be more inclined to sacrifice for the sake of our children and grandchildren, this motivation reduces to the point

that we have no moral motivation to make any sacrifices (especially at the expense of our own children) for 'future generations' that will come into existence a few hundred years from now. But those who are to suffer from disastrous consequences of climate change, for example, will live in a remote future (IPCC, 2007, 2013).

Concerns for the well-being of remote future people should be included into the scope of our moral motivations, into our system of values. This could help avoid Pure Intergenerational Problem and address moral corruption. The next chapter focuses specifically on these issues and explores concerns for future generations in more details.

Conclusion

In this chapter a concept of sustainability values was developed and placed in an interdisciplinary context. The concept of values has a strong presence in several disciplines, including philosophy, economics, social psychology, and political sciences, and its meaning across disciplines varies significantly. It was, therefore, important to provide definitions for some key terms that are frequently used throughout this dissertation, such as values, value systems, personal and collective values, sustainability values. The meaning of values in the sense that is closest to my argument is a set of principles and moral standards of a person or a group. I also propose my own definition of sustainability values – environmental and other values that help present generation meet or adjust their needs in a way that would not compromise the ability of future generations to meet their own needs. I then make a case in line with Habermas's and Dewey's interpretations of value change for an individual value shift (changes in personal values) as a process based on self-reflection, deliberation, and personal experience.

The next step is to support an assumption that values influence behaviour with literature in social psychology. Various studies have proved that there is 'moderately strong relationships at the individual level between various measures of values and measures of environmentalism, including reports of actual or intended behaviour' (Dietz, Fitzgerald, Shwom, 2005, p. 365). This section also explains the meaning of sustainable behaviour, frequently used term throughout this thesis, as closest to private-sphere type of behaviour in the Values-Beliefs-Norms Theory of Environmental Concern and Behaviour. I argue that environmental activism, non-activist public-sphere behaviours and behaviours in

organizations are also important components of sustainable behaviour but they require more definitive commitment that the one required in case of private-sphere behaviours.

After presenting some empirical insights into the question of values, transformation of values, and values-behaviour connection, I turn to a normative perspective on how values should change, how we can approach changes of personal values, and what kind of new values we need in a new environmental context. I address individual value shift through a virtue-oriented approach to environmental ethics, developed by Sandler (2007) that emphasizes individual moral character and virtues. I argue that sustainability virtues and sustainability values are distinct concepts but they are closely connected. The two influence each other and constitute two components of individual moral motivations to act sustainably. Virtue-oriented approach really helps create moral motivations for individual action even in situations when everyone else fails to do their part.

Finally, I propose an account of what gaps and problems in our dominant system of values prevent us from adequately responding to global environmental crisis and lead us to moral corruption. The key problem, in my view, is consumerism and a prevalent materialistic value orientation. The two gaps (or missing values) concern individual responsibility and our relationship to future generations. I argue that individual responsibility for the changing climate and environment, along with care for remote future generations should be included into the list of sustainability values. Both these values have an important connection to our moral motivations, as they each add one more moral reason to act sustainably. Both values extend the scope of our moral motivation: the value of individual responsibility by acknowledging that we have to do something about global problems, even if others fail to do the same; care for remote future generations – by extending the scope of our moral community into the future and making concerns of future people relevant to our contemporary decisions.

Chapter 3. Achieving a Value Shift: Where Does the World Stand with regards to the Perfect Moral Storm?

Introduction

A value shift is a concept too vague and stretched in time to appeal to decision makers when it comes to proposing it as a solution to climate change or other environmental problems. Solutions that receive most attention are related to finance or technology and innovation. The mechanisms that are supposedly going to resolve the problem tend to be rather technical. Understanding processes like the new financing scheme for Post-2015 development or carbon emissions trading scheme in the EU requires certain levels of technical knowledge and is, thus, not exactly comprehensible for the general public.

While focusing on more technical fixes to the problem decision makers appear to push into the background solutions which have to do with social transformation and changes in how people think and behave. Although changes in values, attitudes, behavior and lifestyles are frequently invoked as a necessary prerequisite for resolving the problem, there is no clear program of action or even agreement at a global level on how to make this solution work. There are many disaggregated efforts and initiatives which are not strong on their own or structured enough to make a noticeable difference globally.

In my opinion, this inertia is rooted in the nature of the solution itself and in our poor understanding of it. Social processes are not an exact science, they are hard to control or predict. Unlike a physicist who can calculate the exact time an apple falling from a table needs to reach the floor, no social psychologist would tell with certainty how fast new values or social norms, for example, can spread in the society. It is not even certain whether they would spread at all. A value shift takes much more time than any election cycle or the length of a politician's career. Its outcomes are unclear and its execution vitally depends on forces out of anyone's control. That makes it an unattractive political project to undertake for decision makers.

Although many processes driving transmission of new values are out of our control or even understanding, there are still some things that can be done in order to channel the change. Instead of leaving a value shift towards sustainability "run wild", we could try to harness it. In order to do so, we need a better understanding of the process based on more inquiries into

its various aspects and a comprehensive interdisciplinary approach that would reflect the nature of a value shift. We need to understand the anatomy of a value shift, which includes not only changes in values but in norms, attitudes, and behavior, as well. There can be no guarantees that the shift can be influenced or accelerated. But by tackling it we could at least ensure that we had used all the instruments that were at our disposal to secure justice to our more vulnerable contemporaries and future generations, other species and our neighbours on the planet today and in the future.

This thesis as a whole is an attempt to better explain what a value shift is and how it can be achieved. Chapter 2 explored how a value shift can happen at the individual level, what factors are in play and what elements the process consists of. It also discussed what gaps in our system of values should be addressed to enable the transition towards sustainability. This chapter looks closer at the collective and structural dimensions of a value shift. It aims to contribute to a better understanding of a value shift as a social process. The first section explores whether there is something we can learn from past value shifts to better understand the roots, phases and dynamics of a transition towards sustainability. I suggest that the shift towards sustainability values can be considered an indicator of moral evolution of humankind. The rest of the section also looks at the current developments that can be interpretated as indicators that a value shift towards sustainability is already on the way.

The second part of the chapter focuses on actors who drive the process of a value shift, indicating five main groups. I also argue that some of these actors have the potential to influence a value shift more than they currently do and that they should acknowledge and realize this capacity better. Finally, I discuss three ways of promoting new values and achieving a value shift through laws, awareness raising and education. The chapter is aimed to provide a synthesis that could inform sustainability policies in the future. It is an attempt to put together scattered information and analysis into a coherent argument about achieving a value shift.

3.1. The process of value shift

On the relevance of history

Throughout the history of humankind values were undergoing constant transformations around the world. Past civilizations created certain systems of values, and with the decline of

these civilizations values transformed and sometimes vanished. After the decline of Ancient Greece the Romans who highly valued and respected Greek culture and art continued to foster some values that were core to the Greeks several centuries earlier, like aesthetic beauty, education, or hedonism. A value shift after the decline of the Roman Empire itself took a different turn. The new values embedded in Christianity and prevailing centuries following the fall were oftentimes opposite to those of the Romans.

Shifts in values took long time to complete and were closely intertwined with changes in socio-economic and political systems and institutions. The decline of Christianity and the power of religion over people's thoughts and actions went on since the Enlightenment. Christian religion and the church were challenged by the raise of science and scientific reasoning, rational thinking, and individualism. It took more than two centuries for this value shift to mature and complete, to replace faith with the power of reasoning in minds of millions of people worldwide. Social order changed dramatically from medieval times to the 19th century, and so did the economic and political systems.

Another example of a long-term transition could be abolition of slavery, a shift in values and norms[26]. As an institution, slavery was questioned by predominantly European intellectuals since the 18th century. Yet, it took more than a century before a movement to abolish African slave trade and slavery was initiated. Arguably, the main obstacle on the way was the socio-economic order in which slavery was embedded. As Rodriguez (1997, p.XX) put it: "The moral imperative against the practice [slavery] notwithstanding, slavery continued to spread because it was perceived by many people to be a profitable venture." The aftermath of this transition in the US, manifested in mistreatment of people on a racial basis, continued for many decades after the official laws were passed.

Capitalism and communism could be another interesting example. Two rivalry ideologies comprised of rather distinct values. Capitalism as a socio-economic order emerged before the communism and manifested a certain set of values which Marx and other like-minded philosophers argued against. Emerged as an alternative ideology, communism also represented a value system, different in some key aspects from the capitalist system of values.

[26] Finnmore and Sikkink say political scientists tend to slip into discussions of ''sovereignty'' or ''slavery'' as if they were norms, when in fact they are (or were) collections of norms and the mix of rules and practices that structure these institutions has varied significantly over time (Krasner, 1984, 1988, 1993; Thomson, 1994; Strang, 1991; Ruggie, 1993; and Spruyt, 1994.)

Thus, values of competition and class division were contrasted with values of cooperation and equality, for example. Compared to a free flowing development of capitalism, communist ideology and socio-economic order were abruptly enforced through revolutions in several states. The communist system of values, though accepted by the population due to various stimuli, emerged in the Soviet Union neither naturally, nor voluntarily. After building communism for seventy years the Soviet Union collapsed, and the values it stood for dissolved in a new hybrid order and across new borders.

An indicator of moral progress?

These few brief examples indirectly support my assumption that a value shift towards sustainability that is emerging under the influence of a global environmental crisis is not an exceptional one-time process in history. Values have changed in the past and will continue to change in the future. Shifts in values are an integral part of the development of a society, and, more specifically, of the moral evolution of humanity. I view moral progress as a caravan of subsequent shifts in values. Like smartphones these days require regular upgrades of their operating systems to function better, so does our morality gets "upgrades" now and then in the form of value shifts.

Here my argument rests predominantly on the evolutionary conception of morality developed by Peter Singer in his book *The Expanding Circle: Ethics, Evolution, and Morality* (1981 / 2011). Singer views morality and altruism as rooted in biological features of human beings. Humans are social animals who live in groups and form bonds and emotional responses towards each other, like love or compassion. Our circle of moral concern, Singer argues, starts with family and friends and along the course of moral evolution expands to include members of the same community, members of marginalized groups, nations, race, humanity as a whole, and finally non-human animals. As Jamieson notes in his analysis of the evolutionary account of morality, the view does not determine the content of morality. It should rather be understood as why morality evolved and persists among humans, while morality has the power to issue its own imperatives and moral prescriptions (Jamieson 2002, p.322).

Some benchmarks of moral progress could be abolition of slavery, humanization of warfare, empowerment of women (including by granting women voting rights) and other marginalized

groups, reduction of class division and poverty, and so on. Each of these transitions implies a shift in values that justify and support the state of affairs before and after. Value shifts, thus, are the necessary "upgrades" that our morality needs in order to evolve and progress. While our moral evolution is constituted of value shifts, not all value shifts can be attributed to moral progress. Some shifts can be hard to qualify as moral evolution: transitions from Christianity to the power of science and reasoning or from capitalism to communism and back, for example. The most prominent case would be a shift in values that created and underpin societies of overconsumption in the 20th century.

I suggest that a shift towards sustainability values is one of those value shifts that indicate moral evolution of humanity. The shift is driven by the new knowledge of our influence on the planet which tells us that our casual actions can actually harm remote vulnerable people, other species and ecosystems, remote future people, species, and ecosystems. This value shift has to do primarily with justice and fairness to others. Extending the circle of moral concern to include the rest of humanity, present and future, and those who we share the planet with indicates (or rather at this point *would* indicate) a step forward in developing our morality, a step towards becoming better humans, better neighbours, better guardians and stewards.

One aspect that makes transition towards sustainability values special is that in case of most of environmental issues there is no manifestation of injustice in people's daily lives. Injustice of some sort and large-scale social discontent with it is what pushes us to re-think our moral stand. For example, mistreatment of slaves manifested itself in many forms and was part of people's daily routine. Injustice was in plain sight. Realization that something was wrong about social norms which permitted that order of things was based on personal experiences of millions and was building up over time. It was hard not to have an opinion about the issue because it was part of everyone's daily life. Even those who did not want to think or have an opinion about it, in fact, through no action simply supported the status quo, not a praiseworthy moral position if we think of it after the value shift happened.

An average Passive Citizen of a developed state hears about manifestations of injustice related to environmental change now and then. Most people in developed states do not live through negative consequences of environmental degradation. They do not get to lose their families or friends, land or home in natural disasters. They are not expelled from their natural habitat or die of hunger and changing natural conditions, like other species. They normally do

not personally suffer from or even see injustice related to environmental degradation in their daily lives. They have to trust what they hear or read about it in the news or from other occasional sources.

And, unlike social injustice which is in plain sight, it is always possible to ignore or pay less attention to the stories about environmental issues. Lack of personal experience and attachment to the problem has major implications to our moral motivations to act and think sustainably. When it comes to taking the next step in moral evolution of humankind, it is unclear whether solely awareness and knowledge about the problem are really enough to extend our circle of moral concern which was developing for hundreds and thousands of years.

Remarks on value shifts

To better characterize the process of a value shift I should outline a few observations about the process. First, a value shift being a very broad notion poses some difficulties to its analysis. Defining a unit of analysis (a value shift), therefore, becomes crucial. A broad definition employed in Chapter 2 was the following: a value shift is a change in values, transformation of value systems, the emergence of some new values, replacement and elimination of some old values. What changes is a mix, a weight of each value in the system. I have argued that value changes are shaped through deliberation, self-reflection and personal experience. Moreover, group values are closely connected to social practices and norms, mechanisms that determine how a value is reflected in actual behavior of a group.

Second, values are hard to see and identify. However, analysing some past value shifts the difference between initial and emerged values can be traced fairly easily. Harder to explain are the reasons for these transformations. Are these shifts a result of some natural forces? What makes some values gain a stronger position in a society and others vanish? I will focus here on value shifts that constitute moral progress, including the shift towards sustainability values. It appears that in the heart of each of these subsequent shifts lie the issues of justice and fairness, more specifically, oppression of some groups by others. Climate change, for example, is often conceptualized in terms of global justice – among peoples and generations (for one of the recent philosophical accounts, see Jamieson & Di Paolo, 2014).

Third, the content of values changes with further development of the society and technology. For example, the value of freedom of movement gained new meanings with the arrival of globalization. Freedom to travel and work in other countries became a valuable opportunity for those who can do it, especially when contrasted to those who are deprived of it. The value of privacy and security also extended to cyber-space security and privacy on-line with the expansion of internet, social networks, and a large scale transition towards electronic correspondence and communication. Following the line of thought that Jamieson and Di Paolo propose with regards to re-conceptualizing human rights in a hotter, more populated future world (p.108), the content of some values might have to change as the context for these values changes.

Fourth, there are two levels at which values can change: individual and collective. An example of an individual value shift is Aldo Leopold's transformation described in Chapter 2. Values of a collective entity or a group can also change, groups being as small as families or local communities and as large as states or regions. Both levels are mutually reinforcing. On the one hand, it is a combination of individual value shifts that catalyses a change of group values. On the other hand, group values (reflected in norms, social practices and laws) affect values of individuals as we all live in a society based on interactions. In my argument I acknowledge the difference between two levels but do not focus on either of them specifically. Instead I understand a value shift as a process encompassing both. This point has important implications for the following analysis.

Value shifts and changing norms

The danger behind deconstructing reality into basic components is to oversimplify some processes that could result in the lack of depth of analysis. It is important to identify which key components are at play that influence, facilitate or allow for the process to occur. Only discussing values in the context of a value shift might be misleading. Understanding a value shift would not be complete without serious attention to the role of norms in the process of transformation.

Norms are an integral part of any value shift; they reflect and trigger changes in values at the same time. Values are broader than norms and are invisible. Norms are much more specific, focus on behavior and have an "ought-to" component to them. If a value shift was a river

current, norms would be trees that it carries, that are visible on the surface and with their movement indicate the direction of the current. Norms are easier to tackle than values precisely because they are on the surface of social interaction. They directly affect behavior through sanctions that apply in cases of non-compliance. Some social norms can be codified in law (Sunstein, 1996)[27]. For example, in a place where littering is negatively perceived a legislation to punish litterers is an example of a social norm (against littering) being supported by law. A litterer, thus, would have both formal sanctions for breaking the law (fine, for example) and informal sanctions from other people (signs of disapproval or maybe even negative comments).

There are many interpretations of norms in the literature across various disciplines and many useful distinctions made. Social norms are widely discussed in social sciences as behavioral regularity with an "ought to" component and sanctions for non-compliance attached. Social psychology scholars distinguish between statistical, formal, informal, personal, and perceived norms (Heberlein, 2012, p.93). Statistical norms are, for example, being right-handed or brown-eyed. There are *normally* more right-handed people than there are left-handed. Formal norms are something in writing with formal sanctions (closer in meaning to legal norms and rules). "No Dogs Allowed" sign at the park entrance is an example of a formal norm. Informal norms, on the other hand, are unwritten social conventions, rules of behavior that have informal sanctions attached. For example, speaking too loudly in a public space or dressing in black for funeral are informal norms. There are also individual and group "perceptions" of social norms that can also be different from actual norms (Heberlein, 2012, p.93).

Finally, personal norms are norms at an individual level that carry an individual sense of obligation with internal sanctions. A person from Seattle recently told me a story about him travelling to Texas and not being able to find recycling bins. He was rather upset about the fact that he could not through away the garbage separately, as his personal norm was demanding, as he "ought to". His internal sanctions of guilt and disappointment kicked in. The promise of personal norms lies in the fact that they might not be the same as prevailing social norms which leaves room for norm entrepreneurs to lead by example. This type of norms is the most interesting for my argument about an individual value shift. It implies that

[27] Legal norms are often used in the context of law studies. The term is frequently used to refer to law, written binding rules of conduct issued by a state or an international authority. This term in the sense as it is used by legal scholars is of less interest to my argument than social norms.

an individual has to agree with the norm (and share values underpinning it), which is not necessarily the case for formal, informal, and perceived norms[28].

Following the Values-Beliefs-Norms Theory of Pro-Environmental Behavior outlined in Chapter 2, pro-environmental personal norms are underpinned by biospheric and altruistic value orientations. These value orientations affect individual beliefs, shaping an ecological worldview, as well as an understanding of adverse consequences for valued objects and a perceived ability to reduce threat. These factors all create a sense of obligation to take pro-environmental actions (a personal norm) and result in various forms of pro-environmental behavior.

Heberlein argues that for a norm to emerge it "must apply to clear, specific, observable, public, or semipublic behavior" and that in addition individuals "must feel responsible for their acts and consequences of their acts" (Heberlein, 2012, p.112).To summarize, people with biospheric and altruistic value orientations are more likely to develop and share pro-environmental personal norms. If we want a pro-environmental norm to emerge, these people will be easier to get on board than those with an egoistic value orientation. By focusing on concrete observable public behavior with informal sanctions a pro-environmental norm has a potential to spread to people disregarding their value orientation.

It is easy to argue that often times a decisive factor in spreading and strengthening norms is the law. If something is legally prescribed, then people will do it. More generally, a norm is seen as more legitimate once it is formally codified. Sunstein (1996), a legal scholar, provides a detailed analysis of social norms, social meanings and social roles as a ground for government action and laws. He argues that many of the most severe problems in current societies are a product of unfortunate norms, meanings, and roles and that the impact of law on human behavior has everything to do with social norms (p.967).

Many ideas proposed by Sunstein as applied to individuals and groups found their way to the constructivist literature in the discipline of international relations (IR) which pays a lot of attention to norms, international and domestic, to their dynamics and explanatory power. In IR norms are defined as standards of appropriate behavior for actors with a given identity (Finnemore & Sikkink, 1998). IR scholars distinguish between regulative norms which order

[28] I leave out the question of how personal norms change, what affects them – law, other people's behavior, individual contemplation, deliberation with others etc.

and constrain behavior and constitutive norms which create new actors, interests, and forms of behavior. In IR the focus is on norms that operate among international actors like states, international organizations, NGOs, etc. (and not individuals).

Both Sunstein's and Finnemore and Sikkink's accounts of how norms change at an individual and international level are useful in explaining value shifts and will be considered in more detail in section 2.1. Changes in norms accompany and reflect changes in values. In the long run changes in norms and collective behavioral regularities contribute to transforming what we deem important and what we value. In the late 19th century not so many British women considered equal political participation possible or important. The norm of female suffrage emerged in the early 20th century and was registered as a legal norm is the 1928 (Representation of the People Act). Today the norm that women vote like men and a broader value of the empowerment of women became an integral part of people's mindset.

Looking at past events it is sometimes difficult to dissect the process into neat categories of values and norms. For example, was abolition of slavery a value shift? Was slavery an ethical principle of racial superiority, a principle that implied that some people are entitled for the fruits of labour of others? Or was slavery a norm, a standard of behavior? Or, as suggested by some authors, slavery could have been a collection of norms and practices (Finnemore & Sikkink, 1998)? In my opinion, it was a combination of norms (formal permission to own slaves, informal norms related to how masters treated their slaves, etc.) and underlying values (of equality and racial non-discrimination, respect, individual freedoms, etc.). They are conceptually different but yet so closely intertwined that leaving one of them out of analysis might result in its inadequacy.

A **value shift towards sustainability** requires a combination of various changes in values and norms which would result in certain patterns of behavior that will reduce an overall footprint of humans on the planet. I have already explained what sustainability values are but is there a merit to conceptualizing sustainability as a norm? Can there be a social norm that prescribes us to behave sustainably? And, for that matter, can we argue that an international norm to "develop sustainably" can bring about desired results and resolve global environmental crisis? I would suggest that it cannot.

The concept of sustainability is too broad to be a norm, legal or social. There is no one law that can embody all the various changes that sustainability implies. When slavery was abolished, it was clear from the law that it was no longer legal to trade human beings or used forced labour. Those who depended on slave labour had no way of re-interpreting the law, and socio-economic systems had to transform as a result. Fixing sustainability as a global legal norm in an international agreement leaves room for many different interpretations of how to implement and fulfil it, including some interpretations that contradict the norm itself[29]. Norms have to be more precise, linked to a specific subject or behavior (if applied to individuals), which sustainability is not.

Sustainability embodies many norms. We can talk about pro-environmental social norms, like recycling, eating less or no meat, using bicycles or public transport, or about international norms reflected in ozone depletion, anti-whaling, or wildlife trade regimes. Thus, there is no such one norm as sustainability but there are many norms of sustainability. These norms are strongly intertwined with values and play an important role in a value shift towards sustainability.

3.2. Value shift is on its way

Signs of new values: from global environmental governance to sustainable diets

An important point to stress is that a value shift towards sustainability is already on its way. The value system that caused the global environmental crisis has already undergone some important changes. I intentionally want to omit any specific date or event that started the shift. Like there can be no date named when capitalism started to emerge or social condemnation of slavery started, in case of a value shift towards sustainability one cannot call the exact day or time for when it went on. However, in the second half of the twentieth century there were already signs that the shift started.

To support this argument, I suggest looking at evidence of the value shift towards sustainability at several levels. At a **global level** major changes have occurred in the past 40-

[29] For example, Shell's sustainability report states: "We contribute to ***sustainable*** development by helping to meet the world's growing energy needs in economically, environmentally and socially responsible ways." http://www.shell.com/global/environment-society/s-development/sd-in-shell.html

50 years. In an analysis of sustainability values Leiserowitz[30] and colleagues (2005) argue that a global value for nature and the environment emerged in the middle of the 20th century (p.415). This value, along with the value of development, shaped institutions which emerged to deal with different aspects of environmental degradation in the last decades of the 20th century. The world witnessed unprecedented collaboration at an international level on environmental issues.

Since the 1972 UN Conference on Human Environment in Stockholm and especially after the 1992 UN Conference on Environment and Development in Rio the world saw a succession of mega-conferences dedicated to environmental issues. Some of these conferences attracted the highest level of political participation. Various regimes to resolve a variety of environmental issues evolved, including ozone regime, protection of endangered species, ocean radioactive waste dumping, and climate change regimes. More recently, Post-2015 Development Agenda was the theme of a meeting of the UN GA in September 2013. Sustainable development is expected to play a key role in the Agenda, along with Sustainable Development Goals and the High Level Political Forum for sustainable development. The development paradigm is shifting towards sustainability, which should incorporate not only an economic but also social and environmental dimensions of development.

Global institutions, regimes, and discourses specifically focused on environmental issues would not have emerged if concerns for nature and environment (underpinned by respective values) had not spread across the global community[31]. Thus, multiple developments in how environmental issues are perceived and dealt with, including the emergence of global environmental and sustainable development governance structures, confirm that at a global level a value shift towards sustainability values is on its way. However, it is important to point out that these changes are relatively slow and have an indirect impact on global ecological footprint.

[30] At the turn of the century UN General Assembly *Millennium Declaration* (2000), the *Earth Charter* (2000), World Summit on Sustainable Development (2002) and the Global Scenario Group (2002) produced several accounts of sustainability values for the new millennia. Millennium Declaration identified a set of values fundamental to international relations: freedom, equality, solidarity, tolerance, respect for nature, and shared responsibility.

[31] Here one can argue that these are mostly developed states pushing forward sustainable development agenda globally, while developing states are only reluctantly accepting it. To that I would answer that this thesis is focused on developed states (see Introduction for more clarifications).

Changes are relatively slow given the urgent nature of some key environmental problems, like climate change. According to scientific predictions, drastic reductions in GHG emissions to reduce climate change are urgently required. The low pace at which global community is moving towards an agreement on climate change is hardly acceptable considering the urgency of the problem. Moreover, global agreements do not automatically resolve the problem. In order for them to work, states who signed these agreements have to do their part, which is not always the case. Governments vary greatly in their interests and ability to implement demanding international commitments (Keohane & Victor, 2010). International environmental politics thus only has an indirect influence on the actual ecological footprint.

At **regional, national, and local governments levels** finding evidence of a value shift is not too difficult. Environmental concerns, including immediate urban ecological and health risks, gain more prominence in the work of municipal and city governments. With urbanization being a mega-trend of the 21st century[32], cities will play an increasingly important role in a transition towards sustainability. Cities form networks to work together on key environmental issues.

Local Governments for Sustainability[33], a network of 12 mega-cities, 100 super-cities and urban regions, 450 large cities as well as 450 medium-sized cities and towns in 86 countries was founded in 1990. A more narrow-focus initiative is C40 CITIES Climate Leadership Group[34] which was founded in 2005 and consists of 63 participating member cities. Such networks are platforms for knowledge exchange where cities share their success stories[35]. For example, as one of the most sustainable cities in the U.S., San Francisco has plans to move to zero waste by 2020. The city currently recycles or composts 77% of its waste, the highest rate of any major U.S. city. In the UK, London's innovative congestion charging scheme has reduced vehicle numbers in the central business district by over 70,000 per day, cutting carbon emissions in the central London by 15% since 2003 when it was introduced. These case studies won the City Climate Leadership Award in London in 2013.

Among countries there are also some forerunners. Sweden, Germany and Denmark could be great examples of a consistent change towards sustainability in many aspects of their socio-

[32] http://www.un.org/News/Press/docs/2009/gashc3964.doc.htm
[33] http://www.iclei.org/our-activities/our-agendas/sustainable-city.html
[34] http://www.c40.org/cities
[35] More information on other initiatives can be found at http://motherboard.vice.com/blog/the-ten-best-ways-cities-are-combating-climate-change

economic life (Giddens, 2011, pp. 77-82). It is important to acknowledge, however, that not always is government inaction representative of the situation in the country as a whole. The US is a prominent example. There are many sustainable initiatives in the country, at many different levels. San Francisco, New York City, Los Angeles and many other cities in the US run their own sustainability programs and climate change related initiatives, while the US government does not score as a top-performer in global sustainable development and climate change politics.

European Union is an acknowledged leader in advancing climate change and sustainability policy. The EU is currently operating under the 7th Environment Action Program guiding EU environmental policies until 2020 which, among other objectives, aims to protect, conserve and enhance the Union's natural capital (Article 2.1.a.). The EU is pushing for a global climate agreement (European Commission, 2014) and actively participating in the formulation of the Post-2015 Development Agenda (EU Development Days, 2013).

The growing numbers of regional intergovernmental organizations36 working on environmental causes also confirm that at a regional level environmental concerns are wide-spread. In spite of exemplary performance of some cities, countries, and regions it is clear that environmental concerns are spread unevenly between developed and developing states, and also among developed states they vary a lot. Polls conducted in 127 countries in 2007 and 2008 reveal that more than a third of the world's population has never heard of global warming (Gallup, 2009). The percentage of people who reported knowing "something" or a "great deal" about global warming ranges from as a low as 15% in Liberia to as high as 99% in Japan. The median percentage of people who report knowing about global warming across these 127 countries is 62%. This leaves a worldwide median of 38% who either report having never heard about it or did not have an opinion (Gallup, 2009).

Another perspective can be gained from looking at a **corporate or organizational level**. Business has been "greening" in the recent years, developing sustainability programs and policies. A wide range of initiatives can be listed here, from a popular hybrid car Toyota Prius to Coca-Cola's Water+ commitment, from Starbucks fair trade coffee to IKEA recycling centres. While some of these initiatives can be labelled as "greenwashing" some actually do

[36] To mention a few, Central African Forest Commission, ASEAN Wildlife Enforcement Network, Mekong River Commission, Baltic Marine Environment Protection Commission, Pacific Islands Forum Fisheries Agency, etc.

bring about positive social and environmental change. Private companies are actively involved in transnational government initiatives (Bulkeley et. al., 2012). Private actors play crucial role in the emergence and development of carbon standards and ways of managing carbon (Greene, 2013).

Do these initiatives mean that values driving business are changing? Or is it just an example of how companies are trying to respond to the demand for environmentally and socially responsible products? An important role in transforming the ways that corporations do their business is played by NGOs, a topic that I will discuss the last chapter.

Leaving NGOs and their impact on corporate values aside for a while, corporations are still comprised of individuals. Certainly in some especially large companies individual values are unlikely to make much difference, unless the individual in question works at a CEO level. But the more employees of a company value nature and sustainability, the more likely it is that the company as a whole would not make choices that could have negative environmental and social consequences. I would not argue that business values have undergone any major transformation yet. But the change will come from individuals who run the business, and this is the last perspective I turn to.

Finally, values can change at the **level of individuals**. The change would matter if an aggregated number of individual value transformations in a society was large enough. Individual consumers in developed states contribute on a daily basis to the global environmental degradation through their choices and lifestyles. Decisions of individuals have direct impact on a global ecological footprint. Individual contribution obviously includes not only individual or household emissions but also emissions, pollution and other negative contributions from companies which produce goods and services that an individual consumes. As I have argued earlier, values play an important role in shaping individual decisions and daily choices.

Is a value shift towards sustainability happening at an individual level? Some evidence suggests that it is but it is fragmented. People are becoming increasingly aware and concerned about the environmental and social impacts of their choices. An important role in this work is played by NGOs. For example, the fair trade movement focuses both on social equity and environmental sustainability at the most vulnerable stages of global supply chains.

The share of fair trade products is constantly growing, following the demand from consumers. For example, the market of fairly traded products in the UK continues to grow, in spite of a decline in the retail market in general, reaching 1.57 billion pounds in 2012 (Fairtrade Foundation, 2013).

Some other evidence of a shift towards sustainability values could be recycling, increasing demand for locally produced and organic food, including an urban farming trend, use of electro-cars in cities or solar panels in suburban and rural areas. Of course, none of these examples, taken in isolation, prove that values are changing. Each of them is based, apart from values, on a combination of norms, institutional changes and incentives other than sustainability. However, taken together, these signs signal development of a new way of thinking that reflects deeper underlying changes in what people consider important and what they value.

There certainly are examples of individuals and groups who live more in accordance with sustainability values than others. For example, in the recent decades the number of ecovillages, transition towns and other sustainable settlements around the world was constantly growing, according to the Global Ecovillage Network[37]. An ecovillage is commonly defines as a human-scale full-featured settlement in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development, and can be successfully continued into the indefinite future (Gilman, 1991).

The emergence of ecovillages is certainly a sign of changing values at an individual level (Kasper, 2008, p.21). However, the group of individuals involved in such kind of lifestyle is very small and their impact on the ecological footprint is incrementally small, too. More generally, signs of a value shift towards sustainability can be seen in various areas of life in developed states. However, this process is fragmented across geographical locations and social groups and it is also very slow.

Promoting sustainability values: actors and tools

A value shift towards sustainability is on its way. Values are changing slowly and unevenly across states, social groups and age groups but the process was triggered and it is ongoing.

[37] http://gen.ecovillage.org/

Can it be argued that a value shift is triggered and shaped by certain actors? Do some actors have more capacity to influence a value shift than the others? Some ideas that might be helpful in answering these questions come from the studies of norms by political, IR and social psychology scholars.

Actors who initiate changes in norms when there is a wide-spread dissatisfaction with a norm in a society are called norm entrepreneurs, a term coined by Cass Sunstein (1996). These are individuals or groups, public or private political actors who point out express their own commitment to change, create coalitions, make defiance of the norms seem more costly and compliance with new norms more beneficial. These people act most of the time for altruistic reasons, they demonstrate strong commitment and dedication to the cause. A few examples here could be Al Gore (USA), Nicholas Hulot (France), and David Suzuki (Canada).

After some time when costs associated with expressing a new norm and benefits from rejecting the old one are lowered there can be a "tipping point" after which norms start pushing in a new direction (Sunstein, 1996, p.930). There are two scenarios of how norms can change: norm bandwagons and norm cascades. Norm bandwagons occur when small shifts lead to large ones with more people join the "bandwagon". The tipping point here is a moment after which adherence to the old norms can produce social disapproval. Norm cascades happen when there are rapid shifts towards new norms.

Sunstein argues that the government should play a large role in norm management, although private power to create norm communities may make government action less necessary or less desirable (p.947). He points out that "often all or most people would, on reflection, like to see a change in a particular norm; and yet they cannot bring about the change on their own, because in his individual capacity, each person has limited power to alter meanings, norms, or roles" (p.948). In the context of sustainable development, environmental groups can be norm entrepreneurs that test or change norms and underlying values. However, sometime private groups or individuals cannot produce desired change by themselves. The role of governments then is to help solve collective action problems, a product not of one "wrong" norm but many of them, a product of a system of values.

Sunstein took a paternalistic approach to the role of government in his 1996 article and twelve years later developed in a book *Nudge* co-authored with Richard Thaler. He assumes

that in managing norms the government should know what is best for specific groups and for the greater good of the society. The government should intervene and "help" when people cannot get rid of "bad" norms themselves. While there are limits to this approach extrapolated from the US to all the developed states (weak governments and corruption can undermine its very basis), I suppose that it has its merit. Sometimes using expert knowledge can improve government action aimed at managing norms.

Finnemore and Sikkink (1998) took ideas of legal scholars' ideas about how norms work domestically to the level of international relations. From a constructivist perspective, the "life cycle" of norms includes several stages: norm emergence, norm cascade, and internalization. Between the first two stages the norm has to reach a "tipping point", a threshold of normative change. According to Finnemore and Sikkink's model, the actors who are at the initial stage of norm emergence are norm entrepreneurs with organizational platforms (like individuals and ENGOs). Their motives are altruism, empathy, and ideational commitment.

The actors that norm entrepreneurs are trying to reach through persuasion in the international context are states and international organizations. After a tipping point, a norm cascade begins. States and IOs come into the game, driven by motives such as legitimacy, reputation, and esteem. Norms are spread to new actors (states who were not keen on committing to a new norm first) through mechanisms of socialization, institutionalization, and demonstration. The last stage of a norm "life cycle" is internalization, when a norm is codified in law and spread for conformity reasons through habit and institutionalization mechanisms.

The influence of international norms on domestic ones was stressed by many authors. Keck and Sikkink (1999) revealed a boomerang pattern in transnational activist networks when channels between domestic groups and their governments are ineffective. In these cases domestic groups reach out for more powerful international groups which are part of the network and which can influence governments through international politics and persuade them to change domestic norms. Both the domestic and international norm dynamics are crucial to a value shift, as norms are closely intertwined with values.

Going back to the domestic level, there are several options, or **tools**, available to governments that want to change norms: education, persuasion, economic instruments (taxes and subsidies), time, place, and manner restrictions, and straightforward coercion.

Straightforward coercion (reflected in laws) and economic instruments are considered by many the most efficient, if not the only, tools to direct people's behavior. But what is the potential of these tools to shift societies towards sustainability?

Imagine that the only tools governments were using were these two. There can be only as many laws and taxes or subsidies directing people's behavior. If people do not share values and norms that underpin these measures, there will always be gaps and options for free riding. But the main problem is not even the gaps. It is the fact that our current sustainability norms and values are not ripened to call for the "help" of governments to solve the collective action problem and "fix" them in laws or with taxes or subsidies. If laws and economic measures are not supported by a broader consent and understanding from the public they can result in free riding and social unrests.

In a situation when a large-scale transformation is required we need to rely as much on education and persuasion in managing and creating new norms and values, as we rely on economic and legal measures. And these tools are available not only to governments; they are also available to norm entrepreneurs who have significant powers in altering public opinion and creating pro-environmental norms at all levels from small communities, to states and international community. Let us look closer at the actors who have capacity to change and manage norms and values.

(a) States and political parties.

States and political parties can play an important role in changing values and norms. States and values are two closely interconnected concepts. It makes sense to talk, for example, about "European" values, "Chinese" or "American" values. States represent and promote certain systems of fundamental values which are shared by their citizens and upon which their legitimacy rests. Some countries have their "specialities", like the US is commonly known for promoting democratic values or China is famous for sticking to a non-interference principle etc.

With the global environmental crisis manifesting itself throughout the world environmental values are gaining more prominence in many developed countries, which is reflected in the work of governments and some political parties. One of the most prominent examples is the German Green party recognized by many as a catalyst of change not only in Germany but

also in other European countries (Giddens, 2011, pp.50-1). The party emerged out of a broader social movement and advanced in addition to green values also pacifist and anti-centralist values.

In the early 1980 the party laid out its ideological foundations in a document called Four Pillars of the Green Party. The key principles were stated to be social justice, ecological wisdom, grassroots democracy and non-violence (Stavrakakis, 1997). Later on this list was extended to include[38] ecology, grassroots democracy, social justice, non-violence, decentralization, community-based economics, post-patriarchal principles, respect for diversity, global responsibility, and future focus (Merchant, 1992). Green parties in Germany and around the world (a network of Green Parties worldwide is called Global Greens)[39] played an important role in advancing these values both in political decision making and to the general public.

At a larger scale European Union has been active in promoting and acting upon environmental values since its inception – and before. Environmental protection and sustainable development are values registered in the 1988 Fifth Action Programme on the Environment and later in the 1992 Maastricht Treaty (Baker, 2005). European environmental policies include awareness raising in many different ways, with an annual highlight being Green Week in Brussels when thousands of participants discuss a key environmental issue (The EU Explained: Environment, 2013, p.11). The EU also sponsors competitions and awards (like Green Capital Award for European cities or other awards that recognize contributions from business, public authorities and individual projects.

To which extent do governments and particular parties in developed states fulfil their capacity to promote sustainability values? The first step to answer this question is to define "capacity". States are certainly powerful and resourceful actors with strong potential to promote sustainability. They have access to financial and other resources, including media networks. Elected governments come with legitimacy and are perceived as an authoritative and reliable source of information by the general public. Governments can employ both imposition (laws, taxes) and persuasion (awareness raising, education) techniques to achieve sustainability. Governments have more capacity to reach a Passive Citizen than any other actor.

[38] Capra and Spretnak (1986) also included spirituality in the list of values.
[39] http://www.globalgreens.org/

In case of values, as I have argued earlier, persuasive methods play an important role. If there is no broader underlying agreement in the society with a law, if norms and underpinning values are not in place, there is a high probability that the law would not achieve a desired behavioral outcome[40]. Legal and fiscal frameworks are placed into the heart of environmental politics, pushing actions aimed at achieving change in people's minds, beliefs, and concerns to the background. Use of persuasion and direct interactions with the public through awareness raising and education are not prioritized by governments, although they are part of environmental policies in some states.

There are also major differences in performance among developed states with regards to environmental policies. Some states (Germany, Sweden, Denmark) are stronger in promoting and acting upon sustainability principles, some other states are less so. More generally, the fact that direct interactions with and persuasion of the general public are at the bottom of environmental agenda of many states means that states do not use all tools at their disposal and do not fully realize their capacity to promote sustainability values.

(b) International Organizations

International organizations have actively contributed to the promotion of sustainability values in a variety of ways. The United Nations and more specialized organizations have been involved in resolving global and local environmental challenges for decades. The role of these organizations is twofold. One the one hand, they coordinate efforts of governments and sometimes provide guidance on specific environmental matters. On the other hand, many UN agencies actually participate in the implementation of various activities and programs.

IOs, like states, have significant budgets and access to resources at their disposal. Unlike states, however, IOs do not have any power to impose (pass laws or use economic instruments). Their role is rather to convince governments to introduce relevant policies. With regards to promoting sustainability values, IOs can influence states through a facilitated dialogue but they were not designed to influence or interact with the general public directly. IOs have some programs which engage with the public but these actions are more targeted and mostly of humanitarian nature.

[40] Laws are more concrete than values. Values are better be taught and socialized into than imposed.

One tool that United Nations uses to raise awareness about various issues is to designate "international days" dedicated to certain issues, like the UN World Wildlife Day (March 3rd), International Day of Forests and the Tree (March 21st), International Water Day (March 22nd), etc. The idea behind "international days" is to raise awareness about specific issues through large- scale outreach campaigns and events which is one possible persuasion mechanism to promote sustainability values. Moreover, there is one agency of the UN that specifically focuses on education, UNESCO. UNESCO Decade of Education for Sustainable Development is the only global platform at the time that aims at promoting sustainability through education. In Chapter 3 I have looked at values that DESD embodies and promotes arguing that it has a great potential to promote sustainability values globally.

(c) Non-governmental organizations and social movements

Environmental movement and ENGOs have catalysed changes in values and norms for the past 40 years. As Sydney Tarrow points out social movements' elusive power is as real as the one of political and economic institutions (Tarrow, 2011). Bottom-up demands for change created many pre-conditions for action at local, national, and global levels. Studies show that environmental NGOs have accounted for 23 per cent of all the transnational climate governance initiatives. Together with foundations, community-based groups and business associations, NGOs accounted for 44 per cent of such initiatives (Bulkeley et.al., 2012). Environmental activism spread beyond borders, making ENGOs and transnational social movement subject of study of IR scholars, particularly in the 1990s.

Environmental groups and ENGOs are considered norm entrepreneurs both at domestic and international levels. ENGOs achieve changes by lobbying and leveraging governments in a variety of ways (Gough & Shackley, 2001). ENGOs cannot change norms through straightforward coercion or economic instruments at their disposal, like states do. Paul Wapner (1995) argued that NGOs have political power to influence not only governments but also, very importantly, change public opinion about specific environmental issues. The power of persuasion and education is crucial in creating new norms in the context of sustainability. ENGOs, with their reputation among the general public and, in some cases, budgets that exceed GDPs of some developing states are in capacity to promote pro-environmental norms and values directly to people whose choices matter in aggregate.

The last extended chapter of this thesis is specifically focused on the role of ENGOs in shifting values and norms by changing public opinion. My argument is that ENGOs have the tools of education and persuasion (awareness raising) at their disposal which they use to influence public opinion. However, ENGOs most of the time do not view these changes as a result in itself and rather use it as a leverage to influence governments. Lobbying governments is an important task but if it becomes the ultimate goal of an ENGO it fails to realize its capacity to achieve changes in norms and values through tools that they can use best: persuasion and education.

(d) Individuals

Individuals are critically important catalysts in promoting sustainability values and norms. They frame certain issues in ways that call for attention, interpret and dramatize, and catalyse action. To mention a few recent examples, Al Gore in the US was involved in environmental activism for several decades and became especially famous to the general public for his movie on climate change *An Inconvenient Truth*. In Canada the work of science broadcaster and environmental activist David Suzuki since mid-seventies attracted a lot of public attention to environmental issues. Suzuki reached out to the public through TV and radio shows and books on environmental issues. In France, a journalist, writer and environmentalist Nicholas Hulot also gained vast public support for his documentaries on human-induced harms to the environment. Hulot's most remarkable and famous work known to many in France is his documentary show *Ushuaïa*.

Interestingly, all of these people were famous specifically because of their engagement with the general public. The work of norm entrepreneurs like Gore, Suzuki, and Hulot, aimed at raising awareness and concerns about nature and environment, educating the general public, deserves serious academic attention.

(e) Business

Business mastered persuasion better than any other actor. Reaching out to the public through marketing and advertisement of all sorts, business shapes our choices and preferences, defines our lifestyles and (at least) consumption behavior. Business created a society of overconsumption in pursuit of indefinite growth and profit. Business-as-usual rests on the old

system of values which emerged in times when resources were unlimited. If that system has to be changed, the operating modes of business have to change.

Business has a great capacity to promote values to the general public but it uses it to support the system's status quo. In my view, the most probable scenario for change would rest on the fact that business is comprised of individuals. Once the idea of sustainability (a combination of sustainability values and norms) reaches a certain "tipping point" among the individuals, among the general public, business will inevitably change its course. The change might even come rather from the inside, from the CEOs and employees, from entrepreneurs who run business than from external pressure.

Communicating sustainability

Education and persuasion are crucial to promoting sustainability values, norms, and sustainable behavior. These tools deserve (but do not receive) at least as much attention as legal and economic mechanisms. As I have argued above, education is mostly an area of state influence. However, NGOs and IOs can also play significant roles, especially in places where states are too weak. Education for sustainable development can be used as a channel to promote sustainability values.

The issue here is with who defines the content of the curriculum and what exactly makes its way to the agenda. If governments are not convinced that (1) sustainable development is an important issue or that (2) education is not the key channel in changing people's mind sets about sustainability, they will not put efforts into developing new educational strategies and curriculum. Who then should convince the states? Who should watch the watchmen? This role goes to ENGOs, and I will discuss it in the next chapter.

States, political parties, international organizations and NGOs, as well as individuals and certainly business can all use persuasion as a tool to change behavior but they use this capacity to a different degree and not always for purposes aligned with sustainability. Persuasion implies communication of an issue to the public. Climate change or sustainability are very broad, complex problem areas. Communicators face some serious problems in conveying messages about these issues and especially with achieving behavioural responses.

In an analysis of climate change communication Moser and Dilling (2009, p.163) point out, for example, that ignorance about scientific details of the problem is not what prevents greater concern and action. Studies have shown that what matters much more than information about scientific explanations of climate change to change people's behavior are deeply held pro-environmental values and beliefs, incentives, perceived benefits, skill and a sense of efficacy, social support, peer pressure (social norms), and practical assistance (Moser & Dilling, 2009, Downing & Ballantyne, 2007; Gardner & Stern, 2002; Semenza et al., 2008; Takahashi, 2009). Moser and Dilling (2009) also argue that there is an important place for facilitated dialogue and structured deliberation given the long-lasting and deep societal changes required (p.165).

There is a need for communication strategies that are aligned and consistent with the broader goals of a value shift. Communication should target more specific unsustainable social practices and behavior, as well as norms and values underpinning them. Communicators can also create space for structured deliberative processes with regards to environmental issues. There are at least two important possible avenues that might be considered useful in this respect. Communicators (educators, persuaders, awareness raisers, etc.) should take into account motivational impacts of (a) social roles and (b) virtues on behavior. Let us consider the two in turn.

(a) Social roles

Members of the general public have two most important social roles to play: the role of a citizen and the role of a consumer (Sunstein, 1996, p.923). There are many more social roles that individuals play at the same time (for example, a mother, a teacher, a judge, a friend, a waitress, a doctor, and so on) but these two are the most relevant to political and economic analysis. Social roles influence people's choices and behavior, like social norms do. Choices that one makes as a citizen and as a consumer are not always aligned.

One example here could be the case of Swiss nuclear waste repositories in the 1990s[41]. The government intended to build two repositories for low- and mid-level radioactive wastes. It designated two adjacent communities in central Switzerland as potential sights. In 1993 residents of these communities were interviewed to test public acceptance of the project.

[41] This example is taken from a study by Frey & Oberholzer-Gee (1997)

Residents were asked if they were willing to permit the construction of a nuclear waste repository for short-lived low- and mid-level radioactive waste on the grounds of their community. 50.8 per cent of respondents said yes, 44.9 per cent opposed the facility and 4.3 per cent did not care. Those who agreed viewed the project as a heavy burden for the host community and considered serious risks to health and lives of local residents as very likely in case of an accident.

Then the respondents were asked an exact same question but with an introduced external compensation. The residents were asked if they were willing to permit the construction of a nuclear waste repository on the grounds of their community if the Swiss parliament had decided to compensate all residents of the host community. The support of the project dropped from 50.8 per cent to 24.6 per cent. About one-quarter of respondents seemed to reject the facility simply because of the compensation. The amount of compensation did not have a significant effect on the level of acceptance (if rejected an initial offer, a respondent was made a better offer from $2.175 to $3.263, from $4.350 to $6.525, and from $6.525 to $8.700 (an average monthly income of residents being $4.565); despite this increase, only one respondent who rejected initial offer changed his mind).

Frey and Oberholzer-Gee (1997) interpret higher levels of acceptance without any compensation as a "proxy for the prevailing level of public spirit" (p.752). Basically, they say that people are more willing to accept the facility as their civil duty that would contribute to the greater good of the community (nuclear energy benefiting the whole of Switzerland). They do not consider a dangerous repository in terms of costs and benefits because risks in case of an accident are too high to be calculated.

This is a perfect example of social roles affecting people's choices. In this situation residents playing a social role of a citizen, with associated duties and responsibilities, are much more willing to support a project which is dangerous for them but aimed to benefit a larger group that they belong to. A re-phrased question puts them in a social role of a consumer who has to decide what to do after calculating costs and benefits of the project which drives respondents away from the idea.

These findings have very important implications. Instead of appealing to *consumers* proposing people to calculate how much they would benefit from installing a new solar panel

or recycling, would it not be more efficient to appeal to *citizens* in defining a motivation for action? Appealing to the sense of duty and responsibility, to the feelings of belonging to a group rather than to self-interest and mercantile considerations can be a way to initiate more positive behavioural changes.

(b) Virtues

An important role in promoting sustainability values can be played by virtues. Values and virtues are closely interconnected at a conceptual level. Virtues of sustainability can be easily "translated" into sustainability values: a person may have a virtue of humility – or / and value humility in others and herself. One useful idea that can be picked up by communicators from ethics is a virtue-oriented method of environmental decision-making (Sandler, 2007) described in Chapter 2. The method rests, apart from moral wisdom, on v-rules and the use of mentors, models, case studies, and collaborative discourse.

V-rules, or virtue-rules, embody the substance of virtues. For example, care is one of the environmental virtues of respect for nature. A v-rule for someone who has this virtue would be "to care about nature". If there is an issue that threatens to harm nature in a way, a person who possesses the virtue of care would feel inclined or obliged to do something about it because she cares about nature. A way for communicators to approach virtues is to use case studies and role models and to create space for constructive collaborative dialogue and deliberation. Sustainable behavior can be framed in terms much broader than "good" and "bad". This dichotomy can be further developed by opposing, for example, wastefulness and frugality, indifference and care, shallowness and farsightedness, etc.

My point here is that an appeal to virtues in communicating and framing sustainability could be a way to pinpoint and change underlying or corresponding sustainability values. There are ways of framing sustainability in terms that can foster such virtues as humility, farsightedness, ecological sensitivity and gratitude, frugality, temperance, attunement to nature, and others. These virtues, in turn, are connected to sustainability values as they affect and define what we deem important and what we value.

Virtue-oriented approach to communicating sustainability has at least two major limitations. First, its message might be perceived as a sort of preachment, telling people what virtues and vices are. It assumes in a way that communicators should give some kind of moral guidance

to the public, something which might not necessarily be warmly welcomed in liberal democracies. The second limitation raises from the first one and it has to do with a broader institutional context. Bendik-Keymer suggests that it might be misleading to morally judge how virtuous a person is, especially with regards to environment, without considering a broader institutional context in which virtues are embedded.

Conclusion

In this chapter I have looked at a value shift as a dynamic social process. Values changed in the past, and a shift towards sustainability values is not a one-time historical process. I have argued that some value shifts build up an axis of moral progress, such as, for example, abolition of slavery, abolition or humanization of warfare, empowerment of women and other marginalized groups. Not all value shifts are indicators of moral progress. Values underpinning overconsumption or abusive attitudes to nature and environment that evolved over the last centuries, for example, cannot be characterized as positive moral developments.

I argue that a value shift towards sustainability is an indicator of moral progress. I also argue that this shift had already started and is currently on the way. As values change very slowly, we are nowhere near the end of the process but there are positive signals, some changes at all levels from global to individual that are encouraging. Changes in values are positively linked to the processes of globalization and the development of communication technologies which make people realize that world resources and capacity are limited and that everything is interconnected.

In order to better understand a value shift as social dynamics, I bring norms into the analysis. Norms and values are closely connected, while norms are more specific and have stronger connection to concrete behavior and social practices. I bridge studies from different disciplines on how norms work at domestic and international levels and consider implications of this research to the study of values. I argue that promotion of sustainability values should be channelled through changes in specific norms of behavior.

I analyse in more detail which actors can catalyse changes in values and norms, looking at governments and political parties, international organizations, social movements and NGOs, business, and individuals. Individuals and NGOs play an important role of norm entrepreneurs. I also discuss actors according to their capacity to use various tools to change

norms and values, including straight coercion and economic instruments, persuasion and education.

Finally, I look at how sustainability values can be communicated. I argue that directing messages at *citizens* is more promising that at *consumers* (social roles that people play). I also suggest that appealing to virtues could be taken into account when framing communication on sustainability as one of the ways of increasing motivation to act.

Chapter 4. Care for Future Generations as Part of Sustainability Values

Introduction

Sustainable development is the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

UN, Our Common Future, 1987

Previous chapters explained that a transition towards sustainability and harmonious life of humans on Earth can only be achieved conjointly with societal transformation and changes in the dominant western system of values. One of the key features of this transformation is a long-term outlook. Although global environmental problems inflict some visible damage as we speak and threaten some of our more vulnerable contemporaries, the biggest harm will accrue to our descendants. Descendants are not necessarily our children and grandchildren but more likely remote future people many generations away from now. Recent IPCC projections point at significant changes in temperature, ocean level, glacier volume, and air quality by 2100 (IPCC 2013).

Intergenerational storm not only complicates climate change and global environmental degradation, but it turns them into a new kind of moral problem. The novelty has to do with an emerging moral concern for remote future generations. Concerns for future generations emerge as we, humans, realize our capacity to influence living conditions and the very survival of humans in remote future. This concern is present but rudimental in our current system of values. Yet, it is an important motivational component in a global response to the global environmental change. As Partridge puts it:

"[T]he accelerating advances of science and technology have made it compellingly clear that future generations are vulnerable to our acts and policies. Furthermore, through science we have come to understand the long-term consequences of these policies, and through technology, we have acquired the capacity to affect these consequences, if only through forbearance. Accordingly, in our hands lies the fate, for better or worse, of future persons whose lives we will never share. This is a burden of responsibility that we cannot escape, so long as we willingly accept the enlightenment of science and the capacity of our technology.

"To do nothing, is to do something"; namely, to assent to existing trends and entailments." (Partridge, 2001, p.378)

This chapter aims to look at both philosophical debates related to posterity and more practical questions related to registering and promoting concerns for future generations by current institutions. This chapter attempts to find out what the place of concerns for future generations in our current system of values is and what the ways to strengthen them are. First, philosophical views on why posterity matters and the key approaches and debates concerning future generations in the literature are discussed. This synthesis provides an important support for the argument in the following section on resolving Pure Intergenerational Problem (PIP). The section ends with three observations about strengthening self-transcendent forward-looking concerns.

The next part is aimed to discuss how concerns for future generations are part of an international sustainable development agenda and how they are promoted through education. First, it looks at how concerns for future generations are present the general debate of the 68th session of the United Nations General Assembly (September 2013) that was themed "Post-2015 Development Agenda". It also explores various calls to institutionalize these concerns coming from civil society. Finally, it examines how concerns for future people are promoted through education, focusing on UNESCO Decade of Education for Sustainable Development as a case study.

4.1. The concept of future generations: Philosophical dimensions

Why posterity matters?

Most frequently concerns for future generations are captured in terms of intergenerational justice[42] and intergenerational solidarity (UN, 2013). The relationship between present and future people can be conceived as a matter of equity or solidarity based on a set of principles of fairness. Discussions about sustainable development are often framed around our obligations to future generations. Motivational element of these discussions invokes big questions of what we owe to posterity and what is our responsibility to future people. For

[42] Brian Barry (1999) calls this term potentially misleading as it is often used by scholars a sort of "short hand" for "justice between present and future generations". To make it clear from the outset, I use the terms "intergenerational justice" or "intergenerational solidarity" with a focus on relationship between the present and future generations.

further convenience, I will refer to a relationship between the present and future generations formulated in terms of our moral obligations and responsibility to act for the sake of future people as a *posterity problem*.

Attention of philosophers to the issue of moral responsibility to future generations is relatively recent. A body of relevant literature in the Western, predominantly Anglo-American philosophy developed in the past forty years. A large part of this literature, especially more recent studies that came out after the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, discusses the issue of moral responsibility to future generations in the context of global environmental crisis, climate change, population growth. A new knowledge that we are capable of major planetary transformations potentially harmful to future people raised the moral problem of posterity to a new level of urgency.

There are two threads of inquiry in diverse philosophical studies on future generations. On the one hand, scholars seek to answer a very fundamental (and puzzling in its simplicity) question of *why* we should care for posterity. It is an attempt to justify, find a moral basis and strong moral reasons to act for the sake of future generations. On the other hand, there is a more practical (if that term can apply to philosophical inquiry) question of *how* we should care about posterity. This line of studies at large assumes that future people are morally important and should be to some extent taken care of by the present generation and map the ways to turn our obligations into actions.

Why should we care about future generations?

As a relatively new phenomenon, posterity problem challenges our moral intuitions. Relationship between the present and future generations cannot be governed by the same principles of fairness as intra-generational justice requires (Barry, 1999; Wolf, 2007). It is not clear from a moral perspective why we should make sacrifices (in terms of income, savings, comfort, or habits), especially at the expense our own children, for the sake of some distant future people whose lives we would never share. There are several directions that were suggested in the literature to morally justify actions for the sake of future generations.

Concerns about posterity are often framed in terms of rights, duties, obligations, and responsibilities. It is not uncommon to hear in the political rhetoric that we, the present generation, have a duty to respect the interests and rights of future people. One difficulty with

assigning rights to future generations is the fact that those people do not yet exist. The discussion among philosophers continues back and forth between those who believe that future generations can be bearers of rights (and, thus, impose duty on the present people) and those who believe they cannot. De George (1979), for example, argues that while we have duties towards future persons these persons cannot now be the present bearer or subject of anything, including rights. Future people, de George notes "should correctly be said to have a right only to what is available when they come into existence" (De George, 1979, pp. 95-96).

Feinberg (1971) distinguishes between "active" and "passive" rights. Active rights are rights to act or not to act as one chooses and passive rights are rights not to be done by others in certain ways. Among one's active rights may be rights like to go where one will and say whatever one pleases, often referred to concisely as "the right to liberty". Passive rights include, for example, rights to be let alone, to enjoy one's property, to keep one's affairs secret, or one's reputation undamaged, or one's body unharmed. These are often characterized collectively as "the right to security". Partridge (1990) argues that, while future generations cannot be bearers of "active rights", the notion of "passive rights" is quite applicable to them, and the present generation has a duty to not violate those rights.

Environmental rights of future generations are often captured in terms of group rights, distinct from individual rights. For example, Edith Brown Weiss suggests a concept of "intergenerational planetary rights", rights of each generation to receive the planet in no worse condition than did the previous generation (1989, 1990). Brown Weiss also proposes a theory of intergenerational equity based on three principles of fairness which is discussed a bit later. Another example, an alternative to both "liberal" and "communitarian" views on rights, is Alain Gewirth's "community of rights" (1996). While there is no agreed list of rights that future people might find important, there is a broader consensus among scholars that there are some basic rights that would be relevant to people as biological human beings (rights for life, health, peace, etc.).

More recently, Simon Caney proposed to address climate change from a human rights perspective (2010). He argues that climate change puts human rights (in particular the human rights to life, subsistence, health) into jeopardy. Caney does not claim that human rights approach captures all of the morally relevant impacts of climate change but stresses that an approach that any approach that ignores climate change implications for people's enjoyment

of human rights is fundamentally incomplete and inadequate (Caney in Gardiner et.al., 2011, p.173).

While human rights approach is an important way of engaging with posterity, it has an important limitation when it comes to enhancing moral motivation to act sustainably. Human rights, captured in terms of individual or group rights, is a concept that rests primarily upon the idea of individualism. This approach draws attention to how individuals should be treated and what can they expect. The questions raised by the global environmental change are different in nature. Is humankind going to survive? How are humans going to live in the future? What can we do today to give humankind a chance in the future? Put plainly, a global challenge brings individuals from different countries and backgrounds together, blurs the differences and threatens us a group, as a community.

In this light, another possible answer to the question of why we should care about future generations comes from communitarianism. Avner De Shalit argues that all people belong to an intergenerational community of humans. In order for a group of people to count as a community, he argues, one of three conditions must be met: (a) interaction between people in daily life; (b) cultural interaction; (c) moral similarity (de Shalit, 1994, p.22). While the first condition cannot be met for an intergenerational community, cultural interaction (throughout time) and moral similarity both bind us together into one transgenerational community of humans. It is true: humans can be captured not only as a group in space but also as a group in time. Feelings of belonging to a group are more likely to trigger a positive response from someone who is not personally affected by a threat than individual human rights that go more in line with the "survival of the fittest" mindset.

In 1981 Ernest Partridge made an attempt to explain why concerns for posterity are a normal part of any generation's concerns. Partridge defends a position that "healthy, well-functioning human beings have a basic and pervasive need to transcend themselves; that is, to identify themselves as a part of larger, ongoing, and enduring processes, projects, institutions, and ideals" (Partridge, 1981, p.206-207). Partridge argues that persons will suffer both individually and communally if they are deceived into believing that they can live in and for themselves alone. He also suggests that our duty to make just provision for the future is not of the form of an *obligation* understood as a contractual agreement to exchange favors or services.

"To be sure, posterity does not actually exist *now.* Even so, in a strangely abstract and metaphorical sense, posterity may extend profound favors for the living. For posterity exists as an *idea,* a potentiality, and a valid object of transpersonal devotion, concern, purpose, and commitment. Without this idea and potentiality, our lives would be confining, empty, bleak, pointless, and morally impoverished. In acting for posterity's good we act for our own as well. Paradoxically, we owe it to *ourselves* to be duty-bound to posterity, in a manner that genuinely focuses upon future needs rather than our own. By fulfilling our just duties to posterity, we may now earn and enjoy, in our self-fulfillment, the favors of posterity." (Partridge, 1981).

Partridge's idea of self-transcendence and de Shalit's transgenerational community based on moral similarity are the two views that I rely upon in the next section when proposing a solution to the Pure Intergenerational Problem. These views elucidate what a moral basis of our care for future generations can be.

An elephant in the room of studies looking at the moral responsibility of present people to future generations is Derek Parfit's Non-Identity Problem. This view suggests why we should *not* care about future generations. More specifically, Parfit makes a strong case for why our efforts to improve lives of people in the future are morally irrelevant. In the last part of his *Reasons and Persons* (1984) Parfit explores moral questions regarding future generations and formulates several puzzling conclusions that sometimes go against our moral intuitions.

One of these conclusions is the Non-Identity Problem. Parfit's main assumption is that our identity depends on when we are conceived. The same couple can conceive a baby today or in one week, and these would be two different babies. Parfit applies this logic to different circumstances and time. He discussed two types of policies: Risky and Safe (depletion versus conservation; more recent example could be strong reduction of CO2 emissions versus business-as-usual). Each policy would generate a certain set of outcomes and circumstances in the future. These future realities will be different: as a result of a Risky policy the world might be facing a global environmental or other catastrophe that would wipe out most of humans, leaving the survivors in misery and suffering.

This set of future people, the survivors, would be different from those who would live as a result of a Safe policy. Parfit argues that lives of those who would exist as a result of a Risky

policy, in spite of being very difficult, would still be considered by those people as lives worth leaving (as opposed to never existing), just like the lives of those who would live as a result of a Safe policy. If in both cases lives of future people are worth living, then we cannot say that by choosing a Safe policy we benefit future generations, because as a result of this policy a set of people who would have existed as a result of a Risky policy would never live (which is not their preferred outcome).

Parfit's logic, therefore, brings us to a puzzling conclusion that no matter what kind of policy we choose today, our choice will not harm or benefit future generations. To environmentally-concerned people seeking action this moral conclusion might appear rather discouraging (and advantageous for those groups advocating business-as-usual). The view that our actions won't matter for posterity goes strongly against moral intuitions of most readers, concerned about the environment or not. It conflicts with our self-transcendent motivations.

Even Parfit himself in discussing practical implications of the non-identity problem to social policies suggests that it would be permissible to "pretend" that a choice of a Risky policy might be against the interests of people in the further future and let others go on thinking that it is (Parfit in Gardiner et.al., 2011, p.118). The logic of NIP is brilliant and very difficult to contradict at any point of the argument development. But the conclusions of this intellectual exercise do not have to become a barrier on the way of those who disagree with them to develop other theories about posterity. Some problems just have to be left aside for a while, until the time comes to resolve them. In full agreement with Gardiner's argumentation that NIP does not undermine PIP (Gardiner, 2011, pp. 179-183), I take PIP as a major standing intergenerational problem and explore solutions to it without invoking NIP.

How should we care about future generations?

The second major direction in philosophical treatment of posterity issues is *how should we care about future generations*? Contrary to the first question, this question arises if we assume that posterity matters and that we should care about future people. The most prominent example here is Rawls's "just savings principle". Rawls assumes that we should take care of posterity and proposes a moral principle to guide us *how* to preserve good institutions and the gains of culture and civilization for the future generations. In his Theory

of Justice (1971, 1999) Rawls has a section on "justice between generations"[43] where he proposes a principle of intergenerational justice, namely the "just savings principle".

Rawls assumes that (a) posterity matters and relationships between generations can be considered a matter of justice and (b) the number of future people is constant, thus, avoiding any discussion of the non-identity problem. The idea of a "just savings principle" is that "each generation must not only preserve the gains of culture and civilization, and maintain intact those just institutions that have been established, but it must also put aside in each period of time a suitable amount of real capital accumulation" (Rawls, 1999, p.252). By capital, Rawls means "not only factories and machines, and so on, but also the knowledge and culture, as well as the techniques and skills, that make possible just institutions and the fair value of liberty" (Rawls, 1999, p.256)

Rawls's approach is contractarian, yet he acknowledges that a "just savings principle" cannot literally be adopted democratically, through actual contract negotiations. He, thus, proposes to agree on this principle through a "hypothetical contract", through a thought experiment that he calls "the original position". In an original position parties do not know the stage of civilization of their society, whether their generation is relatively poor or wealthy. They need to arrive to an agreement on how much they would be willing to save at each stage of advance, assuming that all other generations have saved (or will save) in accordance with the same criterion. Rawls notes that the "just savings principle" is not about accumulation of wealth for future generations per se but rather applies to what a society is to save as a matter of justice to preserve just institutions for people to come.

Rawls does not discuss the application of "just saving principle" to environmental matters. Brown Weiss (1989) addresses the gap by proposing a theory of intergenerational equity based on three principles of fairness. (a) "Conservation of options" – each generation should be required to conserve the diversity of natural and cultural resource base, so that it does not unduly restrict the options available to future generations in solving their problems and satisfying their own values, and should also be entitled to diversity comparable to that enjoyed by previous generations. (b) "Conservation of quality" – each generation should be required to maintain the quality of the planet so that it is passed on in no worse condition than

[43] More on the subject can also be found in Rawls 1971 and 1999, especially sections 44; Rawls 1993, 274; Rawls 2001, especially sections 49.2 and 3

that in which it was received, and should also be entitled to planetary quality comparable to that enjoyed by previous generations. (c) "Conservation of access" – each generation should provide its members with equitable rights of access to the legacy of past generations and should conserve this access for future generations. Unlike Rawls who formulates "just savings principle" for national entities, Brown Weiss suggests that this principle of justice can be applied universally, to all nations.

Another aspect of how we treat posterity was captured in a famous debate between the economists Nicholas Stern and William Nordhause a few years ago. The disagreement was about discontinuing the future. The cornerstone of the debate was that economic models cannot be considered neutral. These models are based on important ethical assumptions (e.g. discounting rates) which can and should be discussed and challenged before being incorporated in the models. The debate is well presented elsewhere (Sunstein & Weisbach, 2008).

A challenge to traditional neo-classical economic models posed by this realization certainly did not win sympathy from most of the economists. Most economic models involve value judgments, and discussing even a few of them could jeopardize the stability of economic science. Yet, some efforts to reconcile economic thought with philosophical views were made (e.g. Stern, 2012). The economists cannot answer the question how we should value future generations or why we should do that. Their vocabulary and tools are not meant to answer this kind of normative questions. It is the job of philosophers to address the problem and to explore moral motivations to act sustainably and to protect future generations.

Resolving the Pure Intergenerational Problem

After a brief discussion of some key philosophical positions with regards to future generations this section looks into one specific moral problem, the Pure Intergenerational Problem (PIP) formulated by Gardiner (2011) as part of the Intergenerational Storm and of the Perfect Moral Storm. The dilemma was briefly outlined in Chapter 1. This analysis of an intergenerational dimension of climate change by means of game theoretical models is probably Gardiner's most important contribution to climate and environmental ethics so far.

The PIP derives its logic from the Tragedy of the Commons and Prisoner's Dilemma. Tragedy of the Commons (Hardin, 1968) is essentially a Prisoner's Dilemma involving a

common resource. The agents in this game are international players, such as (most of the time) *states* but sometimes also corporations and international organizations. Tragedy of the Commons describes the spatial dimension of climate change. In order to explain its inter-generational dimension, Gardiner innovatively applies the same logic to *generations* as agents.

Gardiner's analysis generates two claims. On the one hand, it is collectively rational for most generations to cooperate and restrict overall emissions to avoid disastrous consequences of climate change. On the other hand, it is individually rational for each particular generation to continue their emissions (meaning, economic growth and development, business-as-usual), no matter what others do. Each generation is tempted to postpone taking long-term action which goes against their short-term business-as-usual interests, increasing the burden and the risk for the consequent generations. The problem of intergenerational buck-passing and the clash of collectively and individually rational choices are central to the PIP.

Gardiner's account leaves open the question of composition of generations as agents of PIP[44]. Yet, generations consist of a variety of actors operating both at individual and collective levels. Buck-passing logic seems to apply well both levels of environmental decision making. As much as governments are tempted to take it slowly and not go against the immediate business-as-usual interests, individuals are tempted to engage into intergenerational buck-packing through their daily choices, lifestyles, and behavior. It is hard for us to give up lifestyles that we are used to, even if we know these lifestyles (or some elements of them) are unsustainable. We have no time or prefer not to think too much about the long-term consequences of our actions as they would not affect us or our immediate circles of family and friends. We become even less engaged when it comes to distant people in the remote future whom we can never meet.

The logic of PIP can be applied to a wide variety of problems, not only climate change. Producing CO2 emissions is only one of many possible manifestations of the problem. But the same buck-passing thinking extends to other issues: to mention a few, over-consumption, waste management, unsustainable diets, and many others. As Gardiner notes, however, in the case of climate change PIP is complicated by some of the particularities of this phenomenon.

[44] Gardiner agrees that using the term "generation" has its peculiarities related to the size of a generational unit, a starting point and a generational overlap (Gardiner, 2011, p.145-148). But he argues that using intergenerational language is useful for inter-temporal moral problems – a view that I subscribe to.

First of all, climate change is a resilient, seriously back-loaded and substantially deferred phenomenon (Gardiner, 2006, p. 91). These characteristics arise from the nature of a greenhouse effect and bring about serious implications on the structure of the PIP. The results of present emissions will not appear in the form of severe climate related disasters at least for several decades (IPCC, 2007, p. 45). Not seeing actual negative consequences of their actions makes it psychologically easier for the members of present generation to continue their lives as they are - leaving the problem to future generations to solve. After all, by increasing the wealth today (even though unsustainably) we leave future people better-off and richer than ourselves. The problem is though that the harm inflicted on the planet might turn irreparable after passing a certain threshold. It is not difficult to imagine a situation in the future when no money in the world is enough to resolve the crisis.

Secondly, there is an important issue concerning temporal fragmentation of agency. As it was noted in Chapter 2, our moral theories face great difficulties assigning moral responsibility for climate change related harm, both individual and collective, even within the present generation due to spatial fragmentation of agency. With temporarily dispersed agents the situation is even more complicated. In the intergenerational reading of climate change identifying the cause of past emissions is not hard. Industrial activities in developed states before 1992 generated most of GHG emissions in the atmosphere. Moral responsibility for turning the planet into a greenhouse, thus, can be assigned to the past generations from developed states.

But what use is there in pointing out whom to blame? The only point that makes moral difference is that those were past generations in *developed* states. This point is relevant to the spatial analysis of the problem, in discussions of how to distribute the burden of combating climate change within the present generation. But in a temporal reading of climate change there is little use in blaming past generations (of humanity as a whole).

First, past generations were not aware of harmful effects of their actions[45] and, second, it is impossible to enforce any sanctions or change that contribution from the past. It is left to the present and future generations to make effort to avoid possible negative consequences of the created climate problem. The sooner the generation which would reduce or stop harmful activities comes, the higher chances of future people for a better life are. The big practical

[45] Until the first Assessment Report of IPCC in 1990

question, therefore, is how to speed up the process of "moral ripening" in order to achieve visible results and improve the chances if the remote future generations for a better life (or a life as such).

Solution?

Before turning to issues of moral corruption and moral motivations let us briefly consider standard ways of resolving PIP. After all, there might be a straightforward structural way out rather than a tricky one involving a change in our morals. A standard solution for games with a similar structure, like the Tragedy of the Commons, would be an agreement that allows parties (agents) to benefit from a broader context of cooperation. In case of international negotiations of an environmental agreement, for example, that could mean benefits from trade or security. For this solution to be efficient there is also an institution required, which could monitor how parties follow-up their commitments and, if necessary, enforce sanctions on those who fail to do so. Let us call this a *standard institutional solution*, as it requires strong institutional involvement at all stages.

Gardiner argues that the structure of the PIP makes it "notably worse" than the Tragedy of the Commons or Prisoner's Dilemma (Gardiner, 2011, p.162). There are at least two reasons for that. First, agents of the problem (generations) do not co-exist in time. There is no possibility to resolve the problem through actual negotiations or leverage benefits from a broader context of cooperation. Secondly, there is no institution that can guarantee compliance throughout centuries. On the one hand, existing political institutions are relatively short-sighted as they depend on factors like electoral cycles and career length of a politician – time frames hardly compatible with those of climate change.

On the other hand, in light of constant political changes in the world it would be very hard to argue that any of our current institutions can (1) survive throughout centuries and (2) be strong enough to monitor activities of different generations without being biased towards the one party (generation) part of which it currently is[46]. Furthermore, as Gardiner notes, current

[46] One could argue that state could be an example of such an institution. For instance, the US has been committed to the ideals of democracy since its very inception a bit over two centuries ago. It succeeded in ensuring that every consequent generation respects the rules of the initial agreement (the Constitution). Yet, looking at how the world order was changing during those two centuries it would be fair to say that the fate of the US is rather exceptional: most other countries went through dramatic changes of their political and economic orders, of their constitutions and doctrines. Moreover, two hundred years on a planetary scale is not that long. Projections of climate change consequences operate in terms of centuries, not decades or years.

populations might not even be motivated to "establish a fully adequate global regime, since, given a temporal dispersion of effects […] such a regime is probably not in *their* interests" (Gardiner *et. al.,* 2010, p.92). It is possible to conclude then that a *standard institutional solution* is not applicable to the Pure Intergenerational Problem.

Other solutions?

Instead of trying to find a way to change the outcomes of this problem with a fixed structure, I propose to approach PIP differently and explore options beyond the *standard institutional solution*. One way of doing so is by looking at the context from which the problem arises. If we change some crucial elements of the context, the game structure might turn out different. By changing the context we might be able to avoid the problem in the first place. By context I basically mean the system of values that determines the way people think about the problem, their incentives to act in one way or another (on the problem) and their perceived interests and pay-offs. In order to proceed, it is very important to identify those crucial elements of the context that lead to the emergence of the problem.

The main contextual default that allows for the raise of PIP is that intuitively people (from any generation) tend to value their own well-being and the wellbeing of their closer family and friends more than they value the wellbeing of people in remote future who are not yet born and whom they would never meet. We have a narrow circle of moral concern. This feature does not have to be attributed to selfishness of people or their bad moral character; it emerged naturally throughout the course of human development and evolution (Singer, 2011) and until very recently did not pose any substantial moral challenges.

An emerging development narrative in the second half of the last century brought concerns for vulnerable populations from remote poor states closer to the lives of citizens of developed states. A more or less accepted moral imperative of international cooperation is that rich states should help poor states in their development – through aid, capacity building, and other mechanisms.

At an individual level, numerous charities in developed states collect donations from private citizens to support various development and disaster relief projects in poor countries[47].

[47] Interestingly, total giving to charitable organizations in the US was $316.23 billion in 2012 (about 2% of GDP). "This is an increase of 3.5% from 2011. As in previous years, the majority of that giving came from

Private persons in rich countries, thus, are morally concerned about lives of geographically remote vulnerable individuals and groups. If we refer to Singer's "extending circle", with more information and better communications it appears that our circle of moral concern has been extended from our immediate family and friends to include people we never met.

As Singer notes, however, "our feelings of benevolence and sympathy are more easily aroused by specific human beings than by a large group in which no individuals stand out" (Singer, 2011, p.157). That is why in their outreach activities charities and NGOs tend to give their campaigns a "human face" when it comes to development issues or images of particularly appealing animals when it comes to environmental protection (see Chapter 5 for a more detailed analysis). It is psychologically more likely that one would help a concrete child or family than "vulnerable people" in general. Where does this leave future generations?

As I will outline in more details in the next section, the term "future generations" is frequently used in sustainable development related political rhetoric, at many levels. Calls to save the planet for future generations became a commonly used political expression. These calls are supposed to play a motivational role; they imply that it is the right thing to do. As David Hume observed in his Treatise of Human Nature, there is no such passion in human minds as the love of mankind, merely (Hume 1739). Yet, as Singer (2011) notes, an ethic of rules builds on our feelings for others as individuals rather than on an impersonal concern for all.

That gives rise to concerns about a heavy plight of the present generation to right past generations' wrongs at our own expense and for the benefits of people in remote future. People who will sacrifice their wellbeing today will not see the effects of their efforts. How fair is it to take away from one's own children to leave it for some remote future persons whom one would never meet? On a similar note, before helping people in the future shouldn't we improve lives of those who are poor *today*? It appears that these objections are closely connected to our narrow circle of moral concern that extends more or less to the people living at the present moment.

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individuals. Specifically, individuals gave roughly $223 billion (72%) representing a 3.9% increase over 2011."http://www.charitynavigator.org/index.cfm?bay=content.view&cpid=42#.UtVG9fRDuVE; http://www.forbes.com/top-charities/#page:2_sort:0_direction:asc_search:_filter:All%20categories

While care for future generations is a registered moral concern, it is much weaker than concerns for our children and grandchildren's wellbeing. Moreover, the posterity problem is complicated by the fact that future generations are, figuratively speaking, faceless. It would not be possible, even in theory, to have a picture of a person who would come into existence in 200 years. It would not be possible to meet, get to know or enjoy gratitude for our actions from remote future individuals. We cannot like or help someone in particular in the future. When we are asked to do something for the sake of future generations, we have to do it out of "love for humankind" in general, and not out of compassion for particular human-beings.

Speaking in terms for Singer's extending circle, it is possible to say that future generations are the next level of extension of our moral concern. Just like us, present people, future generations are part of humanity, part of an inter-generational community. We are inclined to take action to protect our fellow human beings in the future out of sense of moral similarity, following our self-transcending motivations. But these moral motivations are much weaker than those that push us to protect the wellbeing of our own family or community. The manner of our evolution has made our feelings for our kin, and for those who have helped us, stronger than our feelings for our fellow humans in general (especially merely possible people in the future) (Singer, 2011, p.157). So when a trade-off comes along between the wellbeing of present or future people, future generations loose priority.

My argument is that, naturally, human beings have a sense of compassion and responsibility needed to act sustainably for the sake of future generations. The sentiment is registered but it had not fully ripened yet because it was only a matter of several decades that humans got the power over the future of the planet and fellow human beings in the future. Environmental crisis urges us to better develop our moral sentiment towards a new object, the future of humankind, to its full capacity. It is necessary to direct already existing moral sentiments such as compassion and responsibility towards a new object. This concern can be better advanced by strengthening our feeling of belonging to and responsibility for an inter-generational community and by appealing to our self-transcending motivations.

Strengthening concerns for future generations as part of our moral motivations to act sustainably is a way of changing the context of PIP. Introducing new incentives (moral reason to act sustainably) changes the pay-offs (one feels good about oneself after choosing the right thing to do). Including future generations into our decision making process provides us with

another morally right reason to act sustainably. It weakens one of the two main claims of the PIP, namely that it is individually rational to continue with harmful activities.

Strengthening Intergenerational Solidarity

Forward-looking concerns as a value and as a virtue

Concerns for future generations should be strengthened in order to help avoid the Pure Intergenerational Problem. As Dietz and colleagues (2005, p.351) point out, concerns are based in values but are conceptually distinct from them. A concern reflects both a sense that something is important and a belief that it may be at risk. Thus, our concerns for future generations or the future of humankind are based in a value. We value humanity and the humankind project. We want humans to survive and to live on Earth indefinitely into the future. These are manifestations of our self-transcendent, altruistic motivations which are still weaker than our concerns for immediate family, friends, etc. Care for the future of humankind, care for future generations, forward-looking intergenerational solidarity are all different names for the same value, and it has to be strengthened in our system of values in order to motivate and achieve sustainable action.

A way to strengthen the value at an individual level is to appeal to virtues that can help realize it. If a person wants to act on or live in accordance with what she values, it is useful for her to understand what virtues can help her act on it in the best possible way. In Sandler's classification (2007) of environmental virtues sustainability virtues include temperance, frugality, farsightedness, attunement, and humility. Farsightedness is one virtue that can be considered an obvious candidate to underpin self-transcended forward-looking concerns. But it seems that, in order to be truly motivational, these concerns should be based on more than just farsightedness. I would suggest that care for the future of humankind should be grounded also in virtues like love, compassion, care, cooperation, and benevolence.

As it was noted in Chapter 2, the list of sustainability values is a "work in progress". New values may emerge, replacing or adding to old values. New objects for new values emerge, and values transform as societies develop. The pull of virtues, however, is limited. There is only as many virtues and vices that our moral theories can generate – and that are needed to guide our moral behavior. Thus, I would suggest that care for the future of humankind could be considered an existing, yet weak, value that has to be strengthened. It can be strengthened

by appealing to the virtues of farsightedness, love, compassion, care, cooperation, and benevolence that are already accepted as good examples of moral conduct in our societies.

Terminology

One important obstacle on the way of advancing concerns for future generations is terminology. As Singer points out, people feel more related to (and willing to help) individuals rather than groups. The term "future generations" refers to a group, or groups, of possible people. This term does not have a "human face" and does not raise warm emotional responses. "Future generations" sound more like a figure of speech than concrete suffering human-beings whose pain we have caused and who need our help. Consider a thought experiment. Imagine that you have to answer a set of questions about future generations. Each question refers to future generations but contains a different interpretation of the term.

Would you be willing to sacrifice half of what you have today (your income, comfort, etc.):

A. for the sake of future generations?
B. for the sake of humankind?
C. for the sake of a child Johnny who will be able to live without a serious disability in 200 years from today if you make the sacrifice but die at the age of five if you do not?
D. for the sake of your own child?

In fact, each question from B to D could be an interpretation of the question A. The term "future generations" can mean (b) human kind in general; (c) a particular vulnerable person or group of persons in remote future; or (d) our own children and grandchildren, or young people today more broadly. Which of these questions would trigger a positive response? I would suggest[48] that question D has the greatest chances for a positive answer. Sacrificing personal wellbeing for the sake of one's own child seems to be a healthy and normal reaction of a parent in case of necessity. Let us call this interpretation of "future generations" the "warmest" of all, meaning that it raises the most emotional intuitive response.

Out of three remaining questions, I would expect question C to gain most positive responses. It contains a reference to a concrete vulnerable person in the future whom we can help now.

[48] While this could be an idea for a further study in social psychology, at this point I will only speculate about possible answers.

Even though we can never meet Johnny, thinking about our help in terms of concrete individuals with a story changes our perspective. Let us call this interpretation "warm". Finally, there are "future generations" and "humankind". Both are equally generalized concepts and "cold" interpretations of "future generations". However, "humankind" (or humanity) comparing to "future generations" seems to raise almost patriotic feelings of belonging to one group, one community, in space and time. "Future generations" or "posterity", on the other hand, also refer to our moral similarity and same origin but they in a way separate "us", present people, from "them" who will live in the future. Thus, I would call "humankind" a "cold" interpretation of "future generations" on the scale of raising an emotional positive response and "future generations" as a term – "the coldest".

Thus, it seems that saying "we need to protect the planet for our children and grandchildren" is the most promising way to go if we want to achieve a motivational effect with our words. However, as it was already pointed out this call clashes with the time horizons of climate change and the global environmental crisis. Those would not be our children and grandchildren who are to suffer from planetary-scale natural disasters. Most probably, these are going to be people living many generations later. On the contrary, if we aim to improve the wellbeing of our own children, we might even find ourselves contributing more to the unsustainable production and consumption practices that are prevalent today. Not without a reason there are views that encourage us to refrain from reproduction or limit our number of children, including a Voluntary Human Extinction movement.

So, it would be at least misleading to speak about our children and grandchildren as the main future-oriented motivational component driving sustainable action. Can we use Johnny's case then as the next best motivation? It does not seem so. It is not possible to know exact individuals and their stories from remote future. But we know that human beings are most probably not going to change much physically and we believe that future people will also be morally similar to us, like we are morally similar to our ancestors. They will feel same pain and have same basic biological needs and preferences. No matter how far technology and science develop, it is unlikely that people in the future would enjoy suffering from natural catastrophes.

Thus, when stating the case for future generations it is important to maintain this connection through moral and physical similarity with individuals that constitute a group in the future.

This might be difficult to achieve by finding the right term, though. In the end I would suggest that using the term "humankind", along with preserving the link of moral and physical similarity with concrete individuals in the future is the most realistic way terminology-wise to motivate people to act sustainably. This way could raise both emotional responses to help specific persons (rather than a group) and almost patriotic feelings of belonging to the same group.

Awareness

Finally, in order to strengthen the value care for the future of humankind it is important to raise awareness about an intergenerational aspect of sustainable development. In spite of being an internationally accepted paradigm, at an individual level (focus of this dissertation) sustainable development still raises many practical questions. Passive Citizens receive vast amounts of contradicting information related to various aspects of sustainable lifestyles. Reading an article about corrupted management of a recycling plant or fraud in fair trade labeling can undermine not only willingness to recycle or buy fair trade products but more broadly a motivation to make an effort to live sustainably.

Thus, with regards to future generations of humankind, it is important to make the link between present actions and future climate disasters and environmental degradation clear to the general public. This is not an easy task. Climate sceptics continuously challenge findings and conclusions of climate scientists (e.g. Dunlap & McCright, 2010 on climate denial). Every new climate denial headline adds to the confusion of a Passive Citizen and challenges her motivations to make an effort for something that might not be real after all. Raising awareness about an intergenerational aspect of sustainable development might be more effective supported by the general logic and common sense than by sophisticated climate prediction models that not many can or want to understand.

Many people can relate to more local environmental problems, like air quality, water pollution, littering, etc. And these are common sense conclusions that (1) no people would like to live in a polluted, degraded, or contaminated environment or suffer from natural disasters, including future people and (2) if we do not change our individual practices (littering) or industrial practices (air and water pollution), the environment will only become worse. While appealing to people's personal experience and local needs, awareness raising

campaigns should also introduce and strengthen more general values. Chapters 5 and 6 of this dissertation look in more details at how environmental and sustainability values are promoted to the general public by one possible group of actors, environmental NGOs. Forward-looking concerns and care for the future of humankind are also part of the study.

4.2. Future generations in political rhetoric, advocacy and education

Theoretical debates about posterity at times might look obscure. Many arguments evolve intuitively as our moral theories are not well equipped to deal with the problems such as global environmental change. At this point the realization that humankind is capable of destroying the planet for everyone and everything is still only half a century old. Even more recent is a moral challenge that we have to do something not because **we** are threatened directly but because others in the future would suffer as the result of our choices. Within only a few decades from the nuclear threat the world went from "we are all going to die" to "humanity is going extinct as a matter of centuries – maybe". Certainly, the more recent concerns are less pressing as they do not affect our immediate needs and lives. But the threat of future climate related catastrophes is no less deadly than the threat of nuclear war.

Concerns for future generations have been part of the global environmental debate for many decades. They are incorporated into some important international documents and they are recognized to be a crucial component of the global educational agenda. This section looks closer at the place of concerns for posterity in international institutions and programs that can be conducive to spreading them around the globe. More specifically, it explores how these concerns are advocated by civil society groups, how they are captured by the United Nations and, finally, how these concerns are represented in the global educational agenda.

Future generations in political rhetoric: 68th United Nations Assembly, 2013

The definition of sustainable development contains an important reference to future generations. Terms like "future generations", "intergenerational solidarity" and "future of humankind" are frequently repeated as part of political rhetoric around sustainable development. A prominent example is the recent 68th session of the United Nations General Assembly in September 2013. The main theme of the General Debate in 2013 was

sustainable development and Post-2015 Development Agenda. 196 countries delivered statements that reflected their priorities[49].

I have conducted a content analysis of all the speeches available in English (original texts, not summaries or translations). Out of 162 speeches in English 35 contained references to future generations in connection with sustainable development. Even more contained more general references to the future[50]. Here are a few quotes from these statements:

- It is often forgotten that climate change has direct impact on development, poverty, hunger, and consequently on global peace and security. Short term solutions will have long term consequences, and the steps we take today will be our legacy for generations to come. (Bosnia and Herzegovina)
- We still have much to do in continuing the reforms that will ensure equitable benefit from natural resource capital to current and future generations. Today, more than at any other time, we have an opportunity to transform our world; to pursue an agenda that will eradicate poverty while at the same time sustaining nature to secure natural resources for future generations. (Liberia)
- Our credibility depends on our ability to intervene swiftly and effectively to enforce international law, sanction any breaches, promote development and save future generations. (France)
- We, the countries of the world, must mobilize all available means and resources to finish what we have started in order to achieve truly sustainable results for humanity and our planet. (Bulgaria)
- We have obligations to the present generation, but we have a greater obligation to generations yet unborn who should one day inherit a world of sufficiency irrespective of the circumstances of their birth or where they reside on the globe° We must work to make that world a reality in recognition of our common heritage. (Nigeria)
- Let us tackle the work ahead in a manner that, when future generations look back on this moment, they will be able to say that the leaders of this generation laid the foundation for the eradication of poverty, for building a world society of equality, and for world peace. (south Africa)

[49] All statements are available at http://gadebate.un.org/

[50] For example, Germany used the term in the context of disarmament and the Bahamas spoke about future generations in connection to off-shore financial services. Many references to future generations were made in the context of peace and security, war and conflicts.

- The responsibility for mitigating climate change is a common responsibility for all nations, be they developed or developing. However, developed countries should shoulder their moral, ethical and historical responsibilities for emitting the levels of anthro-pogenic greenhouse gases (GHGs) into the atmosphere. It is those actions which have now put the planet in jeopardy and compromised the well-being of present and future generations. (Antigua and Barbuda)
- For the future we want for our children and grandchildren, we need leadership. We need commitment. And we need action.... NOW. […] When we all return home to our children, and grandchildren we must be able to look them in the eye and tell them with confidence that we have done all that is humanly possible to combat the devastating consequences of climate change. […] Once again I call on all of us to ask ourselves the question "Whose interests are we pursuing? Are we here to secure the future of each other's children or just our own?" This is the greatest moral challenge facing all of us today. (Kiribati)
- Since the Rio Earth Summit in 1992, the international community has supported the principle that the best form of development is one that "meets the needs of the present without compromising the ability offuture generations to meet their own needs." Since that time, however, production and consumption patterns have become increasingly unsustainable, driven primarily by a desire to develop economies at any cost. (Micronesia)
- Pacific leaders will not sacrifice our resources, nor our growth and livelihood for quick returns; our future generations are not for sale. (The Marshall Islands)

35 out of 162 states speaking about future generations to some observers might not seem especially high (ca. 22% of all original speeches in English and ca. 18% of total number of countries). But it is underpinned, first, by the fact that when speaking about sustainable development not every speaker would mention future generations. Secondly, this number reflects a bigger picture of the debate. In spite of Post-2015 Development Agenda being a theme of the General Debate, many speakers chose to ignore the topic, including major players like the US, European Union, Russia.

Out of 35 states that touched in their speeches upon our obligations to future generations there were 6 developed and 29 developing states. All 6 developed states are in Europe (France, Ireland, Hungary, Slovenia, Liechtenstein and Croatia). Only first 4 of these states

are OECD members. There were three more European countries that spoke about future generations but are considered developing states (Bosnia and Herzegovina, Bulgaria, Montenegro).

Among the 29 developing countries in focus 6 states are from Africa and the Middle East, 2 states from Central America and 3 states from Asia. But by far the largest and most vocal group of countries that spoke about future generations (and more generally about sustainable development) were the SIDS, Small Island Developing States: 15 states (Antigua and Barbuda, Kiribati, Micronesia, Palau, Trinidad and Tobago, Nauru, The Marshall Islands, Jamaica, Mauritius, Papua New Guinea, Santa Lucia, Solomon Islands, Tuvalu, Dominican Republic, Commonwealth of Dominica).

What does this geographical distribution tell us about concerns for future generations? First, the proportion of developed states expressing concerns for future generations is alarmingly small. OECD countries choose to speak about other things even on the verge of defining a new development agenda for the world based on sustainable development. Sustainable development and concerns for future generations are, thus, not high enough on their political agenda to address these issues at the one gathering a year where countries were encouraged to talk about them. However, out of those developed countries who talked about future generations one statement deserves special attention, and it comes from Hungary:

"The task is complex, but the mission should be clear: make our common development sustainable. It is not just a synonym for the protection of the environment. The mission is to make sure that our societies, economies, environment, partnerships will serve us all and serve the generations to come. […] Civil societies and other non-governmental players have more influence than ever on our values and decisions. We are racing against climate change. Our perceptions on progress, equity, inequality, affluence and resource management are changing as we speak. The post-2015 development agenda has to reflect these changes. As we face a turning point in our history and the state of the Earth, only with a fundamental shift in mindset may humanity succeed in a transition to global sustainable development."

Statement delivered on September 30th 2013 by H.E. Mr. János Martonyi,
Minister of Foreign Affairs, Hungary

This statement goes in line with my argument about a value shift and can serve one of the best examples that the idea is considered at the highest political level.

Overall, however, it appears that the "voice" of future generations are the small island developing states (ca. 43% of all states that mentioned future generations in the context of sustainable development). These players have everything to lose, and they use United Nations as a platform to express their frustration about the lack of international action. Many SIDS speak not only about sustainable development in general but about climate change and sea level rise in particular. These are the issues that concern them directly. Interestingly, SIDS and other developing states are the ones who use "future generations" and "children and grandchildren" references almost interchangeably. That clearly indicates their vulnerability already within the present generation.

An example of the general debate is indicative. With mostly foreign ministers and heads of states delivering speeches, the platform was not specifically designed to discuss environmental or sustainable development issues. It was different from the Rio+20 conference or UNFCCC conferences of parties as it did not give floor to speakers well-versed in climate change or sustainability. But the theme was aimed to encourage states to speak about these issues nevertheless. The numbers of those who spoke about and ignored the theme can tell a lot about general attitudes to sustainable development among countries. Notable exceptions of key emitters of greenhouse gases and rich states more generally from a group of those who invoked ethical considerations about our obligations to the future generations can be interpreted in terms of low political priority given to those considerations.

Advocacy to institutionalize concerns for future generations

According to the UNESCO Report "Universalism and Ethical Values for the Environment" (2010), the main values that are reflected in key environmental treaties[51] are human rights, sustainability, equity, common but differentiated responsibilities, precaution, participation, vulnerability, state sovereignty, peace and solidarity. Responsibility and care for the future

[51] The Universal Declaration of Human Rights (UDHR), the Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC), the United Nation's Framework Convention on Climate Change (UNFCCC), The Kyoto Protocol, The Earth Charter, The Rio Declaration on Environment and Development, the Convention on Biological Diversity (CBD), and the Universal Declaration on Bioethics and Human Rights (UDBHR).

people are not mentioned among them[52]. For example, the underlying treaty for political action on climate change in the past twenty years, the United Nations Framework Convention on Climate Change, a document of 25 pages, contains only 3 references to the future, and all of these to "future generations." The Kyoto Protocol, a document of 21 pages, has *no* references to the future.

Weak integration of concerns for future generations into international sustainable development agenda led to the emergence of civil society actors who specifically focus on ensuring that the interests of future generations are taken into consideration today. In 2007 a World Future Council (WFC) was founded in Hamburg "to be an ethical voice for the needs of future life and to pass on a healthy planet and just societies to our children and grandchildren."[53] WFC is a charitable foundation, an NGO that has been active in promoting concerns for future generations. More recently, in September 2012, the first meeting of Oxford Martin Commission for Future Generations (OMC) took place in Oxford. OMC is a group of eminent academic, political, society, and business leaders. The purpose of the OMC is to "address the growing short-term preoccupations of politics and break the current gridlock in dealing with key global problems"[54]. In October 2013 OMC launched its first major report, "Now for the Long Term" with key policy recommendations.

In March 2012 Halina Ward published a joint discussion paper with the Foundation for Democracy and Sustainable Development and the World Future Council "Committing to the Future We Want: a High Commissioner for Future Generations at Rio+20" (Ward, 2012). The paper contained a proposal to create an office for an independent and impartial High Commissioner for Future Generations with the United Nations system. The idea was that institutionalization of concerns for future generations can help reflect the inherent long-termism of sustainable development and strengthen the position of future generations vis-à-vis the present. As Ward puts it:

"Too often, the needs of the present are met at the expense of the needs of future generations. Too often, this happens not because there is any inherent conflict between the needs of the present and those of future generations, but because decision-makers are not aware of, or do

[52] Although they might be embedded into the "sustainability" value: following the definition used by UNESCO, sustainable development "seeks to meet the needs of the present without compromising those of future generations"
[53] http://www.worldfuturecouncil.org/about_us.html
[54] http://www.oxfordmartin.ox.ac.uk/commission/news/70

not think about, the burdens that their decisions place upon future generations." (Ward, 2012, p.4)

The case is supported by two exiting institutions operating within the UN system, a High Commissioner for Refugees and a High Commissioner for Human Rights. Both institutions emerged as a response to a specific large-scale problem and aimed to cover a certain institutional gap. Ward also refers to national arrangements and provides the example of an Ombudsman for Future Generations in Hungary. The main responsibility of the Ombudsman was to safeguard the constitutional right of Hungarian citizens to a healthy environment.

The proposal was then put forward at the Rio+20 Conference (United Nations Conference in Sustainable Development) by a major group Children and Youth. Member States did not commit to establishing a new institution in June 2012. But the issue was not taken away from the agenda. Paragraph 86 of the Rio+20 outcome document, The Future We Want, provides that states "will also consider the need for promoting intergenerational solidarity for the achievement of sustainable development, taking into account the needs of future generations, including by inviting the Secretary-General to present a report on this issue." The Secretary-General's Report on Intergenerational Solidarity and the Needs of Future Generations was published in September 2013.

The Report drew from debates on future generations in philosophy and economics, as well as from relevant international and national legal provisions. Among other things, it acknowledged motivational implications of the difference between time perspectives in defining future generations as our children and grandchildren or youth as opposed to remote future people. With regards to institutionalization of concerns for future generations the report dedicates a full section to the proposal of a High Commissioner for future generations. However, in the end it lists this options as one of several possible ways forward with the issue, others being special envoy, agenda item at the high level political forum (a newly established institution to substitute Commission for Sustainable Development), and inter-agency coordination on the needs of future generations.

Overall, the report takes a cautious position, leaving the member states to decide how far they want to go with recognizing our obligations to future generations. This is consistent with the support role of the secretariat in the UN system. UN Secretary General can only note or

advise something, not impose. It is up to Member States to agree whether they deem an issue or concern important enough. Yet, in spite of this slow motion the report was an important step in drawing attention to future generations. Concerns for posterity seem to be gaining more prominence in the international sustainable development agenda.

The slow process of advancing concerns for future generations can be frustrating to those in favor of quick action but it is perfectly well aligned with the idea of a value shift. Values take time to change and to be integrated in the global political agenda. However, it seems like concerns for future generations are on the way to become a fully recognized sustainability value, as part of international political, legal and institutional frameworks, and, most importantly, of individual mindsets.

Promoting concerns for future generations through education

Education is a recognized way of promoting new values. From early childhood to continuous adult education and vocational training education is a channel to influence people's attitudes and values. When we speak about advancing concerns for posterity, education is the most promising way to go – yet, a time consuming one. This section looks at how concerns for future generations are captured in education for sustainable development, a relatively new concept that is now replacing (or submerging) environmental education as the global educational paradigm.

The most prominent organization capable of advancing new educational agendas at the international level is the United Nations Education, Scientific and Cultural Organization (UNESCO). In December 2002, the United Nations General Assembly proclaimed the UN Decade of Education for Sustainable Development, 2005-2014 (DESD), "emphasizing that education is an indispensable element for achieving sustainable development." UNESCO was assigned to be the leading agency implementing activities during the DESD. According to UNESCO:

''The overall goal of the DESD is to integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behaviour that allow for a more sustainable and just society for all'' (Implementation Scheme 2005, Executive Summary).

“Education for Sustainable Development (ESD) is based on values of justice, equity, tolerance, sufficiency and responsibility. It promotes gender equality, social cohesion and poverty reduction and emphasises care, integrity and honesty, as articulated in the Earth Charter. ESD is underpinned by principles that support sustainable living, democracy and human well-being” (Bonn Declaration, 2009).

“ESD is fundamentally about values, with respect at the centre: respect for others, including those of present and future generations, for difference and diversity, for the environment, for the resources of the planet we inhabit” (Education and the Search for a Sustainable Future, 2009, p. 1)

It is clear that the goals set by DESD are far reaching and aimed at altering the future even more than the present. Some scholars question whether it is possible to assess the progress or results of DESD, since one decade could be too short to implement the full scope of ideas proposed by UNESCO (Pigozzi, 2010, p. 267). Indeed, the first ten years are considered rather as a starting point. During this period the initial national structures are set up and the ESD agenda is researched, formulated, and presented.

Therefore, many assessment indicators developed by UNESCO to measure the performance of DESD are focused on more practical aspects of implementation, such as the “integration of educational components into plans for sustainable development” or “growing cooperation and mutual reinforcement among ESD initiatives” (UNESCO, 2005, p. 43), rather than on measuring the spread of new values and principles. The latter is, in any case, very hard to measure, particularly at the early stages of implementation.

Academic views on DESD vary. Some scholars approach the idea with skepticism and view the Decade as part of a fashionable discourse of sustainable development which hides behind a neo-liberal economic and political agenda (Sauvé and Berryman 2005, Jickling 2006). Others tend to develop more supportive interpretations of DESD as a long-awaited opportunity for ESD (Mula & Tilbury, 2009; Calder, 2005; Pigozzi, 2010). These polarized opinions are rooted in the way scholars consider sustainable development and sustainability (as a useful concept or not).

A shift from environmental education (EE) to ESD might lead to blurring the focus on environment and moving it also to social and economic dimensions of development. But, in

my view, an overall effect of this change is positive and it helps educational agenda to stay adequate and relevant to the global political rhetoric and developments. It certainly is more complex and challenging than EE, it includes numerous trade-offs that have to be clarified to the students and only time can show whether an ambition to even have such an educational agenda can be realized. But what ESD is definitely a better reflection of complex global challenges that EE. Having a decade to advance ESD is an important step in launching the new paradigm, which is a positive development.

DESD analysis and references to future generations

There are three main documents within the DESD framework published by UNESCO at the time of writing this piece that are important for this analysis. The main reference source about DESD is the Implementation Scheme published by UNESCO in 2005, at the very beginning of the Decade. This document contains key definitions, explanations, and background information about ESD. UNESCO also produced two important reports during DESD, in 2009 and 2012; the third coming out in 2014.

The first report, "Review of Contexts and Structures for Education for Sustainable Development" (2009) presents a "succinct yet insightful overview" of the various regional and national contexts for developing ESD. The second report, "Shaping the Education of Tomorrow: Report on the UN Decade of Education for Sustainable Development" (2012), focuses specifically on processes and learning in the context of ESD. It looks at new emerging learning processes and changes since the early years of the Decade. Both reports focus on practical aspects of DESD implementation and are aimed to assess the progress being made. However, these two documents are still important for the analysis as they indicate the direction that the process has taken and allow us to compare it with the original idea outlined in the Implementation Scheme.

The Implementation Scheme contains many references to the future and future generations. "There can be few more pressing and critical goals for the future of humankind than to ensure steady improvement in the quality of life for this and future generations in a way that respects our common heritage – the planet on which we live" (UNESCO 2005, p. 8). In a way, the references to "the future of humankind" and "heritage" resemble the language used in another UNESCO document, the Convention Concerning the Protection of the World Cultural and

Natural Heritage (WHC). According to the UNESCO Report on Universalism and Ethical Values for the Environment (2010) the WHC exhibits the strongest focus on future generations among all the treaties related to environmental protection.

In the Implementation Scheme, a document of 53 pages, "future generations" was referenced 10 times; "future," in various combinations other than "future generations," such as "sustainable future," "alternative futures," and "futures-oriented," was used 20 times. Basically, references to the future were made in every other page of the document. In comparison, the 25 page UNFCCC document contains only 3 references to the future, and all of these to "future generations." The Kyoto Protocol, a document of 21 pages, has *no* references to the future. Clearly, the language of DESD confirms the high priority given to future generations within the framework.

There are four key underlying values that education for sustainable development must promote:

- Respect for the dignity and human rights of all people throughout the world and a commitment to social and economic justice for all;
- Respect for the human rights of *future generations* and a commitment to intergenerational responsibility;
- Respect and care for the greater community of life in all its diversity, which involves the protection and restoration of the Earth's ecosystems;
- Respect for cultural diversity and a commitment to build locally and globally a culture of tolerance, non-violence and peace (UNESCO, 2005, p. 16).

It is significant that concerns about future generations made their way to become the second most important value to be promoted through ESD. This concern is introduced through the lenses of a human rights approach discussed in Section 1 of this chapter. Commitment to strengthening intergenerational responsibility at the level of an international educational agenda is an important milestone on the way to changing our system of values, more specifically one value that can help avoid the Pure Intergenerational Problem.

However, two points should be made about the ESD and DESD. Christopher Schlottmann (2012) argues that these frameworks do not reflect sufficiently inevitable trade-offs and conflicting values that students of ESD might face in the future. "If any institutionalized

response to environmental degradation and economic underdevelopment is to succeed, it must address the inevitable conflicting values, conflicts and compromises that will arise" (Schlottmann, 2012, p. 112). Schlottmann identifies at least two intersections where the conflict is very likely: conflicting values in education and conflicting values and the environment.

Conflicting values in education might arise between educational and larger societal aims. For example, there could be a trade-off between liberal learning and vocational training. Conflicting values and the environment are trade-offs between sustainability and development. Both kinds of conflicts are enhanced by the urgency of the climate problem and require ESD to provide certain guidance to "help in understanding, assessing, and […] overcoming these conflicts and trade-offs" (Schlottmann, 2012, p. 115). Therefore, Schlottmann argues, the aims of the Decade should focus more on the development of agency, decision-making skills, and ethical empowerment.

The second point is the question of time frame. It is not clear from UNESCO's documents how far into the future the concept of future generations can reach. Implementation Scheme states that "as people we seek positive change for ourselves, our children and grandchildren; we must do it in ways that respect the right of all to do so […] to do this we must learn constantly – about ourselves, our potential, our limitations, our relationships, our society, our environment, our world" (UNESCO, 2005, p. 8).

This is the only reference made in Implementations Scheme to the meaning of "future generations". Being the main strategic document of DESD, the Implementation Scheme provides guidance for the rest of the decade and for further future. Yet, even this document is not clear on what "future generations" are, a fact which, as I have argued earlier, has major implications to our moral motivations to act sustainably. This gap calls for further developments in our moral theories and for stronger communication between philosophers and practitioners who work on the posterity problem.

Conclusion

This chapter explores the place of concerns for posterity in our system of values. I argue that future-oriented self-transcendent forward looking concerns are crucial to our motivations to act sustainably. Based on this argument I propose a way of approaching Gardiner's Pure

Intergenerational Problem. The gridlock of PIP will continue as long as our incentives remain the same. I, thus, propose to change the context of the problem, focusing on some crucial elements of it. If we change values in which our incentives are rooted to act on the problem in one way or another, we can avoid falling into the PIP in the first place. My solution to the PIP, therefore, is focused on changing moral motivations to act sustainably by extending our circle of moral concern and strengthening how we value posterity.

With regards to strengthening care for the future of humankind, I argue that this value can be better advanced at an individual level by appealing to such virtues like farsightedness, love, compassion, care, cooperation, and benevolence. I also propose to use the term "care for the future of humankind" rather than "care for future generations" or "care for our children and grandchildren" as the one best reflecting both the long-term outlook of global environmental change and our sense of belonging to a community.

To support empirically an idea that concerns for future generations are part of international sustainable development agenda, I went through 196 speeches of world leaders speaking at the general debate of the 68th session of the United Nations General Assembly in September 2013, dedicated to the Post-2015 Development Agenda and Sustainable Development. Out of 162 original speeches available in English 35 contained references to future generations in the context of sustainable development. Notably absent from the list are largest emitters, like the USA, European Union, China, Russia. Only four OECD countries (France, Ireland, Slovakia, and Hungary) mentioned our obligations to future generations as part of their statements. The most vocal group referring to future generations were small island developing states (15 out of 35 speeches).

In the following section I examine how the efforts of civil society actors shaped the debate on institutionalizing concerns for future generations. I focus on the proposal to establish a High Commissioner for Future Generations and see how the call was responded by the UN. Finally, I look at how concerns for future generations are integrated into and promoted through education. I analyze the case of UNESCO Decade of Education for Sustainable Development and find that forward-looking concerns are well registered in the agenda. Yet, it appears that hardly any distinction is made between remote future generations and our children and grandchildren (crucial to our moral motivations to act sustainably).

Chapter 5. The Role of Environmental NGOs as Ethical Norm Advocates in the Value Shift

Introduction

One of the key assumptions of this dissertation is institutional inadequacy, a mismatch between prevailing institutions and the changing character of biophysical and socioeconomic systems (Young, 2010). Traditional actors, including states and international organizations (IOs), dealing with the global environmental crisis and climate change are failing. This failure contributes to the Pure Intergenerational Problem (PIP), the problem of buck-passing responsibility for resolving the crisis onto future people. PIP can be avoided if a system of values underpinning individual incentives to act unsustainably changes.

Recent literature suggests that a more promising avenue to address global environmental crisis and climate change are transnational initiatives (e.g. Abbot, 2012; Green, 2012; Bulkley et.al., 2012; Abbott, Green & Keohane, 2013). Environmental NGOs play a crucial role in such initiatives (Bulkley et.al., 2012). This chapter explores the role pf ENGOs in changing the dominant system of values. The main claim here is that ENGOs should better fulfil their capacity to change values and norms of the general public through direct engagement. ENGOs emerged from grass-root movements, from public dissatisfaction, from groups of concerned individuals. They have greatly evolved in the last forty years, however. *Non*-governmental organizations by definition, ENGOs seem to have most of their resources and attention directed at governments, IOs, and businesses, detaching themselves from the public they emerged from.

Once I asked a representative of a major ENGO based in Brussels why do they think that focusing on state action is more important than engaging with the public. He answered that changing public opinion is an expensive venture, and they prefer to convince a few decision-makers who can take state-wide action than a thousand citizens who have no decision-making power. In light of more than twenty years of on-going, and stagnating, climate talks in which ENGOs participate spending significant budgets the argument about the price of changing public opinion seems misleading. Many global ENGOs have substantial budgets, and it is only the matter of priority how the money is allocated.

Academic literature on ENGOs proliferated in the last two decades. Scholars were mostly concerned with the relationship between ENGOs and states, ENGOs and IOs, as well as ENGOs' participation in and influence on international environmental regimes. ENGOs gained most attention in the discipline of international relations (IR) as actors at an international political arena. They were also studied by social movement scholars. Most of scholarly attention was focused on how ENGOs influence states, and later businesses.

In this chapter I reconsider a widely held view of politics as practice associated solely with governments and suggest that with time some ENGOs have grown large, credible and powerful enough to mobilize public opinion, create environmental concerns, change values, norms, attitudes, and behavior. This chapter addresses the question of the role of ENGOs' in changing values of the general public. I build on the argument put forward by Paul Wapner in 1995 and argue that this type of action that bypasses governments (direct political action) should be recognized by ENGOs and other political actors as political action by its own right. I also look closer at the sources for this newly acquired capacity.

The structure of this chapter is following. First, I give a brief overview of the literature about ENGOs' origins, development, and types. Then I look more specifically at two types of political action available to ENGOs: indirect political action that targets states and businesses and direct political action that targets the general public. The last part of this chapter is a study of climate change campaigns of WWF and Greenpeace which demonstrated what kind of values and ethical concerns these ENGOs communicate to the general public and what kind of solutions they prioritize.

5.1. What are ENGOs?

ENGOs as an analytical category

Almost every NGO study notes a wide spectrum of NGOs' activities, size, structure, and funding. NGOs range from small community-based local associations in the Global South to globally-present campaigners with a membership of millions of people or research-focused centres with budgets of millions of dollars. Just like terms "state" or "business" represent a whole variety of organizational structures, the term "NGO" covers a diverse range of organizations.

Theoretically defining NGOs is difficult primarily because this analytical category remains "complex and unclear" (Lewis, 2009). In this dissertation the term NGO is used as defined by Salamon and Anheier (1992). An NGO is a third-sector organization which should have five following characteristics: be formal, private, non-profit distributing (financial surplus does not accrue to owners or directors), self-governing, and voluntary (at least some degree of participation). A complementary definition, summarized by Morrison (2004, p.4) is that NGOs are "non-state or non-profit organizations that have traditionally been composed of volunteers and concerned with distinct policy objectives". Environmental non-governmental organizations (ENGOs), therefore, are NGOs whose objectives lie in the environmental domain.

Since the rise of ENGOs in the 1980s there were many attempts to systematise an "NGO category" which resulted in "littering the literature with acronyms" (Fisher, 1997, p. 447). Fisher identifies community-based organizations (CBOs), grass-roots organizations (GROs), people's organizations (POs) as locally-autonomous groups, distinct from groups of urban intellectuals working in "relatively impoverished settings" as intermediary support organizations (ISOs), membership support organizations (MSOs) or grass-roots support organizations (GRSOs).

This classification echoes a recognized distinction between Northern NGOs whose origins lie in the industrialized countries (NNGOs) and Southern NGOs from less developed areas of the world (SNGOs), as well as international NGOs (INGOs) (Lewis, 2009). Another variable for NGO classification could be its autonomy. Fully autonomous NGOs are distinguished from government-organized or -supported groups (GONGOs, government-organized NGOs; QUANGOs, quasi-autonomous NGOs; and DONGOs, donor-organized NGOs) (Fisher, 1997). There are also organizations called "briefcase" NGOs, "set up by individuals for purely personal gain" (Lewis, 2009).

Another classification distinguishes among NGOs on the basis of their primary activities (Gough & Shackley, 2001). NGOs are classified as "campaigners", "think-tanks" and "business alliances". Gough and Shackley also provide a compelling list of organizations by category and identify three broad categories of activities (strategies) in which NGOs are engaged: developing creative policy solutions (generally the domain of research-based NGOs); knowledge construction / coalition building; and campaigning / lobbying. It is argued

that “NGOs employ different methods or tactics and call upon different types of professional expertise to suit the target audience and context” (Gough & Shackley, 2001, p.9).

This classification is useful for the purpose of this dissertation because it highlights the role of “campaigners” with major influence on the public opinion which are the main target group of the further research. Among campaigners groups, Gough and Shackley name:

- Greenpeace (specializing in high-profile direct action and lobbying campaigns and in production of reports),
- Friends of the Earth (specializing in lobbying, campaigning and report production),
- WWF (specializing in the development of policies and priorities, building global partnerships, and coordinating international campaigns),
- Ozone Action (focusing on providing informational resources, its campaigns combine media, grass-roots, legislative, direct action, corporate, market, and public education strategies),
- Climate Action Network (CAN, umbrella organization representing ENGOs at international organizations),
- and Christian Aid (specializing on disaster relief, education and campaigning).

Global climate change campaigns of the first two ENGOs (Greenpeace and WWF) will be researched in more details as a case study in the second part of the chapter.

It is important to place NGOs on the map together with other analytical categories, such as transnational networks, epistemic communities, and civil society. NGOs are often referred to as civil society organizations. *Civil society* can be defined as: 1) an intermediate associational realm situated between the state and the building blocks of society (individuals, families and firms); 2) populated by social organizations separate from the state, enjoying a level of autonomy from the state; and 3) formed voluntarily by people to protect or advance their interests and values (Wapner, 1995, p. 312-313).

In the early 1990s several constructivist IR scholars pointed out the emergence of a *global civil society* (Falk, 1992; Lipschultz, 1992; Wapner, 1995). “Global civil society [...] is that slice of associational life which exists above the individual and below the state, but also across national boundaries” (Wapner, 1995, p. 313). Global civil society is a civil dimension of world collective life, in which activists work to change conditions without directly

pressuring states: by organizing capacity building programs in local communities, engaging in educational efforts, through media campaigns, etc.

Epistemic communities are "networks of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue area" (Haas, 1992b, p. 3). Epistemic community scholars look at the role of science and knowledge in world politics as a factor inducing state cooperation. Research-based ENGOs focused on policy and knowledge creation are part of epistemic communities. WWF and Greenpeace, my case studies, also belong to an epistemic community. These are large and influential ENGOs which can afford engaging in more than one activity. Thus, apart from campaigning, WWF and Greenpeace also produce scientific reports.

Many NGOs are also part of *transnational advocacy networks* (TANs). Keck and Sikkink define TANs as "networks of activists, distinguishable largely by the centrality of principled ideas or values in motivating their formation" (Keck & Sikkink, 1998, p.1). TAN scholars hold a dynamic, constructivist view of global politics which focuses on ties among ENGOs that cross borders and link local and global issues. WWF and Greenpeace are part of many transnational advocacy networks, depending on issue area in question (TANs working on illegal animal trade, on the Arctic, or on sustainable food production, etc.).

Brief history of ENGOs

Today ENGOs are acknowledged actors in international and domestic affairs. But it was not always this way. In order to better understand where NGOs are coming from and how they gained the position they have today it is necessary to look at how they had evolved since their inception.

Environmental concerns accumulated for a while before making their way to books and public speeches, and even longer before reaching the political realm. A century after the industrial revolution in Britain, for example, cumulative effects of careless production and coal burning were clearly seen in air and water pollution, which created all conditions for the spread of various diseases, particularly in urban areas. At the same time, in the late nineteenth – early twentieth century the two-pronged movement of wilderness preservationists and resource conservationists began to emerge in the US, being heavily influenced by German

forestry and conservationist practices from other parts of Europe, South Africa and India (McCormick, 1995). That resulted in the establishment of Sierra Club by John Muir, which remains one of the oldest ENGOs still active. However, sentimental attachment to nature as the basis for environmental concern provided weak frame for the mobilization of international activity (Meyer et. al., 1997, p. 629).

A study of the rise of environmental regime in 1870-1990 suggests that it started from the rise of much international nongovernmental association and discourse and leading to interstate treaties and later to intergovernmental organization (Meyer et. al., 1997, p. 623). The two underlying forces that made this process possible were (1) the long-term expansion of the rationalized and authoritative scientific interpretation, which structures perceptions of common environmental problems, and (2) the rise of world associational arenas, with agendas open to broad concerns such as environment, principally the United Nations system (Meyer et. al., 1997).

The first change was cultural in character. It enabled broader collective mobilization and action on the basis of credible scientific conclusions, which worked well in countries operating within rationalistic models of state and society (Meyer et. al., 1997). Private environmental organizations had now something more than sentimental altruistic reasoning to shape the discourse around. Scientific knowledge helped quantify the damage, often link it to the original source, and to bridge environmental concerns with economic and rational choice domains.

Having environmental issues codified in scientific (reliable, understandable) terms, environmental associations were lacking a solid international associational platform that could supersede the old state of play with only rare international conferences or ad hoc meetings as a way to promote and develop the discourse. With the formation of the UN, this platform was erected and also non-governmental organizations were called by this name for the first time.

After the Second World War, the numbers of environmental associations grew rapidly, and the discourse developed both in its scope and depth, and in terms of social mobilization. Associations emerged mostly in North America and Western Europe, and environmental ideas

closely interrelated with peace and nuclear disarmament issues of the cold war and largely supported by the hippie movement in the US.

In the early 1972 the Club of Rome published *The Limits To Growth*, a landmark study which confirmed again that environmental issues transcend borders and need to be discussed at the international arena. This platform was offered by the UN in 1972 in Stockholm to all concerned parties, bringing together government officials, representatives of business, scientific community, and NGOs. Scholars estimate the number of participating NGOs from over 250 (Betsill & Corell, 2008) to more than 400 (McCormick, 1995, p.100). This difference might be explained by the presence of many unaccredited groups. These numbers strongly contrast less than 40 international environmental associations in 1940-1950s (Meyer et. al., 1997).

Differences among ENGOs were visible already at the Stockholm Conference. Participants ranged from scientific experts to hippie groups camping outside the conference venue. Stockholm was the place where most of these organizations met for the first time, and they organized parallel forums to get to know each other better, build relationships and exchange knowledge. In spite of differences, these ENGOs shared common values, knowledge and interests.

The Stockholm Conference marked a transition "from the emotional and occasionally naïve new environmentalism of the 1960s to the more rational, political and global perspective of the 1970s" (McCormick, 1995, p. 88). By the end of the 1970s "the environmental crisis was no longer a silent crisis" (McCormick, 1995, p. 68). A new mass movement had emerged, driven by scientific knowledge and realisation of the limits of growth, making its way onto the public policy agenda.

1970-1980s were the time of rapid advancement of public awareness, science, and ecology. It was the time when activist groups, such as Greenpeace or Friends of the Earth, performed their most impressive actions, stopping whaling boats or dumping 1,500 non-returnable Schweppes bottles on the front steps of the company's head office (Secrett, 2011a). Direct action made a difference, it attracted attention of the public, governments, and businesses, making them change their practices. It raised awareness about environmental concerns,

focusing on one problem at a time, having clear links between damage and the cause, and being able to assign the blame to particular groups.

This approach appeared in the times of social unrest, unpopularity of governments and realization that the humanity and nature were under threat from trashing the planet (Secrett, 2011b). It was direct, involving, shocking at times, and calling for altruistic action. And, considering the level of information and communication technology at that time, the amount of information did not overwhelm the public and reached the goals of mobilization. At the same time, another branch of ENGOs developed rapidly: think-tanks and epistemic networks proliferated, engaging in lobbying and policy advice activities at the national and UN levels. These groups played an important role in resolving ozone depletion, whaling or sea waste dumping issues.

In the 1970-1980s the numbers of ENGOs continued to grow at a slower rate due to formation of official world environmental organizations which structured and organized the whole environmental system (Meyer et. al., 1997, p.633). ENGOs were growing strength, weight and reputation, working as environmental activists, scientific experts, and development volunteers. According to Environment Liaison Centre, a coalition NGO based in Nairobi, by 1982 the number of ENGOs in developed states was estimated at around 13,000, out of which 30 per cent had been formed after Stockholm, and in developing states this number was around 2,300 organizations, with more than 60 per cent formed after Stockholm (McCormick, 1995, p.101). These numbers confirm growing interest of ENGOs in development issues. Newly emerged North-South networks channelled financial aid and scientific knowledge from North to South and local knowledge and experience the other way around.

In 1992 United Nations held a Conference on Environment and Development. 144 heads of states and representatives of 255 countries were present. More than 1,400 NGOs were also accredited for participation. More than 25,000 individuals from 167 countries participated in the parallel Global Forum where NGOs negotiated alternative treaties and engaged in extensive networking (McCormick, 1995). The outcome document of the Rio Conference was *Agenda 21*, a voluntary plan for sustainable development for states and multilateral organizations in the 21st century, which recognized NGOs as partners in a global struggle to promote sustainable development (Betsill & Corell, 2008). Before *Agenda 21*, only states had

the right to address negotiations in formal capacity. Since Rio, ENGOs were encouraged to participate “both directly, through the creation of a high-level advisory board, and indirectly, through the general focus on transparency, reporting and access” (Raustiala, 1997, p.724).

NGOs gained access to the working drafts of documents and treaties, were allowed to address delegates with full simultaneous translation at UN expense, and to circulate draft texts of their own design. Occasionally proposals from NGOs were introduced by sympathetic national delegations, and NGO members have become part of national delegations, even those of foreign countries (Raustiala, 1997, p.724). However, many scholars stressed that this kind of influence of ENGOs was limited (Clark & Friedman, 1998) and that access certainly varied “in degree and kind both across and within institutions” (Raustiala, 1997).

The rise of NGOs challenged the dominant realist view of international relations. Constructivist scholars argued that NGOs are the agents of change who play a crucial part in connecting world politics to biophysical changes (Princen & Finger, 1994). Most of research on NGOs, however, was state-centric. ENGOs posed interest as long as they had influence on governments or international organizations. Wapner (1996) was one of the first and few scholars who noted that ENGO activities aimed at raising awareness and social mobilization should be considered as a political action in itself. The second half of this chapter builds on this argument.

ENGOs continued to tackle development issues, especially in the less developed countries, by encouraging and empowering local population to stand for their environment. Jasanoff (1997) described ENGOs as agents of knowledge transfer, influencing the knowledge-action link. In the early 1990s ENGOs became “the "favored child" of official development agencies, hailed as a “new panacea to cure the ills that have befallen the development process” (Fisher 1997, p.443). Limited scope and reach of ENGOs, however, scuttled these hopes (Zaidi, 1999, p.270).

Meanwhile, ENGOs grew in strength and numbers and continued to participate in international environmental politics. In 2002 more than 3,200 organizations were accredited to the World Summit on Sustainable Development in Johannesburg, where “NGOs were central to the creation of partnerships for sustainable development” (Betsill & Corell, 2006,

p.2). 9856 NGOs and major groups were present at the Rio +20, UN Conference on Sustainable Development in 2012 (UNSCD, 2012).

Growing numbers brought about function diversification among ENGOs and led to growing bureaucratization of the most powerful organizations. Charles Secrett, a former CEO of Friends of the Earth (FoE) argued after leaving the organization that in spite of becoming well-funded and staffed with top specialists, ENGOs such as FoE, Greenpeace, WWF are tactically stalled. With more than £100m spending every year "the challenge on the established NGOs to make a significant difference is greater, and harder, than ever" (Secrett, 2011b). Stellenberger and Nordhaus (2004) also argue in their famous piece *Death of Environmentalism* that environmental movement in general is stuck due to the wrong framing of environmental issues. In the following part I try to tackle the failure and suggest how priorities can be shifted in order to better realize ENGOs' potential to advance change towards sustainability.

5.2. ENGO Dynamics: Direct and Indirect Political Action

ENGOs are political actors active both at domestic and international arenas. They work to resolve local and global environmental problems, improve unsustainable practices, protect and preserve biodiversity and nature, etc. I shall assume that a bigger picture behind the efforts of all actors, the end goal of any environmental or climate change policy is to have a society that operates sustainably and justly. This requires a broader societal transformation, a shift towards sustainability values, sustainable practices and social norms, changes in individual behaviour and choices. ENGOs perform different kinds of political action in order to achieve this change.

Historically, ENGOs emerged to voice environmental concerns coming from the general public. ENGOs provided organizational platforms for norm entrepreneurs to sparkle changes. In fact, ENGOs as such can be considered to be norm entrepreneurs. The most researched aspect of normative change initiated by ENGOs is the influence these organizations have on states. Scholars looked at how ENGOs could reach states through domestic and international channels and pressure them to change certain policies or practices. The success of this type of political action was measured in terms of states' responsiveness to ENGOs' arguments. I shall

call this type of political action 'indirect action' in which states and IOs can be considered as 'intermediary agents' between ENGOs and individual members of the society.

What happens if states are unwilling, unable or failing to produce required policies domestically and achieve a consensus at the international level? Then the efficiency of ENGOs' indirect political action can be put into question. However, the failure of global climate regime cannot be blamed on the lack of ENGO activity. Priority with which the EU treats environmental issues cannot be attributed to the work of ENGOs alone. States' responses to ENGO actions are shaped by a large number of structural factors. Not always does 'good' ENGO work produce 'right' state policies.

Let us consider what environmental, sustainability and climate change policies aim at. The end goal is to have a sustainable and just society. What need to be changed are unsustainable social norms and practices combined of individual choices and behavior. As I have argued earlier, crucial method to achieve such a radical and large scale transformation is persuasion, not direct force (including economic and legal measures). In order to achieve compliance, it is essential that a critical mass of people understands the need for change. In the end, people whose aggregated decisions really matter are individual members of the society, and these people need to be persuaded and enabled (with relevant infrastructure).

When ENGOs target states, they expect governments to produce efficient policies and do the actual work to convince the public to change their ways or put people in an economic and legal framework where they would have to change. ENGOs assume that their role is to convince governments to do something. Moreover, ENGOs persuade the general public to support them in reaching out to governments. There certainly are some structural changes that can only be done by states. But when it comes to individual choices and behavior, ironically, it looks like ENGOs convince the general public that it is necessary to convince the governments to convince the general public what the right thing to do is.

Preoccupation of ENGOs with states, thus, threatens to diminish another dimension of their political influence based on ENGOs' capacity for persuasion. Paul Wapner was among the first scholars to criticize a state-centred view of ENGO influence as narrow. This interpretation left societal dimension of activists' work out of the analysis or only considered it as part of action aimed to influence states by mobilizing voters. Politics in this case is seen

as a practice associated solely with governments (Wapner, 1995, p. 312). Wapner suggested that activist efforts of ENGOs and other civil society groups within and across societies should be recognized as a type of political action in itself. He also suggests that what was not questioned by scholars throughout earlier transnational debate was the essential quality of world political activity:

"Having lost part of the argument, after being forced to acknowledge the centrality of the state, [scholars] failed to ask what constitutes relevant political behaviour, what power is, and which dimensions of collective life are most significant for bringing about changes in human practices. Students of international relations fell back on the traditional notion that genuine political activity is the interaction of nation-states, that power consists in the means available to states, and that the state system is the arena for affecting human behaviour throughout the world. Thus, NGOs became important, but only because they influenced state behaviour."

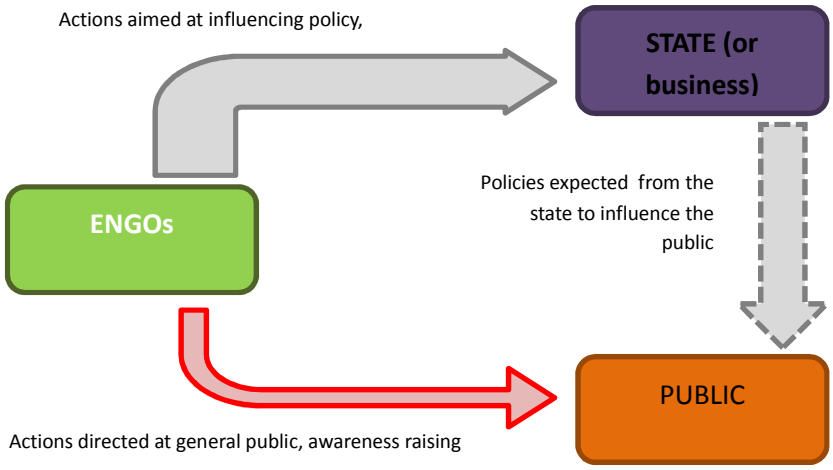
Wapner 1995, p. 320.

There is evidence supporting the fact that ENGOs are capable of changing public opinion and norms. During the ozone crisis in the 1980s ENGOs have demonstrated the ability to reach out and educate the public and key target groups about the environmental and health impacts of ozone depletion and the importance of taking action (Andersen & Madhava Sarma, 2012, p. 333). During the establishment of an anti-whaling norm Greenpeace was a prominent player in the process which engaged into direct and other actions, including boycotts, and informing the public (Andersen, 1998). Unfortunately, academic research to link ENGOs' outreach efforts and the opinion of the general public is underdeveloped. Scholars' attention was drawn to the relationship between NGOs and states and international organizations, almost entirely ignoring this important aspect of ENGOs work.

Yet, ENGOs have capacity to order, direct and manage widespread behavior of the general public around the world through media campaigns, educational efforts, local community capacity building programs, etc. Wapner argued that this is political action in its own right. It is aimed to change people's perceptions of the problem, transform attitudes and behavior. I shall call this type of action 'direct', because it is directed straight at the public.

Below is a graph to illustrate the dichotomy of political action of ENGOs. A thick grey arrow from ENGOs to states represents well-researched influence of ENGOs on policy making at

domestic and international levels. A thinner red arrow represents direct political action of ENGOs aimed at the general public.



This model of interactions is intentionally simplified. The purpose of this exercise is not to reflect a complexity of connections among ENGOs, states, businesses, and the general public. It is more to visually represent the difference between two types of political action available to ENGOs.

In practice it is often hard to differentiate between ENGOs' motives. Is convincing the general public the final goal of ENGO campaigns or is it an intermediary leverage (voters) to influence state policies? It might be argued that public concerns define to a great extent the agenda of ENGOs, organizations comprised of members. It might also be argued that states and political systems have an influence on what ENGOs say and how they say it. Important roles in achieving change are played also by business and IOs, for example. However, for the purposes of theoretical clarification of my argument, I use this simplified model to illustrate a conceptual distinction between two types of ENGOs' political action.

5.2.1. Indirect Political Action of ENGOs (target: states, businesses)

Traditionally, scholars identified the failure of state and markets to efficiently deliver public goods as the main reason for the rise of a non-profit sector. Young (2000) proposed three theoretical models of interactions between governments and non-profit sector. Non-profit organizations can be regarded as supplementary, complementary or adversarial to the government (Young, 2000, p. 149). Supplementary role of non-profit sector is about fulfilling the demand for public goods left unsatisfied by the government.

Complementary model views non-profit organizations as partners to government who help carry out the government-financed delivery of public goods. In the third, adversarial view, NGOs are pushing governments to make changes in public policies and maintain accountability to the public. Young admits that a relationship between governments and the non-profit sector cannot be fully understood through only one of three lenses. The three models are considered to be overlapping and complementary to each other, explaining different aspects of the relationship.

In a transition towards sustainability ENGOs often play a complimentary role to the governments. For example, in Russia, WWF has initiated and co-funded with the government several wildlife conservancy programs, including the program to protect Siberian (Amur) tigers. The program was put together largely thanks to the dedicated efforts and support of the WWF Russia. However, more frequently ENGOs face lack of political will from governments and have to play an adversarial role and push governments to change unsustainable policies and practices.

There are two distinct, yet not mutually exclusive, views on forces that drive ENGOs to engage into international activities and cooperation. Globalization thesis (Wapner, 1996; Held 1998) suggests that the development and sophistication of technology and communication provided civil groups with an opportunity to engage into more international interaction over environmental issues. Group characteristic thesis (Tarrow, 1998) suggests that an international activity of environmental groups is primarily an extension of domestic politics to another arena. ENGOs originated and have most presence in the developed states, and their activities at the international level both shaped and were shaped by national policies.

This view stresses the resources of the organization and its ideology as decisive factors in explaining which organizations end up engaging into international activities. Thus, better funded ENGOs, and also those which hold more reformist views on the existing social paradigm are more likely to join international activities than more conservative conservationist organizations. Empirical data on more than 250 ENGOs from Global Environmental Organizations Survey largely supports group characteristic thesis. It appears that group budget, domestic activities and ideology have a significant influence on the group's international activity (Rohrschneider & Dalton, 2002).

United Nations, its agencies and other international organizations offer ENGOs a platform to interact with states. These organizations constitute an important pillar of world environmental regimes. Environmental regime is a "partially integrated collection of world-level organizations, understandings, and assumptions that specify the relationship of human society to nature" (Meyer et al., 1997, p. 1).

Developments leading to the emergence of ozone regime, to the regime for long-range trans-boundary air pollution in Europe, anti-whaling, illegal wildlife trade and climate change regimes were thoroughly analysed by political science and IR scholars (Zuern, 1998, p. 618). ENGOs played an important role in many of these processes. Studies suggest that an important development enabling ENGOs perform their international political action was growing number and increasing access of these organizations to the international environmental structures and decision making process (Corell & Betsill, 2003).

However, Clark and Friedman (1998) note that a greater number of non-state actors translated directly into more systematic participation within international governmental organizations or that states and international organizations uniformly respond to NGO "knocks" by opening the intergovernmental "doors" (p.3). The degree of access varies from issue to issue and is controlled in the end by the states, who keep the right to organize meetings behind the closed doors[55]. One of the most advanced contemporary UN processes in terms of inclusion of civil society, preparatory meetings of the Open Working Group on Sustainable Development Goals, still only allow for a few minutes at the very end of their meetings (when some delegates in fact are already leaving) for inputs from ENGOs.

Ringius (1997) suggested four roles for ENGOs in environmental regimes: mobilizing international public opinion, transnational coalition building, monitoring of states' environmental commitments, and advocating precaution and protection of the environment. ENGO influence on global environmental regimes was well-documented in many studies:

[55] Out of recent developments, enhancing ENGO participation in the UN environmental institutions, it is possible to highlight the online platform for submissions of views on different UNFCCC proposals and developments in research activities. The platform (at www.unfccc.int) is operating since 2005, and the number of submissions had increased from four in 2005 to more than hundred in 2011. The availability of ENGO inputs online, in public access, also has a positive impact on the issue of ENGO legitimacy and accountability, while this makes it possible for the general public (including members of the ENGOs) control positions of organizations that claim to represent their interests.

- A thorough study by Ringius (1997) looks at the case of ocean dumping of radioactive waste and traces the role of ENGOs in changing the regime towards a radioactive waste disposal ban in 1993. Ringius argues that the role of ENGOs was crucial in changing principles and norms of the regime[56].
- Edward A. Parson looked at developments leading to the Montreal Protocol on Substances that Deplete Ozone Layer (in Haas, Keohane & Levy, 1993). He also points at the role of NGOs in organizing information campaigns to mobilize public opinion.
- Wapner (1995) stresses the role of direct action by Greenpeace in overturning the images of whale hunting, resulting in the changes of norms, principles, and establishment of an anti-whaling regime.
- Skodvin and Andresen (2003) analyse non-state influence on the International Whaling Commission in 1970-1990s and acknowledge ENGOs' political capital and capacity to mobilize public opinion in support of their position.
- Humphreys (2004) analyses NGO influence in international forest negotiations and concludes that NGOs had significant influence on the textual outputs on international forest policy since 1980s, particularly by shaping the discourse on the public value of forests and by shifting the forest conservation agenda towards increased public sector and community involvement.
- Gulbrandsen and Andresen (2004) looked at the case of Kyoto Protocol and NGO influence on its implementation. Differentiating between 'insider' and 'outsider' strategies, authors note that in case of Kyoto Protocol implementation ENGOs used much more often the insider strategy (working with delegates and trying to convince them in ENGO position in order to influence the outcome of negotiations) comparing to the outsider strategy (campaigning in order to use public opinion as a leverage to influence governments). The reason for that could be related to difficulties with identifying a solution easily communicable to the public.
- Haas (1990), Thomas (1992) and other scholars argue in favour of epistemic communities as agenda-setters in international environmental politics and stress the role of science and knowledge in shaping environmental policies. For example, under the Convention for Long-range Trans-boundary Air Pollution (1979) the RAINS model of acid

[56] Another good example of a regime change by the transnational civil society, yet not directly linked to the environment, was the ban on AP land mines which was achieved after a long-term high-profile NGO campaign (more on the issue in Richard Price "Reversing the Gun Sights: Transnational Civil Society Targets Land Mines").

deposition, and the team at the International Institute for Applied Systems Analysis that developed it, "has played a central role in the development of the regime" (Raustalia 1997, p. 726).

- With regards to monitoring states environmental commitments, Gemmill and Bamidele-Izu (2002) highlight the partnership initiative of the WWF and the World Conservation Union in organizing TRAFFIC, the wildlife monitoring network established in 1976 to assist the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975, in implementing the provisions of the Convention. TRAFFIC is considered to be the key component in the implementation of CITES.

Gemmill and Bamidele-Izu (2002) also identify seven various forms of ENGO involvement in global environmental governance: expert advice and analysis, intellectual competition to governments, mobilization of public opinion, representation of the voiceless, service provision, monitoring and assessment, and legitimisation of global-scale decision-making mechanisms. While overlapping in some points with the roles proposed by Ringius, this list provides a deeper insight into the variety of forms of ENGO international activities and highlights an important function of ENGOs which relates to legitimization of decision-making mechanisms in environmental politics.

International political arena offers a wide range of opportunities for ENGOs to target both governments and the general public. Changing and mobilizing public opinion domestically and internationally are considered to be key strengths of ENGOs. However, politics understood as practice associated solely with governments, channels ENGOs' efforts into quite a specific direction – towards states.

'Uncomfortable' Questions to ENGOs: Accountability and Relationships with Business

In the earlier decades of their existence ENGOs defined their identity to a great extent by contra-positioning themselves against other actors. Thus, "non-profit" characteristic set them aside from business. Being "non-governmental" positioned these organizations aside from states. One assumption about NGOs was widespread: NGOs were viewed as organizations "doing good", acting on moral grounds, defending ethical cause (Fisher, 1997). Environmental NGOs put efforts into protecting the planet and its biodiversity for their own sake and for the good of all humanity, not any specific, selected group of people.

More recently, however, new features in ENGOs' work emerged. Since late 1990s – early 2000s scholarly attention shifted from finding the right paradigm to explain the place of NGOs in international and domestic political affairs (and their relationship with states) towards such issues as emerging relationships (partnerships) between NGOs and business, and issues of accountability and legitimacy of NGOs.

Since the inception of an environmental movement ENGOs business, particularly large transnational corporations (TNCs) were targeted as a source of environmental degradation, as parts of the system supporting and reinforcing a status quo of production practices that damaged the environment. TNCs were blamed and shamed on a many occasions by ENGOs demanding a change to the ways they do business. Since some pioneering collaborations in the 1990s (Environmental Defence Fund partnering with McDonalds to introduce more sustainable packaging, for example), the paradigm of ENGO-business relationship started to shift.

Some changes were more in line with the traditional "challenging" paradigm. ENGOs played an important role in advancing ethical and environmentally sound standards in production and trade practices. WWF, for example, helped set up a globally applicable FSC (Forest Stewardship Council) accreditation, certification, and labelling scheme for products from properly managed forests. The Fair Trade movement developed a certification system to help consumers make informed choices about products that meet environmental, labour, and developmental standards. The work of ENGOs here can be viewed as taking over some functions, earlier only performed by governments, in terms of setting a "new generation" of de facto regulations for business in the form of standards, guidelines and certifications (Nalinakamuri & McLean, 2005)

Some partnerships, however, are harder to justify to those who believe that ENGOs' role is to challenge, not to legitimize business-as-usual practices. WWF partners with Coca-Cola to "save polar bears" (Coca-Cola's Arctic Home) and serves as a "conservation partner" to IKEA (IKEA and WWF Partnership). The Nature Conservancy works with BP "to ensure their oil exploitation efforts […] are done sustainably" (The Nature Conservancy: Working With Companies), as well as with Shell, Monsanto, and Walmart.

Sierra Club partners with Clorox to market a line of "green" cleaning products for a percentage of sales. This deal received a lot of attention in the media (NBC News, 2008). At the moment of this thesis submission Sierra Club has deleted all mentioning of this partnership from its website. The architect of the deal, chairman of Sierra club Carl Pope, stepped down shortly after the deal amid discontent that the group has strayed from its core principles (LA Times, 2013). Many of corporate-NGO partnerships were strongly criticized in the media[57].

As Dauvergne and LeBaron (2014) argue in their recent book *Protest Inc.*, more and more big ENGOs morph into global business-style institutions. Corporatization of ENGOs demonstrates a significant shift in the strategy and ethos of many ENGOs who now view business as allies rather than adversaries. While specific efforts (such as Greenpeace campaign to remove illegal Indonesian paper fibre from Mattel's Barbie boxes) help improve individual footprint of individual products, they are not fundamentally helping the planet but instead are rather reinforcing unsustainable production and consumption practices worldwide (LeBaron, 2013). In spite of being encouraged at different levels of environmental politics, partnerships among ENGOs and industry go against the original moral vector of ENGOs and lack legitimacy and support, first of all, among the environmental movement itself.

Another "uncomfortable" issue is related to the *accountability, legitimacy and credibility* of ENGOs. The debate over the accountability of ENGOs started in the nineties. A new and growing actor in international affairs, ENGOs were not democratically elected and their accountability mechanisms were more linked to donors than to the members they claimed to represent. Social movements and NGOs challenge present identities or existing constituencies without being concerned about electoral accountability or due process (Peruzzotti, 2006, p.48).

Who do ENGOs represent? Who are they accountable to? The relationship between the Northern and the Southern NGOs in the areas of development also raise many questions. With better funded Northern NGOs providing support and guidance to their Southern colleagues, what kind of agenda was placed on the table? Did Northern ENGOs "representing the voiceless" from the South really represent the interests of peoples they claim to speak for?

[57] For WWF-IKEA cooperation see *The Guardian* (2009); for the role played by the WWF in the agreement to expand soya production see CorporateWatch (2005); for the proposed long-term cooperation between the International Union for the Conservation of Nature (IUCN) and Shell see Block (2012).

Keohane and Grant (2005) identify three types of international and transnational accountability mechanisms that are in play to constrain the abuses of power by NGOs. These constrains are enabled through fiscal accountability of NGOs to their donors, market accountability, and peer accountability and care for reputation. It is noted, that "as NGOs become stronger, with credibility that is not easily shaken even as they make false or prejudicial claims, their lack of such mechanisms of accountability, apart from legal provisions within states against fraud, becomes a more serious issue" (Grant & Keohane, 2005, p.38).

One example here could be a struggle from the early 1990s Greenpeace undertook regarding Shell's Brent Spar, crude oil storage tank anchored off Shetland. Shell wanted to sink the structure in deep waters as a safer and cheaper alternative to bringing it ashore, cutting it up and reusing it. Greenpeace argued that seas should not be used to dump waste and that it was dangerous and irresponsible to sink, along with tonnes of steel, 5,000 tonnes of oil. This number, though based on Shell's own estimates, was wrong – there was in fact much less oil on Spar (BBC, 1998). In spite of making (intentionally or not) false claims and in a way manipulating data to influence public opinion, credibility and reputation of Greenpeace were hardly shaken.

As Kenneth Anderson, a former senior officer of Human Rights Watch, argues, the NGO phenomenon created a need to redefine traditional notion and mechanisms of accountability. Accountability only partly overlaps with representativeness, and it is very frequently best obtained through mechanisms that are not fundamentally about representation or democracy (Andreson, 2009, p. 175). It is, thus, necessary to disentangle the issues of accountability and representativeness to either accept traditional critique of NGO accountability gaps or develop a new view on the issue.

To conclude the section on indirect political action of ENGOs, two points can be made. First, overall ENGOs have influence on international and domestic environmental affairs (degree varies from issues to issue and from country to country). They have capacity to influence states, international organizations and business by using persuasion. Second, some ENGOs have grown large, powerful and bureaucratized. Their priority targets, however, remain same as thirty-forty years ago: states and businesses.

5.2.2. Direct Political Action of ENGOs

I have called ENGOs' activities directed at the general public and aimed at changing public opinion, unsustainable social norms, behaviors, and practices, *direct*[58] political action. The term *direct* is used to clarify priorities by indicating the final target group of sustainability and environmental policies. The general public comprised of individuals is, in my view, the most important end goal of any efforts to address global environmental degradation. Societal change and an underlying value shift are crucial and central to achieving sustainability. This being said, the role of governments and business in the process of societal change should not be undermined. ENGOs' indirect political action aimed at governments and business is an important complimentary strategy to direct political action.

Almost twenty years ago Paul Wapner argued that ENGOs are capable of political action other than that focused on states and business (Wapner, 1995). He pointed at societal dimensions of activists' efforts to mobilize public opinion and shape behavioural response. Awareness raising and educational work of ENGOs should be considered political action in itself. Wapner does not undermine the role of the state completely but argues against a narrow view of politics as practice associated solely with government.

Wapner identifies three approaches that ENGOs can take to resolve environmental problems that bypass states and business:

- *Political globalism:* Wapner uses the example of Greenpeace creating international ecological sensibility. Direct action and remarkable media campaigns of this ENGO had an unprecedented effect on the way people thought about environmental issues such as, for instance, whaling or ocean waste dumping. Awareness raising efforts are aimed at increasing general knowledge about environmental problems and formulating environmental concerns in the society;
- *Political localism:* an approach which Wapner illustrates with the work of the WWF. This approach is aimed at empowering local communities to resolve local environmental problems and at turning control over resources in the area to people who use them sustainably;

[58] Readers who share a state-centred view of politics (politics as practice associated primarily with states) might question this terminology. "Direct" or "indirect" terms as I use them here do not carry any normative component to them (none implies faster, more important or more efficient).

- *Political internationalism:* Wapner provides an example of Friends of the Earth (FoE). FoE used a strategy when divisions of an ENGO in different countries create linkages among local, national, and international actions directly, without engaging with the state structures. Clearly, in the past twenty years Greenpeace and WWF proliferated and currently they have offices and coordinate actions across the world as well.

Wapner's approach is central for my argument because (1) it takes a broader view of politics than practice associated solely with governments and (2) views ENGOs as capable of independent political action not directed at states or business. Direct political action aimed at changing public opinion, behaviour, norms, practices, and values might resemble the most political globalism. However, the role of empowerment as an important factor in mobilizing public opinion locally (political localism) and internationally (political internationalism) should not be undermined.

As it was shown, ENGOs have come a long way from being scattered and weak grass-root activist associations and groups of concerned amateurs to large well-funded reputable global players with business-like organizational structures. In the beginning ENGOs used to express concerns of the groups they emerged from but with time they have grown detached from the public and from people they represent. Many of today's ENGOs are qualitatively new entities. They are bigger and much more powerful compared to what existed before. But they still use tools and rely on priorities that were relevant in the 1970s by concentrating their efforts on targeting states and business and using public opinion merely as a leverage to reach those actors.

I want to make a case for ENGOs' direct political action. Times have changed and ENGOs have changed. Some large well-funded globally present ENGOs have to acknowledge their **capacity to trigger societal change** by targeting the general public as an important, even crucial, political action in its own right. That means they would have to revisit their priorities and relocate resources to put more efforts into awareness raising and educational activities to change social norms and practices, promote sustainability values and behavior. ENGOs' have several unique characteristics that enable this capacity.

- The power of ENGOs' ethical standing and international credibility.

ENGOs enjoy high levels of public trust and credibility. According to Edelman's Trust Barometer (2014) in 2013, for the fifth year in a row, NGOs remained to be the most trusted institution globally. NGOs (all kinds of organizations, not only environmental) enjoyed the support of 63% of respondents across 25 countries, followed by businesses (58%), media (57%) and governments (48%). The basis for this trust is a common perception of NGOs as "ethical" agents acting entirely out of altruistic considerations. Many environmental NGOs have solid international reputations of "the good guys" and were even called the "consciousness of the world" (Fisher 1997).

Studies aimed to investigate the high level of trust in NGOs generated some interesting findings. In 2012 a poll was held asking respondents what NGOs had done recently to earn their trust (GlobeScan, 2012). The key messages here are the prominence of "help" and its recipients, "people" and "environment". This indicates the importance of tangible outcomes to people's willingness to see NGOs as trustworthy. Interestingly, the word "nothing" is also at the forefront of the cloud. That might mean that the high level of trust in NGOs might be based, at least in part, on blind faith that NGOs can be trusted, "simply because what they represent" (GlobeScan, 2012). Good reputation precedes ENGOs and makes for their most valuable and powerful asset.

These results add weight to the findings of an earlier global polling conducted by GlobeScan which revealed that "the consensus of public support for NGOs' role in aid and assistance work is greater than for their political campaigning and advocacy" (GlobeScan, 2012). This means that the public rather supports direct action of NGOs that creates tangible, visible results (specific conservation and preservation efforts, assistance work, aid, etc.) rather than indirect political action aimed at governments and businesses. The level of public support of a particular kind of NGO action does not by itself imply that this action is more important or efficient. But if ENGOs claim to represent public opinion and act in the best public interest, these findings should signal that something is wrong with ENGOs' vector of activities.

It appears that the larger, the more influential ENGOs grow the more they get detached from their grass-root supporters and morphed into government- and business-like bureaucratic organizational structures. ENGOs use public opinion primarily as a leverage to influence states and businesses – and still enjoy high levels of public trust. As I will show in a study in the second half of this chapter, in their outreach campaigns ENGOs predominantly rely on

ethical and aesthetic arguments in convincing people to support their cause. They frequently invoke normative categories such as "good" or "right".

Altruism, ethical and aesthetic arguments were among the most important dimensions of the environmental movement's aspirations which were at the origin of its development. These considerations play crucial role in mobilizing the public. Yet, in the recent decades, political rhetoric around environmental issues shifted to a great extent towards scientific and economic arguments. Bureaucratic and technical language often overshadows moral and aesthetic dimensions of issues in question. It is remarkable, for example, how cold and detached the term "biodiversity" sounds compared to things it stands for. On this note, Jepson and Canney (2003, p. 273) argue that:

"…areas such as the English Lake District, Yosemite and the Serengeti, all of which bring massive public benefit, were designated as parks largely because of the romanticizing efforts of, in these examples, the poet William Wordsworth, the writer-naturalist John Muir, the landscape photographer C.E. Watkin, and the zoologist-adventurers Berhard & Michael Grzimeck. It is inconceivable to think that these parks would exist if instead scientists had promoted bio-prospecting, carbon-sequestration, and harvesting of nontimber forest products as reasons for their designation."

It might be noted that different arguments are used on different audiences. For an NGO to get public support, they need to show images of panda cubs and appeal to people's emotions and altruism. To be taken seriously by governments, ENGOs have to speak the same bureaucratic language and appeal to economic and political (electoral) considerations. When speaking to businesses, ENGOs utilize economic arguments and leverage their supporters' base as consumers. The problem is not with targeting, it is more with the degree of morphing.

ENGOs originated as "the consciousness of the world" and were determined to remind the parties about ethical and aesthetic aspects of environmental protection in all possible ways. With time, ENGOs' efforts to be taken seriously by governments and businesses seem to have caused ENGOs to become more like governments and business in the ways they reason, act and operate. In tooth and nail negotiations aesthetical and ethical arguments often get pushed to the background, taken over by economic, political, and practical concerns.

By putting faith into governments as the key agents of change, ENGOs failed to recognize that with time they have acquired political power to make a change on their own. This power rests most of all on their global reputation of ethical agents and high levels of public trust. It is unclear to which extent ENGOs would manage to fulfil the role of the "consciousness of the world". For the purpose of this paper I shall assume that they represent important values and ethical concerns (overseen by other stakeholders) and act on this moral ground. Representing and promoting ethical considerations and values is the main purpose of ENGOs.

- ENGOs' capacity to change public opinion and values

Having a strong moral stand, international credibility and a reputation makes some ENGOs an influential and reliable source of information and advice for the general public. Most ENGO campaigns are bound to be specific. To be efficient, "Save the planet" call has to be broken into concrete issue areas with clearly communicated problems and possible solutions. Thus, ENGOs defend whales (Greenpeace), coordinate creation of protected areas in the Amazon region (WWF), fight to remove toxic chemical from store shelves (Environmental Defence Fund), and expose false solutions in climate and biodiversity finance (Friends of the Earth).

In their outreach efforts ENGOs provide information and explain complex environmental issues to the general public. Campaigns reveal often unobvious links that lead to environmental problems or obstruct solutions to these problems. The level of detail can vary from one campaign to another and some campaigns can be quite specific. But one characteristic about ENGOs' outreach efforts remains the same: they all show that ENGOs *care*. ENGOs express care about nature, about justice; they feel responsible for the planet – and they appeal to similar values in their supporters. Pro-active non-indifferent approach aimed to trigger emotional and altruistic responses is based on strong ethical values that ENGOs both rely on and promote.

ENGOs know that they can change public opinion and they use this capacity primarily to gain leverage to influence states and business. The public is electorate for governments and consumers for businesses. But this capacity, this political power can be realized differently if the general public was viewed not as means to an end but as the end in itself.

- ENGOs have budgets, networks

The third crucial factor that ensures the power of ENGOs' direct political action is their financial strength and global presence. Some ENGOs have money and networks to deliver their message worldwide. For example, WWF Network that includes WWF International, its Program Offices, all the WWF National Organizations and their Program Offices in 2012 declared a total income of 592,741,000 Euros or ca. 820 mln USD (WWF, 2013).

According to World Bank data (2014), in 2012 GDP levels of 14 states were less than the income of WWF. Tuvalu, the poorest country, had a GDP of less than 40 million USD[59]. Total income of Greenpeace Worldwide in 2012 was 268,325 mln Euros or ca. 370 mln USD (Greenpeace, 2013). Combined budget of only WWF and Greenpeace exceeds 1 bln USD. There is power behind these numbers, enhanced by global presence of these organizations. WWF has offices in more than 80 countries and employs around 2,500 full-time staff (WWF Quick Facts). Greenpeace has offices in 53 countries and employs around 2,400 people. Networks play an important role in spreading the word. Offices in many countries (especially in developed countries) could help carve the message to better fit into local background, appeal to values and mentality of the local population.

Direct action of ENGOs and individual value shifts

A value shift towards sustainability happens at the level of individuals but is effective as an aggregate of these individual responses. For a fundamental shift in values to be sustainable, it must be freely-chosen by individuals who have experienced a "transformation in the heart" (Edwards & Sen, 2006, p. 607). As outlined in Chapter 4, all social systems rest on three bases:

(1) a set of principles that form an axiomatic basis of ethics and values;
(2) a set of processes - the functioning mechanisms and institutions that undergird the system;

[59] The list also includes Kiribati (174,984,469 USD), Marshall Islands (182,400,000 USD), Palau (228,415,735 USD), Sao Tome and Principe (263,398,378 USD), Micronesia (326,160,961 USD), Tonga (471,575,497 USD), Dominica (479,688,889 USD), Comoros (595,900,353 USD), Samoa (683,719,606 USD), St. Vincent and Grenadines (712,588,889 USD), Grenada (766,510,727 USD), St. Kitts and Nevis (767,000,000 USD), and Vanuatu (787,073,459 USD).

(3) subjective states that constitute our inner being – our personal feelings and intuitions in the deepest sense (Edwards & Sen, 2000, p. 608).

According to Edwards and Sen (2000), social change requires integration of all three bases of change. Over-emphasis in favour of one or another can lead to a misbalanced outcome and fail the transformation. Choosing indirect action ENGOs focus primarily on the second base, a set of processes, mechanisms and institutions underpinning the system. Yet, they have capacity to change the other two components: be a flagship of a value shift (represent and promote sustainability ethics and values) and through their outreach efforts change individual feelings and intuitions about environment and sustainability in the deepest sense.

Edwards and Sen (2000) argue that the ideas of societal transformation and value shift are rarely consciously supported by NGO activities. Rather NGOs' experiments with the shortcomings of the system, such as institutional inefficiency or injustice, "consolidate a new bottom line of values, principles and / or personal behaviour from which better models may evolve in different ways in different contexts" (p. 6). I agree with this argument. ENGOs do not take their capacity to trigger societal transformation seriously because they still operate within a system of priorities and constrains established forty years ago. It is important that ENGOs acknowledge their capacity for independent political action as catalysts of a global value shift.

Types of ENGOs' direct political action

Wapner (1996) identified awareness raising and building environmental concerns in the society (political globalism), as well as local and international empowerment of the general public (political localism and political internationalisms) as three ways of taking direct political action that bypasses states. If we talk about promoting sustainability values, empowerment plays more of a supportive (yet, important) role in the process.

Edwards and Sen (2000) suggested that NGOs can influence individual and societal transformation through their:

- programme activities (the work they conduct in the field themselves or supporting others),
- constituency-building work (fundraising and membership increasing activities)

- and organizational praxis (the ways in which the promoted values are expressed in structures, systems, and management of ENGOs themselves).

The basis for this classification is a functional divide. ENGOs' activities are aimed to fulfil certain functions, and thus fall into functional categories such as program activities, constituency-building work and organizational praxis. This typology does not clarify the substance of the action but rather explains ways of fulfilling it. It is not about *what* ENGOs do to influence individual and societal transformation but *how* they channel their action. This is a useful distinction but it is not helpful if we want to understand what is it that ENGOs can do to change values, norms, practices, etc.

I would like to propose a more general substance-focused typology of direct action of ENGOs. As noted earlier, direct political action has a lot to do with persuasion. To persuade the general public to do or believe something, it is important to (1) broadly raise awareness about an issue or a problem; (2) educate the public about more specific aspects of the problem and its solutions; and (3) invoke a sense of empowerment in communities. This typology clarifies what kind of action is taken. Let us look closer at each of kind of direct political action of ENGOs below.

(1) Awareness raising

One of the most crucial actions that ENGOs can undertake is raising awareness about environmental issues. Outreach efforts of ENGOs consist of – but are not limited to – information campaigns (in mass media and through ENGOs' own networks) and direct action (demonstrations, protests, etc.). The purpose of awareness raising is not to turn public into experts but to provide it with a very general knowledge about a given problem which is enough to be concerned. Normally the message is crafted in a way which triggers emotional response and helps formulate a concern around the issue in question.

Awareness raising activities of ENGOs played vital role in surfacing some of the world's most important environmental problems. For example, in case of protecting the ozone layer ENGOs' awareness raising and generating media coverage played crucial role in both leading to and following up on the Montreal Protocol. At that time ENGO awareness campaigns included: producing and disseminating materials such as reports, brochures, posters, badges and songs; generating media coverage; organizing meetings, conferences and workshops;

organizing grassroots activities; and building coalitions of diverse stakeholders (Gilfillan, 2002, p. 335).

Of course, since then rapid development of internet and social media changed the landscape of ENGO activities dramatically, shifting a lot of interaction with their supporters on-line. The new platforms to raise awareness are email lists, organizations' websites, facebook, twitter, you-tube channels. However, ENGOs still attempt to involve the public into direct action. For example, the WWF's Earth Hour campaign calls people around the world to turn off the light for sixty minutes to draw attention to global environmental problems. According to the WWF, in 2013 7001 cities and towns in 154 countries took part in Earth Hour. An outreach at such a scale was certainly possible primarily due to new communication technologies.

(2) Education

Education is another way of engaging the public. Education is similar to awareness raising (both provide new information) but is deeper and more structured. If awareness merely touches the surface of a problem enough to create concerns, education operates with larger volumes of information, requires more time and commitment. In the context of transition towards sustainability it makes most sense to talk about education for sustainable development (ESD) or environmental education (EE). EE has a longer history than ESD which was only recognized around ten years ago as an umbrella for many educational approaches that already exist (including EE) and new ones that remain to be created (UNESCO Education Themes).

Educational work is part of many ENGOs' activities. There are two main ways in which they can advance ESD. First, they can provide ESD directly to the public, to communities. An example of such work could be a conference organized in September, 2011 by Friends of the Earth UK in Nottingham University (McGregor, 2011). The conference gathered around 300 representatives of the concerned public from around country. The agenda was entirely dedicated to knowledge of the local community about the global problems and available local solutions.

Another way of advancing ESD is through partnerships. ENGOs can partner directly with schools or higher education institutions. For example, WWF New Zealand since 2001 has

been engaged into environmental education in schools by "establishing creative and innovative education activities that demonstrate how environmental education, and the New Zealand environmental education guidelines, can be implemented, and communicating and promoting these solutions to other education providers." WWF New Zealand together with the Tindall Foundation also created an Environmental Education Action Fund which sponsors communities' educational endeavours – specifically focused on taking action to resolve environmental issues.

WWF Hong-Kong works actively with schools (in- and out-of-classroom programs for students and teachers), as well as community centres, unified groups, and tertiary institutes. Since 2000, WWF Indonesia has been developing educational materials for schools, including film and slide shows, games in and out of class, radio shows on local FM stations, cartoon awareness raising films, posters and stickers for students. By 2008 (the most recent data available) WWF's Environmental Education team in Jakarta reached more than 3500 students in 350 schools.

ENGOs can also build partnerships with business to advance ESD. In the academic year of 2011-2012 WWF Greece and Frigoglass (beverage coolers market leader) organized a workshop for 1500 students of all ages, the "Journey to the Future City". The workshop's main objective is for students to understand the consequences of climate change as well as the ways each household and each person can reduce energy consumption. Students are urged to become familiar with high technology, energy efficient solutions and to re-evaluate their way of life in order to distinguish needs from desires and ways in which they can reduce energy consumption."

One of the most significant partners that ENGOs can engage with to advance ESD is the government. Government is the most powerful player when it comes to influencing a structured educational system. In many countries governments have direct control over educational standards, curricula and practices. ENGOs can lobby governments to change them. For example, in Malaysia in 2010 WWF proposed a new educational policy to the Education Ministry to "enable a more permanent and structured environmental syllabus for subjects in primary and secondary schools nationwide." (The Star, 2010). Lobbying clearly falls into the scope of indirect actions of ENGOs as it is focused on governments. In case of

education, however, it appears to be one of the most significant actions that ENGOs can take if they want a large-scale change in educational standards and curricula.

Lobbying is not the only way to partner with states. In Chile, for example, ENGOs collaborate with the national and municipal governments to advance ESD and often supplement the lack of state educational effort (Padilla 2001). In and without collaboration with governments, ENGOs in Chile provided courses related to local environmental issues (water and air pollution, recycling, waste management) and explaining solutions. According to Padilla, ENGOs bring about "the push, the force, the diversity, the local knowledge, the creativity and the flexibility" that are required for environmental education (Padilla, 2001, p.228).

In spite of ENGO various efforts, educational activities aimed at promoting ESD are still scattered around the world. Some scholars argue that there is a need for broader well-structured, comprehensive environmental education program, with objectives related to awareness creation, knowledge accumulation, positive attitude inculcation, problem solving skills acquisition, and citizen participation, and developed both for school and public levels (Singh & Rahman, 2010). I would be cautious about creating a "one-fits-all" kind of program. Diversity and local knowledge around the world should not only be accounted for but incorporated into educational solutions tailored to the region or community. Possibly, with time, ESD can become an umbrella for different educational approaches.

(3) Empowerment

Finally, an important aspect of ENGOs' direct action has to do with empowerment of local communities and of a global community. Weaker, more vulnerable and less funded groups from the Global South can get a sense of empowerment when they work with local and international NGOs, receive funding and generally feel that there is a "back up" to changes that they implement locally. The famous "boomerang effect" of NGOs (Keck & Sikkink, 1999) is an example of empowerment that transnational networks of NGOs bring about: local NGOs bypass their governments and reach out to powerful international allies, other NGOs, parts of the network. International allies help convince the governments to take action locally at the international level.

In developed states the feeling of belonging to a "global environmental movement" also plays an important role in empowering individual members of the general public. One example here could be 350.org, an ENGOs which is "building a global climate movement" and since 2008 managed to attract participants from 188 countries. 350.org started in the US and first moved to Europe. Once the presence in North America and Europe was better established (the call for a movement worked – more people were joining 350's actions), ENGO started putting more efforts into building a movement in developing countries.

Conclusion

This chapter focused on the role played by ENGOs in advancing sustainability concerns. I made case for the direct action of ENGOs, their interactions with and influence on the general public as opposed to indirect action in the form of lobbying and other methods aimed at policy-makers in national governments, at international organizations and business. ENGOs have come a long way from small groups of amateurs to affluent international organizations with budgets comparable to GDPs of some developing states. The global political landscape also changed dramatically. Yet, ENGOs continue to operate within the same set of priorities as existed forty years ago, concentrating most of their efforts on lobbying in often stagnating international and national environmental politics (like climate change).

With power comes great responsibility. I argued that ENGOs should acknowledge and better realize their capacity to change public opinion and contribute to the value shift towards sustainability. ENGO activities directed at raising awareness, educating and empowering the general public and their power to change public opinion, values, norms, and attitudes have become in some cases crucial assets of these organizations. It is essential that ENGOs which have reputation and substantial budgets acknowledge this capacity as a type of political action by its own right and put more efforts into direct engagement of the public on environmental and sustainability issues. This way ENGOs can make an invaluable contribution to a value shift towards sustainability.

Chapter 6. Analysis of climate change campaigns of WWF and Greenpeace

Introduction

NGOs are the most trusted actors in world politics (Edelman's Trust Barometer, 2014). These "ethical" agents have a great capacity to act as norm entrepreneurs with regards to changing unsustainable values of the general public. Backed-up by strong reputation, recognition, global presence and successful track record of past "good deeds", some ENGOs have generated significant political power, power to access and convince millions of people. Power of persuasion is crucial in a transition towards sustainability because most substantial changes, to be sustainable in the long run, have to be based on free will of individuals.

This chapter is an empirical study that attempts to identify what kind of values and concerns ENGOs advance and communicate through their outreach efforts to the general public, as part of their direct political action. My key interest here is to challenge a widely-held assumption that ENGOs are "ethical" agents "doing good". The point was not to overturn this view completely but rather to try to get a better idea of how well-grounded these perceptions are. As noted in the previous chapter, sometimes the public trust NGOs even without being really able to explain why (GlobeScan, 2012). If unfounded trust as a trend continues unchecked, at some point it might result in general disenchantment of the public with these actors. Assumptions underpinning the trust and actual behavior of ENGOs should be analysed under more scrutiny.

One way to assess how ENGOs live up to expectations is simply to compare expectations to reality. High level of public trust implies that ENGOs are expected to have a solid ethical stand which the public shares. For the public to know about this moral position – and about related ethical challenges – it is necessary that the ENGOs communicate to the public what values underpin their work and why they do what they do. An analysis of outreach communication of ENGOs to the general public could help understand what ENGOs want their supporters to consider important, what ideas and solutions they promote, and which moral reasons ENGOs advance to motivate the public to act on a problem.

Out of a wide range of ENGOs and civil society groups I selected two ENGOs, WWF and Greenpeace. The main reasons for this choice are their recognisability and global presence. Recognisability might be a difficult characteristic to measure scientifically, especially when it

comes to testing it across countries. To my knowledge, there are no studies that focus on identifying the most recognized or famous environmental NGOs globally. However, based on global presence and networks of WWF and Greenpeace, the amount of supporters in different countries and geographically diverse spheres of activity, it can be assumed that these ENGOs are among top well-known organizations in their field around the world[60].

In order to see how WWF and Greenpeace live up to the expectations of the public as "ethical agents" this study looks into the content of their outreach communication, and the angle it takes has to do with values. It is often assumed that ENGOs' work and messages to the public are based on "good" values, on ethical concerns that are in everyone's interest, on altruistic motives to protect a common good. ENGOs also advance social justice concerns that are intertwined with environmental degradation. Perhaps the very reputation of ENGOs is rooted in the fact that people believe in ENGOs' moral authority.

But before moving to communication it is important to acknowledge that there is another aspect of ENGOs' work which is central to their moral authority, to how public perceives them. These are ENGOs' program activities, such as preservation and conservation efforts. It could be argued here that actions mean more than words. If an ENGO actually creates protected habitat for tigers or works together with authorities to reduce elephant poaching practices, the results speak for themselves better than words. To check the efficiency of program activities, any interested individual could look into ENGOs' annual reports or other documents, and this is not the aim of this study.

ENGOs definitely gain moral authority for taking action to protect concrete species but one concern here is that they use this authority to project it onto other dimensions of their work. For example, an ENGO well-known for saving tigers and elephants can have a conservative position covering a weak ethical stand with regards to global climate deal (more favouring status quo, not pushing far enough as justice concerns would require). But because of its reputation for saving tigers and elephants the public would support its position in any other area of work, including climate change.

[60] For example, large ENGOs such as Environmental Defence Fund or Nature Conservancy are well-known and active in the US. However, these ENGOs are much less known to the general public and have much less supporters outside the US. In terms of their activities, these ENGOs also tend to focus primarily on US environmental issues.

Program activities are a very important part of ENGOs' work but it is not the only one dimension in which they can make a difference. Raising awareness about environmental problems and ethical challenges associated with them is as important. This power to make a difference should be recognized and harnessed first and foremost by ENGOs themselves. Studies like this one might help ENGOs get an outsider's perspective on how their work is perceived and what kind of impact it can and cannot make. The content of ENGOs' outreach communication is crucial to understanding how well-developed their ethical stands are, what kind of awareness they are raising and what the role of ethical concerns in this awareness is.

ENGOs' outreach and communication with the general public happen through their campaigns. In order to reach the general public, apart from protests in front of parliaments or oil platforms, ENGOs traditionally use mass media (advertisement on TV, radio, printed media) and since more recently internet (ENGOs' websites and mailing lists, social networks, advertisement on other websites, etc.). Advertisements contain links to ENGOs' websites where more information on a given topic and a lot of other materials is available. It can be deducted then that the first step which interested members of the general public take (especially the younger generation) is to go to the website of these ENGOs and get acquainted with the information there. Thus, materials available on WWF and Greenpeace websites are a valuable source of data for someone who wants to know what the key messages of these ENGOs are to the public, what concerns and values they advance, and which solutions they propose.

This study looks at the campaigns of WWF and Greenpeace on climate change, probably the most urgent and significant environmental challenge of our times. All major international ENGOs do at least some work directly or indirectly related to climate change. Both WWF and Greenpeace put climate change at the top of their agendas. Analysis of climate change campaigns of these ENGOs could give a snapshot of ENGOs' values, concerns and political priorities that are passed on to the general public. The study pays special attention to the ways these ENGOs frame and prioritize concerns for future generations, one of the most important sustainability values.

Methodology

The study aimed to answer two **research questions**:

1. What kind of values do ENGOs such as Greenpeace and WWF stand for and communicate in their climate change campaigns?
2. How are concerns for future generations framed in these campaigns? What weight do these concerns have in relation to other values?

In order to answer these questions two case studies were selected: international climate change campaigns of WWF or Greenpeace. While these ENGOs have vast global networks and sometimes national offices conduct their own campaigns, the focus of this study was specifically on global, or international, campaigns of these organizations in which they appear as unified actors (WWF as a global ENGO and Greenpeace as a global ENGO).

Case study selection and importing data

The case study selection was based on the "crucial" case study selection method. The method consists in choosing case(-s) that are most likely to exhibit a given outcome (Gerring 2008). In this study the outcome is a shift towards sustainability values. I assume that out of a wide range of ENGOs and civil society groups WWF and Greenpeace are the most likely to achieve changes in public opinion, attitudes, norms, and values that would eventually result in a large-scale societal transformation. I assume that because both ENGOs are large in terms of budget and global presence, both have international reputation and recognition and, most importantly, both actively engage with the general public through their campaigns and other activities. Finally, both ENGOs actively work on climate change.

The data used for this analysis was collected in the period from May to June 2013 from **global** websites and official YouTube channels of WWF and Greenpeace. Materials included text (as documents and as part of internet pages), pictures (part of documents and internet pages), and videos. Only materials published in the period from January 2008 to June 2013 were included in the analysis. Such time limit had to be established in order to keep the study focused. WWF and Greenpeace have been using their websites to interact with the public for more than a decade but the quantity and quality of materials that they publish online increased in the last years. An important factor that determined 2008 as a starting year was

the UNFCCC Conference of Parties in Copenhagen in December 2009. Civil society built up high expectations of the event and the work done can be traced in a substantially increased number of climate change related materials of different kind that ENGOs published on their websites during 2008.

The main criterion for collecting data was its accessibility. As long as text documents, videos, presentations, slide shows, etc. were available in open access on the websites and official YouTube channels of WWF and Greenpeace and could have been accessed and downloaded by any interested member of the public, they were included in the study. Some documents were more technical than the others and might have targeted more advanced public with certain level of knowledge about the issue. However, the fact that these documents were accessible by anyone under "climate change" tabs meant that this information was shared with the public and was part of climate campaigns.

In order to ensure that all relevant data is covered all text documents, videos, and internet pages in English under "climate change" tabs or on "climate change" playlists in YouTube were included into the analysis. Total amount of data used in this analysis was 73 videos, 207 texts, 76 internet pages. One set of data was used to answer both research questions. The data was imported into NVivo, software designed to optimize qualitative analysis of large data volumes. All internet pages were saved in a format which enabled word search queries in the text that they contained.

While initially designed to work with text, NVivo also provides tools to work with graphic and video materials. Images from internet pages and text documents, as well as videos, were tagged (transformed into verbal messages by means of keywords) as part of analysis. Basically, depending on what each image represents, what message or messages it carries, the image got a keyword or words attached to in. Same process applied to videos – as a whole and to certain parts and moments. By the time all data was imported into NVivo every document, internet page and video had one or more keywords attached to it which characterized the message that this source delivered. For example, if a photo in a report on [what] depicted a child from a poor rural village the tags would be "children", "development", and "vulnerability".

Coding

The main method used in this study is content analysis. Normally content analysis is performed on text documents but it is possible to apply this method to videos and pictures, as well, if these media can be interpreted as text. The first step to perform content analysis on the data set is to assign codes to data (Berg 2001). In NVivo this process translates into coding relevant pieces of information at nodes. Nodes are analytical hubs in NVivo to which references to different data sources can be "tied" (or "coded at").

In my work I used two coding methods (manual and search queries) in order to include as much relevant data as possible in the analysis. To analyse video and graphic (part of text documents or internet pages) materials I used manual coding. For example, if a video contains mentioning of fossil fuels (in voiceover or graphic representation) a link to this video can be coded to a node "fossil fuels". It is possible to code the exact part of the video that mentions fossil fuels and later access this reference (along with references to other coded sources in this node) by clicking on "fossil fuels" node. Nodes accumulate all the relevant references to a particular category, word, topic, etc. and allow apply statistical analysis tools to initially qualitative data. The results of search queries (how many times a word appears in sources, for example) can also be coded to nodes.

First, the task was to identify what key themes as possible foundations for values occur most often throughout all the campaigns. To find that out, all graphic and video materials were analysed and coded under analytically developed nodes (first round of manual coding). While going through the material, I manually selected and marked references (verbal and graphic) that could trigger or be linked to certain values. These references were coded at individual nodes and added to the "THEMES" folder. For example, images of polar bears frequently appearing in pictures and videos were coded at a child node "polar bears" and parent nodes "the Arctic" and "wilderness". Images of animals, like polar bears, pandas or tigers, resonate, for example, with such value as "care for wild life / nature".

After manual coding of video and graphic materials was completed, I ran search queries to check (1) for the presence of identified themes in texts (text documents and texts from internet pages) and (2) for most frequently used words in all sources (texts and coded video and graphic materials). Thus, first, I ran text queries for each of the identified themes (for

example, how many times words ACTION or NATURE occur in texts). The results of these queries were coded as individual nodes at SEARCH QUERIES folder.

Important to note here is that manual coding and coding search queries' results were used as complimentary methods. For example, graphic material was spread throughout different types of sources. A lot of pictures (logos, cartoons, etc.) were posted directly on website pages of WWF and Greenpeace but there were also some embedded in documents that could be downloaded from these websites (reports, presentations, policy briefs, etc.). I coded manually images irrespectively of where they came from, including text documents. But I did not code texts manually, for that purpose search queries were used.

Identifying key values

After identifying key references from all sources through manual coding and search queries, I tried to distil a set of values from that list. Based on a study by Leiserowitz and colleagues (2006), I have compiled a set of values that are central to sustainable development – sustainability values. These values were derived from the Millennium Declaration of the General Assembly of the United Nations (basis for Millennium Development Goals), from the Earth Charter (2000) and from the Great Transition Scenario (2002).

I then tried to attribute themes that emerged from manual coding and search queries to each value. For example, a value of SOLIDARITY can include notions such as action, solidarity, global movement, change the world together that were identified during manual coding. SOLIDARITY, like other values, is vague enough to be difficult represent in images and videos. I, therefore, included other themes from graphic and video materials that could be considered as an interpretation of this value. The value, however, is specific enough as a concept to run one search query to see how many times it is mentioned in the text.

Not all values from Leiserowitz' list were represented in THEMES. Values such as peace, freedom or tolerance were not picked up during manual coding. That does not necessarily mean that those values are missing from the campaigns. That rather means that these values were more difficult to present graphically than verbally. That is why search queries for these key words showed more results.

After adding references to the pre-determined list of values from Leiserowitz et. al. (2006), I also identified six more values that were not part of sustainability values but were prevalent in the campaigns. These values, based on key words in CAPS, are "belief in the power of TECHNOLOGY", "climate change as a SECURITY or SAFETY THREAT", "INDIVIDUAL(ism)", "SCIENCE or SCIENTIFIC justification", "FUTURE" and "belief in the effectiveness of POLITICAL action or POLITICS or GOVERNMENTS". These values were attributed with relevant themes from manual coding and then with individual search queries based on words in CAPS.

Then a total number of references was calculated for each value by adding references from manual coding (video and graphic materials) and search queries (text materials). This column provided a clear picture of what emphasis was placed by WWF and Greenpeace on different values in communicating climate change to the general public.

Finally, to answer the second research question (how concerns for remote future generations are framed) I ran search queries with key words such as "future", " future generations", "children", "grandchildren", "humanity", "humankind", "posterity", etc.

Results

Table 1. THEMES (from graphic and video materials).

Name	Sources	References	Name	Sources	References
wild nature	39	64	global movement	5	5
renewable energy	46	57	Ecosystem	4	5
Planet	39	52	Footprint	4	5
Action	36	49	Victim	5	5
climate change	41	47	secure for all life on earth	4	4
Solidarity	37	46	Wastefulness	2	4
Children	32	45	Sustainability	4	4
Coal	27	44	Green	4	4
Water	29	40	Consciousness	3	3
Threat	30	40	Finance	3	3
Arctic	33	37	Imagine	3	3
polar bear	18	21	Floods	3	3
climate leadership	24	29	music, dance, fun	3	3
governmental action	11	12	change the world together	3	3
Community	26	28	Diversity	3	3
indigenous communities	23	38	Food	3	3
scientific justification	20	25	Bike	2	2
Vulnerable	10	23	Inspiration	1	2
changing planet	22	22	Business	2	2

Future	15	18	Home	2	2
individual habits	15	17	planet (2)	1	2
personal experience	16	16	get involved	2	2
right thing to do	12	14	new ideas	2	2
Forests	13	14	Health	2	2
unsustainable economic development	10	13	human race	1	1
Consumption	11	11	climate justice	1	1
oil and gas	10	10	Panda	1	1
Biodiversity	10	10	Share	1	1
political change	9	10	Challenge	1	1
climate agreement	8	10	world of enough	1	1
individual ideals	9	9	Recycling	1	1
Awareness	9	9	Management	1	1
Cooperation	9	9	Opportunity	1	1
CO2 emissions cut	8	9	Disease	1	1
Solutions	7	9	Harmony	1	1
new technologies	5	6	public transport	1	1
intergenerational solidarity	8	8	Family	1	1
change the way you think	7	7	Sustaina	1	1
Overfishing	6	6	Choice	1	1
Foresight	6	6	Inspire	1	1
Connectedness	6	6			

Table 2. "Most frequent words" and other search queries' results.

Keyword	Number of sources	Number of references
01_energy	235	20638
02_climate	303	9397
03_power	159	8092
04_emissions	227	7841
05_electricity	85	6249
06_global	271	5786
07_renewable	144	5704
08_countries	242	5406
09_change	297	5282
10_carbon	208	4609
11_coal	136	4483
12_wind	91	4363
13_solar	71	4050
14_world	241	3900
15_gas	152	3688
16_use	198	3613
17_evolution	78	3473
18_development	187	3438
19_demand	113	3405
20_international	231	3139
21_new	239	3137
22_generation	88	2817
23_heat	69	2781
24_oil	134	2772

25_nuclear	102	2592
26_biomass	58	2553
27_industry	141	2475
28_costs	137	2467
29_plants	93	2458
30_transport	86	2362
31_water	138	2351
32_capacity	136	2294
33_future	214	2290
34_production	137	2278
35_reduction	156	2240
36_policy	203	2233
37_national	192	2100
38_sustainable	153	2094
39_arctic	85	2032
40_share	159	2026
Other search queries		
Future generations	17	30
Humanity	30	38
Values	49	246
Nature	138	508
Environment	148	998
Community	143	745
Equity	46	174
Justice	9	16
Fairness	17	25
Vulnerable	96	366
Help	145	635
Poor	87	277
Responsibility	104	449

Table 3. Values in climate change campaigns of WWF and Greenpeace.

SUSTAINABILITY VALUES	RELATED GRAPHIC AND AUDIO THEMES from manual coding	Number of reference in SEARCH QUERIES (automatic)	Number of reference in GRAPHIC and AUDIO THEMES (manual coding)	TOTAL References
List of values from Leiserowitz et.al. (2006)				
PEACE	-	61	-	61
FREEDOM	-	16	-	16
SOLIDARITY	Action (49), solidarity (46), global movement (5), change the world together (3)	27	103	130
TOLERANCE	-	16	-	16
SHARED RESPONSIBILITY	Changing planet (22), climate leadership (29) – including governmental action (12), cooperation (9), global movement (5), change the world together (3)	2	80	82
DEVELOPMENT	Indigenous communities (38), footprint (5)	3438	43	3465
ENVIRONMENTAL	Changing planet (22), footprint (5)	80	27	106

PROTECTION				
respect for NATURE	Wild nature (64), planet (52), water (40), arctic (37), forests (14), biodiversity (10), ecosystem (5), footprint (5)	508	227	735
LIFE SUPPORT SYSTEMS	Coal (44), forests (14), water (40), oil and gas (10), overfishing (6), connectedness (6), footprint (5)	3	125	128
COMMUNITY	Community (66) – including indigenous communities (38), global movement (5)	745	71	816
EMPLOYMENT	-	580	-	580
CONSUMERISM	Consumption (11), footprint (5), wastefulness (4)	1598	20	1618
HEALTH	Health (2)	612	2	614
EDUCATION	-	72	-	72
OPPORTUNITY	-	263	-	263
EQUITY or JUSTICE or EQUALITY	Right thing to do (14), victim (5), vulnerable (23), conscience (3)	174	45	219
Other identified values				
(Belief in power of) TECHNOLOGY	Renewable energy (57), solutions/new technologies (9)	2003	66	2069
(Climate change as a matter of) SECURITY/SAFETY /THREAT	Coal (44), threat (40), changing planet (22), unsustainable economic development (13), oil and gas (10), overfishing (6), secure for all life on Earth (4), floods (3)	821	142	963
INDIVIDUAL(ism)	Action (49), Individual habits (17), personal experience (16), individual ideals (9), music/dance/fun (3), change the world together (3), bike (2), change the way you think (7)	337	106	443
SCIENCE or SCIENTIFIC (justification)	Scientific justification (25)	1003	25	1028
FUTURE	Future (18), intergenerational solidarity (8), children (45), foresight (6), imagine (3), human race (1)	2290	81	2371
POLITICAL or POLITICS or GOVERNMENTS	Action (49), change the world together (3), political change (10), climate leadership (29), including governmental action (12), climate agreement (10), CO2 emissions cut (9), finance (3)	1338	113	1451

Discussion

Analysis of climate change campaigns of WWF and Greenpeace with NVivo software helped generate a clear picture of what WWF and Greenpeace communicate as important in the context of climate change, what kind of issues and ideas they emphasize and what values they advance to the general public. This analysis generated some interesting findings.

Which words dominate the debate?

First, a “word frequency” query identified most frequently used words in all sources (all texts and coded video and graphic materials). The statistics presented in Table 1 gives an idea of priorities that shape outreach and discourse of WWF and Greenpeace.

The word totally dominating the narrative is ENERGY. Energy is mentioned more than two times more often than the next runner-up, CLIMATE (20638 against 9397 references). This is a peculiar finding, considering that the very topic of these campaigns is CLIMATE change. Words POWER, EMISSIONS, ELECTRICITY, RENEWABLE and CARBON are also among top ten most frequently used words. COAL, WIND, SOLAR, GAS, HEAT, GENERATION, OIL, BIOMASS, NUCLEAR are all among top forty most frequently used words. ENERGY (renewable and not) is the key theme of climate change campaigns of Greenpeace and WWF.

Another point worth mentioning hides behind such words as DEMAND, INDUSTY, PLANTS, CAPACITY, PRODUCTION. These key words signal that the discussion is framed in terms of economic activities. A curious moment: two words, PRODUCTION and REDUCTION, opposite in meaning, follow each other on places 34 and 35 respectively.

Climate change campaigns of WWF and Greenpeace, based on these findings, seem to interpret climate change primarily in economic terms as an energy issue, mostly about switching from old unsustainable to new renewable sources of energy. They present fossil fuels in a negative light (dark backgrounds, smoke, gloomy images) and propose as a main solution to the problem renewable energy (positive visualization, often wind mills with a background of a dawn sky, symbols of hope like rainbows).

Other remarkable references are GLOBAL (5786) and COUNTRIES (5406), both among top ten most frequently used words, as well as WORLD (3900), INTERNATIONAL (3139), POLICY (2233) and NATIONAL (2100). This finding indicates that WWF and Greenpeace campaigns present climate change as a matter of global importance that should be resolved through intergovernmental activities. The solution to climate change is framed in terms of INTERNATIONAL and GLOBAL efforts of COUNTRIES, not INDIVIDUALS. INDIVIDUAL (337 references) action or efforts, in fact, did not even make it to top 40 most frequently used words. These empirical findings support the argument that ENGOs favour

indirect political action (convince governments which can later convince the general public) in resolving climate change.

Surprisingly, such words as NATURE (508) and ENVIRONMENT (998) did not make it to top 40 most frequently used words. This finding could potentially question the rationale for actions proposed by WWF and Greenpeace. How is it that in their campaigns about climate change these ENGOs use the word ENERGY *forty one* times more often than NATURE? Among other things, this finding says something about priorities that WWF and Greenpeace pursue through their campaigns and in their work.

Interestingly, framing climate change as an issue of justice and fairness also does not seem to be the case for these ENGOs. JUSTICE was only mentioned 16 times in 9 sources and FAIRNESS 25 times in 17 sources throughout all the vast materials of their campaigns. EQUITY was more frequent with 174 references. The words POOR (277), VULNERABLE (366) and HELP (635) were more prominent in the materials. RESPONSIBILITY was invoked 449 times, 5 times in vicinity of 10 words from the word RICH, in the contexts indicating that rich countries should take responsibility for combating climate change and for less developed countries.

Concerns over the FUTURE (2290) were number 33 out of 40, which confirms that climate change is presented as a strategic, long-term impact issue. References to the future will be discussed in more details below (answer to research question 2).

Research question 1: *What kind of values do ENGOs such as Greenpeace and WWF represent and communicate in their climate change campaigns?*

Identifying a set of values that ENGOs communicate in their climate change campaigns is the most important part of this analysis. Before I proceed to explaining my findings and conclusions, I would like to take a moment to acknowledge methodological challenges of this work. Values are particularly vague concepts and may invoke different ideas, feelings, and interpretations in different people. Using NVivo software as an analytical tool was useful to make the process as objective as possible.

Manual coding of videos and images was the part mostly susceptible to subjectivity as these data can often be interpreted in different ways, depending on the person who analyses it.

Therefore, having all the coding recorded in NVivo allows the underpinning variables of this study to be transparent and open for revisions by any interested party. I do not claim monopoly on truth with my way of coding and agree that if other people did the same work, they might get somewhat different results. But all my conclusions can be traced back to the original data (NVivo project attached on a CD to the hard copy of this dissertation) which makes the study transparent and viable.

According to the empirical findings, WWF and Greenpeace make emphasis on the following values in their campaigns (sorted by number of references): DEVELOPMENT (3465), care/concerns about the FUTURE (2371), belief in the power of TECHNOLOGY (2096), CONSUMERISM and consumption (in a negative light, 1618), belief in the power of GOVERNMENTs and the importance of POLITICS (1451), belief in SCIENCE and scientific justification (1028); followed by the vision of climate change as a SECURITY or SAFETY threat (963), the role of COMMUNITY (816), respect for NATURE (735), importance of HEALTH (614) and EMPLOYMENT (580), and INDIVIDUAL action and effort (443).

Concerns about SOLIDARITY (130), EQUITY (174), FAIRNESS (25) and JUSTICE (16) were also present in these campaigns but they did not make it very far in terms of total number of references. Other values communicated in the campaigns were OPPORTUNITY (263), Earth as LIFE SUPPORT SYSTEMS (128), ENVIRONMENTAL PROTECTION (106), SHARED RESPONSIBILITY (82), EDUCATION (72), PEACE (61), TOLERANCE (16), and FREEDOM (16).

Important to note, these results are based on a total number of references from both manual (THEMES) and automatic (SEARCH QUERIES) coding. However, if we look separately at the manual coding (videos and images mostly), the result is quite different. Graphic and video materials of campaigns, according to the study, represent the following values: respect for nature (227), climate change as a security or safety threat (142), Earth as life support system (125), belief in the power of political change and governments (113), individualism (106), solidarity (103), concerns about the future (81), shared responsibility (80), community (71), belief in power of technology (66), equity, justice, and equality concerns (45), development (27), environmental protection (26), science and scientific justification (25), consumerism (20), health (2).

The difference between the two lists is probably determined by the fact that visual messages, unlike texts, can better transmit images of wild nature and animals that refer to the "respect for nature" value. Positioning climate change as a threat can resemble the value of rightful protection of oneself, one's family and habitat. Individualism in this case refers to the idea of individual action that people can take – however, most of the time this action (encouraged by ENGOs) is to support their activities directed at influencing governments. Important to notice, campaigns are dominated by images of people from indigenous communities, most of the time captured working or engaged in some productive activities. There is also a continuous theme of change, both positive and negative. The very term CLIMATE CHANGE contains this word, and it is often referred to changing planet, or changing (worsening) conditions. Positive image of change is mostly reflected in calls for action and "changing the world together".

What do these lists tell us? First, they give a clearer idea, supported empirically, about the kind of values that ENGOs promote in their campaigns and what kind of solutions to climate change they advocate for. The message can be framed in terms of five strongest values (by number of reference) that WWF and Greenpeace advance to the general public: development, technology, governments, science and security.

This contributes to the discussions about ENGOs as "the conscience of the world" and "doing good", unfolding the underpinning ideas behind their message. Secondly, these lists clearly demonstrate that the communicated values do not correspond exactly with the list of sustainability values, combined from several internationally agreed documents. Effectively, this means that the study could contribute to the debate about sustainability values by adding new values identified empirically. These lists also give an idea of proportional emphasis on different values in the campaigns and confirm the argument that governmental action is considered a bigger priority by ENGOs than individual behavioural change or value shift in the society.

Research question 2: *How are concerns for future generations framed in climate change campaigns of WWF and Greenpeace? What weight do these concerns have in comparison with other values?*

In order to better understand what place concerns for the future and for future generations occupied in climate change campaigns of WWF and Greenpeace I ran several targeted search queries in all sources. Search queries generated the following results: FUTURE (2371), CHILDREN (123), HUMANITY (38), FUTURE GENERATIONS (30), HUMANKIND (8), INTERGENERATIONAL (3), POSTERITY (2).

The word FUTURE is mentioned throughout all sources in total 2371 times which places it among top 40 most frequently used words in the campaigns, but towards the bottom of the list, at the 33rd position. 199 out of 284 text sources (texts and internet pages) mentioned FUTURE at least once; it was also coded in 15 videos out of 63. This indicates that climate change is presented as a strategic, long-range problem that will affect the future of the present generation and of humanity as a whole. The words FUTURE and PLANET co-occur within 4 words from each other 38 times in 31 sources (e.g. the future of the planet, etc.); the words FUTURE and CHILDREN - 8 times in 6 sources (e.g. our children's future, etc.); the words FUTURE and HUMANKIND – 5 times in 3 sources (every time as part of Article 3.1. of UNFCCC[61]).

Climate change and unsustainable development are presented as a threat to vulnerable groups, especially children. FUTURE in graphic and video themes is primarily associated with the images of children, often from indigenous communities (45 references from 32 sources of graphic and video materials were coded to the node CHILDREN). The values of compassion, family, paternalism, parents' care for their children are invoked with these images.

There are 30 references to FUTURE GENERATIONS in 17 sources throughout the campaigns. Only five times the term is used as part of a Brundtland definition of sustainable development or as part of UNFCCC language. Other references are made to future generations in the context of EQUITY, but not justice or fairness.

FUTURE GENERATIONS is primarily used as a term in text documents. There are indications that their existence and wellbeing would be contagious on our current decisions (thus, phrases like "for the sake of" or simply "for" future generations) but there are no

[61] "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities, thus, the developed country Parties should take the lead in combating climate change and the adverse effects thereof"

elaborations with regards to how far in time those future generations would exist. In video and graphic materials the closest representations of future generations are images of children.

This finding confirms my previous conclusions that the fact that remote future generations would be the ones mostly affected by climate change has not yet been interpreted and represented as a motivational factor in actions on climate change. To create motivation, ENGOs use images of children to indicate out link to the future. Long-term dimension of the value "care for future generations" was not represented in the campaigns. It is important to admit that consequences of climate change would spread way into the future and affect not only our children and grandchildren. It is, thus, crucial to elaborate on different meanings of future generations, other that our immediate off-springs.

In comparison to other issues, concerns about the FUTURE in the analysed campaigns can be placed somewhere between very strongly advocated ENERGY and INTERNATIONAL POLITICS debates and very poorly represented discussions and arguments about climate JUSTICE, INTERGENERATIONAL EQUITY or SOLIDARITY. Most of the time concerns about the future are used as a motivational argument (a "doomsday" aspect). Much more rarely are these concerns framed as part of an ethical debate regarding obligations to less fortunate present people and remote future people. When they are framed this way, it is often related to quotes from key documents of international climate regime (UNFCCC, Kyoto Protocol, Brundtland Report, etc.).

To summarize, WWF and Greenpeace use future-oriented concerns primarily as a motivational tool but they do not differentiate between immediate and remote posterity. While references to the future are regularly deployed as part of their climate change campaigns, these concerns fall behind other issues that have to do with solutions proposed by these ENGOs. To put it very simply, these findings tell us what WWF and Greenpeace tell the public climate change is all about. It is primarily about ENERGY and it is about INTERNATIONAL POLITICS. Much less than that, climate change is about the FUTURE and it is almost not at all about JUSTICE and EQUITY. These findings raise serious questions regarding the general perception of ENGOs as "as doing good" and as "the conscience of the world". They also reinforce – rather than answer – a question of unequivocal public trust in NGOs' normative stand. However, the last point might be specifically related to the two ENGOs analysed.

Conclusion

The main concern underpinning this study is that blind public trust into moral authority of ENGOs means that the public does not question ethical stands of these organizations. ENGOs are expected to have strong moral position as the actors "doing good", just by being part of the camp of non-governmental organizations. In the past, it might have been the case – in times, when NGOs were establishing themselves as part of a global dialogue, as actors that stand up for people or issues unrepresented otherwise. Without an impregnable ethical stand thirty or forty years ago ENGOs had little chance to be supported by the public and heard and recognized by the governments.

In more recent years the actions of ENGOs, especially the most well-known and wealthy ones, have been much less about challenging the existing order and much more about compromising. Their role as the "consciousness of the world" in bringing forward difficult ethical questions has been reduced to repetition of principles established in UNFCCC and mild criticism of the on-going political processes. ENGOs no longer initiate and guide ethical discourse, they rather blend into it. Compromises imply giving up part of one's interests, and it might be that ENGOs have given up part of their identity which was responsible for challenging moral order and making it better.

The findings of this study confirm that concerns of justice, equity, vulnerability, intra- and intergenerational solidarity are rather poorly represented in climate change campaigns of WWF and Greenpeace. Concerns about energy and international climate politics were much more prominent. Climate change was framed in these campaigns primarily as a challenge of switching from old, unsustainable sources of energy to new, sustainable ones. This thread, by far, dominated the whole narrative. The second most visible theme was framing climate change as a matter of international politics, as an issue to be resolved by countries, through international collaboration and national efforts – as opposed to individual changes in habits, attitudes, lifestyles.

This study identified key values that underpin climate campaigns of WWF and Greenpeace. The strongest emphasis was made on development, belief in progress of science and technology, belief in power of governments and importance of international political action of countries, and security and safety aspects of climate change. Values such as respect for

nature, positive role of community, health, employment and individual action were also represented in these campaigns. An important place was given to future-oriented concerns and to framing climate change as a strategic, long-term problem.

The findings of this study confirm that WWF and Greenpeace do not account for differences in the interpretation of the term "future generations" and its implications to people's moral motivation to act sustainably. They frequently use images of children in their graphic and video materials, especially children from indigenous communities and least developed countries. The images of children are the one graphic representation of a link to the future, a representation of future generations. Overall, these campaigns trigger sentiment towards children but they do not really encourage the public to think about how our actions affect remote future people. They focus on today's costs and benefits, on specific technological solutions, and do not provide a bigger picture of global and individual moral responsibilities. Ethical positions of WWF and Greenpeace are not properly explained or justified, they are mostly assumed to be implicit.

While one should be careful extrapolating these conclusions on other ENGOs, these two organizations were chosen as "the most likely" ones to be heard and convinced by the general public around the world, due to their reputation and global presence.

Empirical findings from this study contribute to research on interactions between NGOs and general public. This qualitative analysis generated new findings that can help better understand a moral stand that ENGOs such as WWF and Greenpeace take on climate change. It also touches on the question of accountability and explains how this position is different from what is expected of NGOs, considering the highest possible level of public trust that these actors enjoy.

Conclusion

In light of global environmental change all human systems are subject to scrutiny. Anthropogenic pressure on the planet takes different forms, and they all should be examined in order to return to a balanced relationship between humans and nature. Climate change and many other environmental problems pose both practical and theoretical challenges but for the most part these issues cannot be resolved within any one given academic discipline, with market forces or through political effort exclusively. These challenges require interdisciplinary approaches.

This thesis was an attempt to contribute to an interdisciplinary perspective on climate change and global environmental degradation. It employed a constellation of approaches from several academic fields, including environmental and climate ethics, social and political sciences, international relations. All of these disciplines contributed to the study as they all contained inquiries regarding the main question of this dissertation, a value shift towards sustainability. I understand a value shift towards sustainability as a process primarily social in nature but which also includes distinct political and economic dimensions.

The term "value shift towards sustainability" rests on two important elements: the concept of values and the concept of sustainability. Values are the principles or moral standards of a person or social groups, the generally accepted or personally held judgment of what is valuable and important in life (Oxford English Dictionary, 1993). According to social psychologists, values are important predicators of behavior and attitudes. In political science values are conceived as part of ideology, which also has a clear influence on how societies operate. In international relations values are often approached through the lenses of norms that affect how international community works and what it prioritizes.

Philosophers have been arguing for several decades that ethics is at the heart of global environmental crisis and that the current system of values is inadequate to deal with challenges of such spatial and temporal magnitude (Jamieson, 1992). Mindset and values underlying and driving unsustainable actions of billions of people have to change if we want to restore a more balanced relationship with our environment and ensure social justice. Past shifts in values (abolition of slavery, emancipation of women, etc.) provide an example of

moral progress and give hope that the right course of action on our interactions with the planet is possible.

Values are slow to change and very hard to influence. How values spread and transform is largely outside of human control and even understanding, as well as the mechanisms of influencing them. However, one thing common logic tells us is that values are more likely to emerge and spread if they are formulated, challenged and deliberated than if they are vaguely implied in minds of many and voiced by none. This dissertation was an attempt to bring together different perspectives on values, on why and how they change and what they should look like, according to our moral theories, in order to contribute to and encourage further interdisciplinary dialogue about values for sustainability.

Speaking of a shift in values inevitably brings about the second element of the term that represents the final "destination" of this transformation. Sustainability is a normative concept that is closely intertwined with the concept of sustainable development – yet, lacking a precise definition of the latter. If sustainable development is a process, sustainability is more of a state of a system to which we should strive. Sustainability can be defined in many different ways as it is compiled of many dimensions (the triad of social, environmental and economic dimensions is one of the most general categorizations). However, any definition of sustainability is bound to be normative in a way as it would reflect a certain position regarding how the world and societies should look like.

Being a normative concept, sustainability rests on value judgments. Values define what kind of world we want to pass into the future. Unlike virtues which are always positive characteristics, values can be morally ambiguous or even negative (for example, someone can value material possessions over love and friendship). To help navigate this ambiguity while trying to identify what changes should be made to achieve sustainability we need guidance that can be provided by moral theories. Yet, as suggested by philosophers themselves, our moral theories are ill equipped to deal with the problems such as climate change and global environmental degradation – problems to which everyone contributes but nobody can be held responsible for.

There is a need for moral guidance, but there is little guidance there. Civil society actors, politicians, businesses and scholars from economics and other disciplines seem to contribute

to the conversation about the visions of sustainability much more actively than philosophers. But it is important that the proposed solutions are also analysed as morally right or wrong, just, far, equitable, good or bad. Fundamental theoretical inquiry into the moral dimensions of sustainability is lacking.

In order to contribute to an interdisciplinary dialogue on the role of values this dissertation addressed several questions. First, it was important to understand in what way values can be a solution to climate change and the global environmental crisis. This question was discussed in chapter 1. I argue that values are at the core of people's moral motivations to act (or not) sustainably and they lead the world straight into problems like the Tragedy of the Commons or the Pure Intergenerational Problem. Transforming values can help change the context out of which these problems emerge and help avoid or seriously undermine them.

Changes in values happen simultaneously at different levels: personal and collective. My interest in individual moral motivations to act sustainably led me to explore how values and virtues are at play in people's decision making in the context of sustainability. Values emerge through personal reflection, deliberation with others and the use of role models. Personal experience plays an important role in strengthening values. This has important implications for advancing sustainable behavior and values to a Passive Citizen. I also argue that appealing to virtues in communicating sustainability to the public could help trigger certain correlating values.

The next step was to understand in which ways values should change to achieve sustainability. What old values should be eliminated or transformed and what new values should emerge? These questions were tackled in chapter 2 of this dissertation. I argue that the dominant system of values in developed states has at least three major gaps that should be addressed. First, there is a culture of over-consumption that drives unsustainable practices, extraction of resources and production. Secondly, there is a lack of concept of individual responsibility for the global environmental crisis, a problem to which billions of people contribute but nobody can personally feel responsible for in the framework of existing conception of responsibility. Finally, there is an important issue of concerns for remote posterity which are poorly developed in the existing system of values but which have serious implications to our moral motivation to act sustainably.

The hazards of over-consumption are fairly familiar to the public and frequently addressed by civil society, international organizations, scholars and the media. It is a well-known issue that is rooted in capitalist values and boosted by advertisement and other business strategies. This problem of over-consumption requires both systemic transformation and changes in individual lifestyles and behavior. This challenge is reinforced not by one but by a cluster of values, that includes materialism and individualism. Due to the limited space of this project, this problem was identified as one of the key gaps in the system of values but not discussed deeper as it is addressed elsewhere.

Difficulty with conceptualizing responsibility in light of global environmental problems is a much less debated topic. The problem emerges because our established concepts of responsibility fail to account for a situation when individual contributions to the cause of future and present damage (e.g. climate change) are incrementally small and the effects of these actions cannot be traced back to individual sources. Thus, everyone is contributing (especially, citizens of developed states) but nobody can be held accountable for it and no one feels personally responsible.

One of the first scholars to voice this concern was Dale Jamieson (1992) and since then not many inquiries into the origins and implications of the problem have been conducted. Recent contributions from Walter Sinnott-Armstrong (2005), Simon Caney (2005) and by Allen Thompson (2012) reinvigorated the debate. More theoretical developments are needed to understand the ways in which personal responsibility for global environmental crisis could manifest itself and how it can be strengthened. I argue that it is crucial not to associate this sentiment too much with blame and despair but instead with hope and opportunity. This should direct people's motivation to take sustainable actions less because they feel guilty or pressured but because they understand that this is a good and the right thing to do.

Out of the three gaps that I identify in the dominant system of values concerns for remote posterity received the most attention in this dissertation and were discussed in detail in chapter 4. The role of future generations in people's moral motivations to act sustainably has become more prominent in light of developments such as the invention of nuclear weapons that give humans power to destroy the whole planet and a less obvious yet not less deadly process of global environmental degradation. The effects of our present actions on future generations can undermine their very existence. These concerns were registered in a

commonly invoked definition of sustainable development (UN 1987) and more recently elaborated in a report of the UN on intergenerational solidarity (2013).

In an overview of UN debates that also include the opinions of civil society I demonstrate that concerns for future generations are on the way to become one of global norms, along with peace, social justice, tolerance, etc. Advancing these concerns is a very important process which can help avoid the Pure Intergenerational Problem (Gardiner, 2011). If the context from which the PIP emerges changes and the impact of people's actions on remote posterity is included in their moral motivations, this would change the structure of people's incentives and pay-offs in a way that would prevent them from falling into the PIP.

But how can values change? Is there a way to advance and facilitate the shift? Are there mechanisms to promote certain values and concerns? Who would be the actors to conduct the transformation? These questions were subject of inquiry in chapter 3 which included perspectives from political science, social science, history, law, education, and communication. I argue that past value shifts provide rich material for inquiry regarding the mechanisms and time-frame of transition. A value shift towards sustainability, in my view, is an indication of moral progress which coincides with expanding the circle of moral concern of humans to include not only other humans in the present but also non-human animals and ecosystems, as well as future generations.

A value shift towards sustainability is already on the way, as demonstrated on multiple examples from different levels. New values can be enforced by strong regimes (obviously, not the preferred choice) and they can be advanced through education (from primary to high school, university level and continuing adult education) and awareness raising efforts (more shallow and less consistent in time than education). The actors actively involved in a transition towards sustainability (but not necessarily agreed on the final destination of this transition) and capable of advancing an idea of a value shift to the general public are governments, international organizations, business, civil society actors, including environmental NGOs, and individual norm entrepreneurs. They each have their agenda, capacity and limitations which I discuss in the chapter.

Among all the actors that can advance a value shift the most likely ones to do so are environmental NGOs, due to their non-profit mission to voice concerns of the disadvantaged,

including other species and the planet as a whole, and their established role of norm advocates. In chapter 5 I look closely at the place of these actors in global sustainable development politics and argue that, with time, many of them have drifted quite far from their founding ideals. Large and influential ENGOs engage into questionable partnerships with businesses and tend to focus much more on lobbying than on the public who is their primary supporters.

NGOs are the most trusted political actors, according to Edelmann's Barometer (2013). Due to their reputation among the public as ethical agents, ENGOs have a strong ability to influence what people think about environmental problems and how they act on their beliefs. In chapter 5 I argue that ENGOs have to recognize their capacity to change public opinion as political action in itself and try to view changes in public attitudes and behavior as a goal as important as changes in policies and laws. The public should be the primary target of their outreach efforts and their work, not merely a leverage to influence governments and businesses.

To get a better picture of what ENGOs communicate to the general public and what kind of values they advance I looked at climate change campaigns of two well-known international ENGOs, WWF and Greenpeace. Using NVivo I have analyzed in chapter 6 all the text, graphic, and video materials from early 2008 until June 2013 available on the ENGOs' websites and YouTube channels. The findings of the study have to a great extent supported my earlier argument that these ENGOs are indeed focused on governments and only view changes in public opinion as instrumental in pressuring states and business to achieve policy changes.

NVivo software also allowed conduct an analysis aimed at distilling values and key messages advanced in these climate change campaigns. The word by far dominating the debate was energy. Climate was the next most frequently used word and it was mentioned twice more rarely. This might be surprising as the issue at the heart of the campaign is climate change but this result demonstrates that ENGOs view and frame the issue primarily as a shift from using fossil fuels to using sustainable energy sources. Other findings were strong emphasis on the role of governments and international cooperation and on technology and science as solutions to climate change.

Values such as respect for nature, positive role of community, health, employment and individual action were also represented in these campaigns but were less explicit. An important place was given to future-oriented concerns and to framing climate change as a strategic, long-term problem. Yet, WWF and Greenpeace do not account for differences in the interpretation of the term "future generations" and its implications to people's moral motivation to act sustainably. They frequently use images of children in their graphic and video materials, especially children from indigenous communities and least developed countries. The images of children are the one graphic representation of a link to the future, a representation of future generations.

Bridging the theory of values with actual messages through which they are communicated was an important interdisciplinary link that illuminated the practical dimensions of advancing sustainability. It is important to note here that while I chose to focus on ENGOs as the most likely "ethical" agents to advance a vision of sustainability, the same method of distilling values from campaigns, advertisement and other outreach activities can be easily applied to other actors active in sustainability discourse, such as governments, businesses, international organizations, and individual norm entrepreneurs. Each group of actors, I believe, would have a distinct pattern of values that they choose to advance, some of which would overlap with other actors but some would be specific to each group.

Future research inquiries and creating a "map" of values advanced by different actors could confirm or disprove this hypothesis. More studies are also needed to improve our understanding of the mechanisms underlying the formation and transfer of values. This is a fruitful ground for cooperation among ethicists, communication and education scholars and social psychologists.

To conclude, the mix of disciplines and methods used in this dissertation might at times appear random but it was following a very specific logic. All the questions were focused on values, and these questions required different disciplinary perspectives to answer them. While my choice of methods and the balance of disciplines could be criticized depending on critic's preferred discipline, the overall goal of this thesis was to give an interdisciplinary perspective that could embrace as many angles and answer as many questions about values as necessary for a comprehensive idea. I do not claim to have a full picture (that could only emerge

through work of many scholars over many years), but I believe this dissertation took a first stab into developing such a picture.

There are still many avenues for future research on values. More research is necessary in order to improve our understanding of what are sustainability values and virtues, how they can be transmitted through education and awareness raising, as well as through deliberative processes and the use of role models. The role of communication and message framing is also crucial to advancing sustainability to the public, and it would be useful to know what messages are more efficient in achieving this goal than others. I believe that sustainability can be achieved in the future but this requires a large-scale interdisciplinary and international collaborative effort.

Concluding remarks

Climate change and global environmental crisis are altering the conditions in which people live. The world in which our grandchildren will live will be different from the one we live in today and also from the world which their grandchildren will be born into. The rapid scale of global environmental change will force people to adapt their ways and practices. However, this process does not have to be postponed to the future, when there will be no choice. Knowing the potential (and likely) disastrous consequences of climate change to which each and every one of us contributes should be enough to encourage people to think about their individual contribution and re-evaluate their daily routines, choices and practices.

Blaming "the government" or "corporations" for destroying the climate is hypocritical if one herself does not take any action to limit her ecological footprint. Many individual changes will contribute to a greater transformation and to a value shift towards sustainability. But, in my view, this change should be a conscious choice rather than a forced decision. People should be aware of the fact that some new moral principles more appropriate to the changing world should be jointly developed through deliberation and individual self-reflection – and followed. And this dissertation was an attempt to bring together knowledge relevant to fulfilling this task.

Bibliography

Introduction

1. Artz, L., Ortega Murphy, B. (2000). *Cultural Hegemony in the United States.* SAGE Publications, Inc.
2. Barry, B. (1999). Sustainability and Intergenerational Justice. In *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* by Dobson, A. (ed.). Oxford University Press.
3. Box, D. (2009). Paradise Lost. *The Ecologist*, 14th May 2009. Retrieved from: http://www.theecologist.org/blogs_and_comments/Blogs/Dan_Box_the_carteret_islands/269853/dan_box_blog_paradise_lost.html
4. Brown, D. (2014). *Ethics and Climate blog.* Available at: http://blogs.law.widener.edu/climate/
5. Jamieson, D. (1992). Ethics, Public Policy and Global Warming. *Science, Technology and Human Values*. 17: 139-153.
6. Johnston, P., Everard, M., Santillo, D. & Robert, K.H. (2007). Reclaiming the definition of sustainability. *Environ Sci Pollut Res Int*. 2007 Jan;14(1):60-6.
7. Kelman, I. (2008). Climate change and displacement. *Forced Migration Review*, FMR 31 October, 2008. Retrieved from: http://www.fmreview.org/climatechange
8. Pachauri, R.K. (2010). Foreword. *Climate Ethics: Essential readings.* Gardiner, S., Caney, S., Jamieson, D., Shue, H. (eds.). Oxford University Press.
9. Revkin, A. (2006). Updating prescriptions for avoiding worldwide catastrophe. *New York Times*, 12 September 2006.
10. Shue, H. (1999). Global Environment and International Inequality. *International Affairs* 75: 531-545.
11. UN (2011). *Human Development Report.* Retrieved from: http://hdr.undp.org/en
12. UN (2012). *The Future We Want.* Outcome document of the united Nations Conference on Sustainable Development, Brazil, June 20-22 2012. Retrieved from: http://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf
13. World Bank (2014). *CO2 Emissions* (Metric Tons Per Capita). Retrieved from: http://data.worldbank.org/indicator/EN.ATM.CO2E.PC/countries/1W?display=default

Chapter 1

1. Aldy, J.E., Barrett, S. & Stavins, R.N. (2003). Thirteen plus one: a comparison of global climate policy architectures. *Climate Policy, 3(4), December 2003*, pp. 373-397.
2. Baer, P. (2002). "Equity Greenhouse Gas emissions, and global common Resources", Chapter 15 in *Climate Change Policy: A Survey*. Island Press.
3. Barrett, S. (2003). *Environment and Statecraft.* Oxford University Press, Oxford.
4. Barry, B. (1999). Sustainability and Intergenerational Justice. In *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* by Dobson, A. (ed.). Oxford University Press.
5. Böhringer, C. & Welsch, H. (2006). Burden Sharing in a greenhouse: egalitarianism and sovereignty reconciled. *Applied Economics, 38*, pp. 981-996.
6. Brown, D. (2002). *American Heat: Ethical Problems with the United States' Response to Global Warming.* Lanham, Md.: Rowman & Littlefield.
7. Corfee-Morlot, J. & Höhne. N. (2003). Climate change: long-term targets and short-term commitments. *Global Environmental Change*, 13, 2003, pp. 277-29
8. Den Elzen, M., Meinshausen, M. & van Vuuren. D. (2007). Multi-gas emission envelopes to meet greenhouse gas concentration targets: Costs versus certainty of limiting temperature increase. *Global Environmental Change-Human and Policy Dimensions* 17(2): 260-280.
9. de-Shalit, A. (1995). *Why Posterity Matters: Environmental Policies and Future Generations.* London, Routledge.
10. Di Paola, M. & Pellegrino, G. (eds.). *Canned Heat.* New Delhi: Routledge Publishing.
11. Di Paola, M. (2013). Climate Change and Moral Corruption. *Philosophy and Public Issues (New Series)*, Vol. 3, No. 1 (2013), 55-67. Maffettone, S., Pellegrino, G. & Bocchiola, M.
12. Di Paola, M. (2014, forthcoming). Virtues for the Anthropocene. *Environmental Values.*
13. Earth Charter Initiative (2008). A Short History of the Earth Charter Initiative. Retrieved from: http://www.earthcharterinaction.org/download/about_the_Initiative_history_2t.pdf
14. European Commission (2011). Transparency Register. Available at http://ec.europa.eu/transparency/civil_society/index_en.htm

15. Freeman, M. III. (2001). Economics. Jameson (ed.) *A Companion to Environmental Philosophy.* Blackwell Publishers Ltd.
16. Gardiner S.M., Caney, S., Jamieson, D. & Shue, H. (eds.). (2010). *Climate Ethics: Essential Readings.* Oxford, University Press.
17. Gardiner, S.M. (2004a). Ethics and Global Climate Change. *Ethics* 114: 555-600.
18. Gardiner, S.M. (2004b). The Global Warming Tragedy and the Dangerous Illusion of the Kyoto Protocol. *Ethics and International Affairs* 18 No.1.
19. Gardiner, S.M. (2011). *A Perfect Moral Storm: The Ethical Tragedy of Climate Change.* Oxford, University Press.
20. Gewirth, A. (1996). *The Community of Rights.* Chicago, University of Chicago Press.
21. Giddens, A. (2011). *The Politics of Climate Change*. Second Edition. Polity Press.
22. Global Scenario Group (2002). *Great Transition: The Promise and Lure of the times Ahead.* Stockholm Environmental Institute, Boston. Tellus Institute. Retrieved from: http://www.tellus.org/documents/Great_Transition.pdf
23. Hansen, J. (2009). Interview available at http://grist.org/article/2009-09-28-james-hansen-on-obama-climate-legislation-and-coal/
24. Hardin, G. (1968). Tragedy of the Commons. *Science* 162: 1234-1248.
25. Harris, P. (ed.). (2000). *Climate Change and American Foreign Policy.* New York: St. Martin's Press.
26. Hartwell Paper (2010). A New Direction for Climate Policy. *London School of Economics.*
27. International Institute for Sustainable Development reporting Services (2013). Future Events announcement: http://climate-l.iisd.org/events/seventh-meeting-of-the-open-working-group-on-sdgs-owg-7/
28. IPCC (1995). *Economic and Social Dimensions of Climate Change.* Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.
29. IPCC (2007). The AR4 Synthesis report. Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.
30. IPCC (2013). Assessment Report 5. Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.
31. Jamieson, D. (1992). Ethics, Public Policy and Global Warming. *Science, Technology and Human Values* 17: 139-153.

32. Jamieson, D. (2001). Climate Change and Global Environmental Justice. *Changing the Atmosphere: Expert Knowledge and Global Environmental Governance*, ed. P.Edwards and C.Miller (Cambridge, Mass.: MIT Press), pp. 287-307.
33. Jamieson, D. (2007). "When Utilitarians Should Be Virtue Theorists." In *Utilitas* 19.2: 160-183.
34. Jamieson, D. (2014). *Reason in a Dark Time: Why the Struggle Against Climate Change Failed and What It Means for the Future.* Oxford University Press.
35. Jamieson, D. (ed.) (2001). *A Companion to Environmental Philosophy.* Blackwell Publishers Ltd.
36. Junger, S. (1999). *The Perfect Storm: A True Story of Men Against the Sea.* HarperCollins.
37. Kyoto Protocol to the United Nations Framework Convention on Climate Change. (1998). Available at: http://unfccc.int/resource/docs/convkp/kpeng.pdf
38. Malone, E. & Rayner, S. (1998). Human Choices and Climate Change. Vol. IV, *What Have We Learned?* Battelle.
39. Müller, B. (2002). *Equity in global climate change: the great divide.* Oxford, UK, Oxford University Press.
40. Nordhaus, W. (2007). A Review of the Stern Review on the Economics of Climate Change. *Journal of Economic Literature, Vol. XLV(September 2007),* pp. 686-702.
41. Nozick, R. (1974). *Anarchy, State and Utopia.* New York: Basic Books.
42. Ostrom, E. (2000). Reformulating the Commons. *Swiss Political Science Review*, Vol. 6, issue 1, pages 29-52.
43. Ostrom, E. (2012). Green from the Grassroots. *Project Syndicate*: http://www.project-syndicate.org/commentary/green-from-the-grassroots
44. Oxford Martin Commission for Future Generations (2013). *Now for the Long-Term, the Report.* Oxford Martin School, University of Oxford.
45. Parfit, D. (1984). *Reasons and Persons.* Oxford: Oxford University Press.
46. Partridge, E. (2001). Future generations. *A Companion to Environmental Ethics*, Jamieson (ed.). Malden, Massachusetts: Blackwell Publishers.
47. Pizer, W. (1999). Choosing price or quantity controls for greenhouse gases. *Climate Issues Brief, Resources for the Future, 17*.
48. Pizer, W.A. (2002). Combining price and quantity controls to mitigate global climate change. *Journal of Public Economics*, 85(3), pp. 409-434.

49. Rawls, J. (1972). *A Theory of Justice.* Harvard University Press.
50. Rawls, J. (1999). *A Theory of Justice.* Revised Edition. Belknap Press of Harvard University Press.
51. Rayner, S. & Prins, G. (2007). *The Wrong Trousers: Radically Rethinking Climate Policy.* Institute for Science, Innovation and Society, Oxford, UK.
52. Rittel, H. & Webber, M. (1973). Dilemmas in the General Theory of Planning. *Policy Sciences*, 4.
53. Shearman, D. & Smith, J.W. (2007). *The Climate Change Challenge and the Failure of Democracy.* London, Praeger.
54. Shue, H. (1993). Subsistence Emissions and Luxury Emissions. *Law and Policy* 15: 39-59.
55. Shue, H. (1999). Global Environment and International Inequality. *International Affairs* 75: 531-545.
56. Singer, P. (2002). *One World: The Ethics of Globalization*. New Haven, Conn.: Yale University Press.
57. Sinnott-Armstrong, W. (2005). It's Not My Fault. Sinnott-Arsmstrong & Howarth (eds.), *Perspectives on Climate Change.* Amsterdam: Elsevier.
58. Stern, N. (2006). *Stern Review: the Economics of Climate Change.* Cambridge, University Press.
59. Stern, N. (2008). The Economics of Climate Change. *American Economic Review 98.2* (pp. 1-37).
60. Stern, N. (2012). Ethics, equity and the economics of climate change, *Center for Climate Change Economics and Policy Working Paper No. 97; Grantham Research Institute on Climate Change and the Environment Working Paper No. 84.*
61. The Guardian (2009). "Copenhagen's Failure Belongs to Obama." Available at http://www.guardian.co.uk/commentisfree/cif-green/2009/dec/21/copenhagen-failure-obama-climate-change
62. Traxler, M. (2002). Fair Chore Division for Climate Change. *Social Theory and Practice* 28: 101-134.
63. Unite Nations (1992). *Framework Convention on Climate Change.* Available at www.unfccc.net.
64. United Nations (1972). *Declaration of the United Nations Conference on the Human Environment.* Available at:

http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503

65. United Nations (1987). *Report of the World Commission on Environment and Development: Our Common Future (Brundtland Report).* Available at: http://www.un-documents.net/our-common-future.pdf
66. United Nations (2012). *The Future We Want: Outcome document adopted at Rio+20.* Available at: http://www.un.org/en/sustainablefuture/
67. United Nations (2013). *Report of United Nations Secretary-General on Intergenerational Solidarity and the Needs of Future Generations*. Available at: http://sustainabledevelopment.un.org/content/documents/2006future.pdf
68. Vanderheiden, S. (2008). *Atmospheric Justice. A Political Theory of Climate Change.* Oxford: Oxford University Press.
69. Victor, D.G. (2001). *The collapse of the Kyoto Protocol and the struggle to slow global warming.* Princeton, University Press.
70. Vol. 3, No. 1 (2013), 55-67, edited by S. Maffettone, G. Pellegrino and M. Bocchiola
71. Weisbach, D.A. & Sunstein, C.R. (2009). Climate Change and Discounting the Future: A Guide for the Perplexed. *27 Yale Law and Policy Review 433.*
72. Weiss-Brown, E. (1989). *In Fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity.* Ardsley, New York: Transnational Publishers.
73. Wissenburg, M. (1998). *Green Liberalism: The Free and the Green Society.* London, UCL Press.

Chapter 2

1. Agence France-Presse. January 15th, 2008. *Lifestyle changes can curb climate change: IPCC chief.* Retrieved from: http://www.google.com/hostednews/afp/article/ALeqM5iIVBkZpOUA9Hz3Xc2u-61mDlrw0Q.
2. Anderson, E. (2014). Dewey's Moral Philosophy. *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Zalta, E.N. (ed.). Retrieved from: http://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=dewey-moral
3. Anscombe, G.E.M. (1958). Modern Moral philosophy. *Philosophy*, 33: 1–19.

4. Appleton, J., ed. (2013). *Values in Sustainable Development.* Routledge Studies in Sustainable Development. London: Routledge.
5. Axelrod L.J. (1994). Balancing personal needs with environmental preservation: identifying the values that guide decisions in ecological dilemmas. *J. Soc. Issues* 50:85–104.
6. Bohman, J. & Rehg, W. (2014). Jürgen Habermas. *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition), Zalta, E.N. (ed.). Retrieved from: http://plato.stanford.edu/entries/habermas/
7. Broome, J. (2012). *Climate Matters: Ethics in a Warming World.* Norton and Company, New York.
8. Brown L, ed. (1993). *The New Shorter Oxford English Dictionary on Historical Principles.* Oxford: Clarendon.
9. Corral-Verdugo, V. (1997). Dual 'realities' of conservation behavior: self-reports vs observations of re-use and recycling behavior. *Journal of Environmental Psychology.* 17:135–45.
10. Dawlabani, S.E. (2013). *The Psychological DNA of Capitalism.* HuffPost Politics Blog. Available at: http://www.huffingtonpost.com/said-elias-dawlabani/the-psychosocial-dna-of-capitalism_b_3882188.html
11. Dewey, J. (2008). *The Later Works of John Dewey*. Volume 13, 1925 - 1953: 1938-1939, Experience and Education, Freedom and Culture, Theory of Valuation, and Essays. SIU Press.
12. Di Paola, M. & Pellegrino, G., eds. (2014). *Canned Heat.* Routledge, New Delhi.
13. Dietz T, Frisch AS, Kalof L. & Guagnano GA. (1995). Values and vegetarianism: an exploratory analysis. *Rural Sociol.*60:533–42.
14. Dietz, T., Fitzgerald, A., & Shwom, R. (2005). Environmental Values. *Annu. Rev. Environ. Resour.* 2005. 30:335–72.
15. Dower, N. (2005). The Nature and Scope of Global Ethics and the relevance of the Earth Charter. *Journal of Global Ethics*, Vol. 1, No. 1, June 2005, pp.25-43.
16. Earth Charter Initiative: http://www.earthcharterinaction.org/content/
17. Fransson N. & Garling T. (1999). Environmental concern: conceptual definitions, measurement methods and research findings. *J. Environ. Psychol.* 19:369–82
18. Gardiner S.M., Caney, S., Jamieson, D. & Shue, H., eds. (2010). *Climate Ethics: Essential Readings.* Oxford, University Press.

19. Guardian, The. (2009). *Western lifestyle unsustainable, says climate expert Rajendra Pachauri* / http://www.theguardian.com/environment/2009/nov/29/rajendra-pachauri-climate-warning-copenhagen
20. Guardian, The. (2010). *What's the one lifestyle change I could make that would have the most positive environmental impact?* http://www.theguardian.com/environment/2010/may/10/lifestyle-change-environmental-impact
21. Habermas J. (1991). *Moral Consciousness and Communicative Action.* Boston: Beacon.
22. Habermas, J. (1981). *Theory of Communicative Action.* Boston: Beacon.
23. Heberlein, T. (2012). *Navigating Environmental Attitudes.* Oxford: Oxford University Press.
24. Hitlin, S. & Piliavin, J.A. (2004). Values: Reviving a Dormant Concept. *Annual Review Sociology*, 30:359-93.
25. Hursthouse, R. (1996). Normative Virtue Ethics. *How Should One Live? Essays on the Virtues*, 19-36. R. Crisp (ed.). Oxford: Oxford University Press.
26. Hursthouse, R. (2013). Virtue Ethics. *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.).
27. Inglehart R. (1997). *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies.* Princeton, NJ: Princeton Univ. Press
28. IPCC (2007). *Assessment Report 4: Synthesis report*. Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.
29. IPCC (2013). *Assessment Report 5*. Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.
30. Jamieson, D. (2007). When Utilitarians should be Virtue Theorists. *Utilitas*, Vol. 19, Issue 02, pp. 160-183.
31. Kalof L, Dietz T, Stern P.C. & Guagnano GA. (1999). Social psychological and structural influences on vegetarian beliefs. *Rural Sociol.* 64:500–11.
32. Kasser, T. (2002). *The High Price of Materialism.* Cambridge, MA: MIT Press.
33. Lear, J. (2006). *Radical Hope: Ethics in the Face of Cultural Devastation.* Cambridge, MA: Harvard University Press.
34. Leopold, A. (1949). *A Sand County Almanac.* Random House LLC (1966).

35. Lindeman M. & Sirelius M. (2001). Food choice ideologies: the modern manifestations of normative and humanist views of the world. *Appetite* 37:175–84.
36. MacIntyre, A. (1981). *After Virtue: a Study in Moral Theory*. University of Notre Dame Press; 2nd edition.
37. Marini M.M. (2000). Social values and norms. *Encyclopedia of Sociology*, Borgatta, E.F. & Montgomery, R.J.V. (eds.), pp. 2828–40. New York: Macmillan.
38. Nilsson A., von Borgstede C. & Biel A. (2004). Willingness to accept climate change strategies: the effect of values and norms. *J. Environ. Psychol.* 24: 267–77.
39. Nordlund, A.M. & Garvill J. (2003). Effects of values, problem awareness, and personal norm on willingness to reduce personal car use. *J. Environ. Psychol.* 23:339–47.
40. Nussbaum, M. (1999). Virtue Ethics: A misleading category? *The Journal of Ethics*, Volume 3, Issue 3, pp 163-201
41. Pellegrino, G. (2013). Justice in the Auditorium. Gardiner's Theory of Intergenerational Justice. *Philosophy and Public Issues (New Series)*, Vol. 3, No.1 (2013): 69-88. Rome: Luiss University Press.
42. Raskin, P., Banuri, T., Gallopin, G., Gutman, P., Hammond, A., Kates, R. & Swart, R. 2002. *Great Transition: The Promise and Lure of the Times Ahead*. A report of the Global Scenario Group. Stockholm Environment Institute – Boston.
43. Robeyns, I. (2014). The Capability Approach. *The Stanford Encyclopedia of Philosophy* (Summer 2011 Edition), Zalta, E.N. (ed.). Retrieved from: http://plato.stanford.edu/entries/capability-approach/
44. Sandler, R. (2007). *Character and the Environment*. New York: Columbia University Press.
45. Sandler, R., interview. Available at: http://cup.columbia.edu/static/Interview-Sandler-Ronald.
46. Schultz, P.W.& Zelezny, L.C. (1999). Values as predictors of environmental attitudes: evidence for consistency across 14 countries. *J. Environ. Psychol.* 19:255–65.
47. Schultz, P.W., Gouveia, V.V., Cameron, L., Tankha, G., Schmuck P. & Franek, M. (2005). Values and their relationship to environmental concern and conservation behavior. *J. Cross-Cult. Psychol.* 36:1–19.
48. Schwartz, S.H. & Bilsky, W. (1987). Toward a universal psychological structure of human values. *J. Personal. Soc. Psychol.* 53:550–62.

49. Sen, A. & Nussbaum, M., eds. (1993). *The Quality of Life,* Oxford: Clarendon Press.
50. Sen, A. (1992). *Inequality Re-examined,* Oxford: Clarendon Press.
51. Shue, H. (1993). Subsistence Emissions and Luxury Emissions. *Law and Policy* 15: 39-59.
52. Shue, H. (1999). Global Environment and International Inequality. *International Affairs* 75: 531-545.
53. Sinnott-Armstrong, W. (2005). *It's Not My Fault: Global Warming and Individual Moral Obligations, in Perspectives on Climate Change.* Amsterdam: Elsevier.
54. Solomon, D. (2003). Virtue Ethics: Radical or Routine? *Intellectual Virtue: Perspectives from Ethics and Epistomology*. DePaul, M. & Zagzebski, L. (eds.). 57-80. Oxford: Oxford University Press.
55. Stern P.C. (2000). Toward a coherent theory of environmentally significant behavior. *J. Soc. Issues* 56:407–24.
56. Stern, P.C. & Dietz, T. (1994). The value basis of environmental concern. *J. Soc. Issues* 50:65–84.
57. Stern, P.C., Dietz, T. & Kalof, L. (1993). Value orientations, gender and environmental concern. *Environ. Behav.* 25:322–48.
58. Stern, P.C., Dietz, T., Abel, T., Guagnano, G.A. & Kalof, L. (1999). A social psychological theory of support for social movements: the case of environmentalism. *Hum. Ecol. Rev.* 6:81–97.
59. Sunstein, C. (1996). Social Norms and Social Roles. *Columbia Law Review*, Vol. 96:903 1996.
60. Thompson, A. & Bendik-Keymer, J., eds. (2012). Ethical Adaptation to Climate Change: Human Virtues of the Future. Cambridge: MIT Press.
61. Van Wensveen, L. (1999). *Dirty Virtues: The Emergence of Ecological Virtue Ethics.* NY: Humanity.
62. Vanderheiden, S. (2008). *Atmospheric Justice: A Political Theory of Climate Change.* Oxford: Oxford University Press.
63. Williams, G. (2008). Responsibility as a virtue. *Ethical Theory and Moral Practice.* 11 (4): 455-470.
64. World Health Organization (2013). *Urban Population Growth.* Available at: http://www.who.int/gho/urban_health/situation_trends/urban_population_growth_text/en/.

65. Worldwatch Institute (2004). State of the World 2004: Special Focus, The Consumer Society.
66. Young, I.M. (2004). Responsibility and Global Labour Justice. *Journal of Political Philosophy* 12 (4): 365-388.

Chapter 3

1. Baker, S. (2005). The Evolution of European Union Environmental Policy in Redcliff, M.R. (ed.) *Sustainability: Sustainable development*. Taylor & Francis.
2. Buckeley, H., Andonova, L., Bäckstrand, K., Betsill, M., Compagnon, D., Duffy, R., Kolk, A., Hoffmann, M., Levy, D., Newell, P., Milledge, T., Paterson, M., Pattberg, P., & Van Deever, S. (2012). Governing climate change transnationally: assessing the evidence from a database of sixty initiatives. *Environment and Planning C: Government and Policy*, volume 30, pages 591 – 612.
3. Capra, F. & Spretnak, S. (1986). *Green Politics.* London: Paladin.
4. City Climate Leadership Award (2013). Retrieved from: http://cityclimateleadershipawards.com/
5. Downing, P. & Ballantyne, J. (2007). *Tipping Point or Turning Point? Social Marketing and Climate Change.* London: Ipsos MORI Social Research Institute.
6. Egenhofer, C. & Alessi, M. (2013). EU Policy on Climate Change Mitigation since Copenhagen and the Economic Crisis. No. 380 / March 2013. Retrieved from: file:///C:/Users/Katia/Downloads/WD380%20Egenhofer%20&%20Alessi%20Final.pdf.
7. European Commission (2014). Climate Action. Retrieved from: http://ec.europa.eu/clima/policies/brief/eu/index_en.htm
8. European Development Days (2013). *A Vision for the 2015 Development Agenda.* Retrieved from: http://eudevdays.eu/topics/vision-post-2015-agenda-0.
9. Fairtrade Foundation (2013). *Bucks Economic Trend With 19% Sales Growth.* Retrieved from: http://www.fairtrade.org.uk/press_office/press_releases_and_statements/february_2013/fairtrade_bucks_economic_trend.aspx.
10. Finnemore, M. & Sikkink, K. (1998). International Norm Dynamics and Political Change. *International Organization 52, 4, Autumn 1998,* 887–917.

11. Frey, B.S., & Oberholzer-Gee, F. (1997). The Cost of Price Incentives: An Empirical Analysis of Motivation Crowding- Out. The American Economic Review, Vol. 87, No. 4 (Sep., 1997), 746-755.
12. Gardner, G. T. & Stern, P. C. (2002). *Environmental Problems and Human Behavior.* 2nd edn., Boston: Pearson Custom Publishing.
13. Giddens, A. (2011). *The Politics of Climate Change*. Second Edition. Polity Press.
14. Gilman, R. (1991). The Eco-village Challenge. *Living Together (IC#29)*, Summer 1991, p.10. retrieved form: http://www.context.org/iclib/ic29/gilman1/
15. Gough, C. & Shackley, S. (2001). The respectable politics of climate change: the epistemic communities and NGOs. *International Affairs 77, 2 (2001) 329-345.*
16. Heberlein, T. (2012). *Navigating Environmental Attitudes.* Oxford: Oxford University Press.
17. Jamieson, D. & Di Paolo, M. (2014) Climate Change and Global Justice: New Problem, Old Paradigm? *Global Policy Volume 5. Issue 1.* 105-111. February 2014.
18. Jamieson, D. (2002). Is There Progress in Morality. *Utilitas (14)* 318-338. Cambridge University Press.
19. Keck, M.E. & Sikkink, K. (1999). Transnational Advocacy Networks in International and National Politics. *ISSJ 159/1999 © UNESCO 1999.* Blackwell Publishers, Oxford.
20. Leiserowitz, A.A., Kates, R.W. & Parris, T.M. (2005). Sustainability Values, Attitudes, and Behaviors: A Review of Multinational and Global Trends. *Annu. Rev. Environ. Resour. 2006. 31:413–44.*
21. Merchant, C. (1992). *Radical Ecology.* New York: Routledge.
22. Moser, S. C. & L. Dilling (2010). Communicating Climate Change: Opportunities and Challenges for Closing the Science-Action Gap. *The Oxford Handbook of Climate Change and Society*, Richard Norgaard, David Schlosberg, John Dryzek (eds.). Oxford University Press.
23. Official Journal of the European Union (2013). *European 7th Environment Action Program.* Retrieved from: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1386&from=EN.
24. Pelham, B. (2009). Awareness, Opinions About Global Warming Vary Worldwide. *Gallup World*, April 22nd, 2009. Retrieved from:

http://www.gallup.com/poll/117772/Awareness-Opinions-Global-Warming-Vary-Worldwide.aspx

25. Robinson, M. & Tutu, D. (2014). Europe Should Lead on Climate Change. *The Guardian (17-03-2014).* Retrieved from: http://www.theguardian.com/environment/2014/mar/17/europe-climate-change-legacy
26. Rodrigues, J.P. (1997). *The Historical Encyclopedia of World Slavery.* ABC-CLIO.
27. Semenza, J. C., Hall, D. E., Wilsond, D. J., Bontempo, B. D., Sailor, D. J. & George, L. A. (2008). Public perception of climate change: Voluntary mitigation and barriers to behavior change. *American Journal of Preventive Medicine* 35(5): 479–87.
28. Singer, P. (2011). *The Expanding Circle: Ethics, Evolution, and Moral Progress.* Princeton University Press.
29. Stavrakakis, Y. (1997). Green ideology: A discursive reading. *Journal of Political Ideologies, 2:3,* 259-279.
30. Stern, P.C. (2000). Toward a coherent theory of environmentally significant behavior. *J. Soc. Issues* 56:407–24;
31. Sunstein, C. (1996). Social Norms and Social Roles. *Columbia Law Review Vol. 96, No. 4,* May, 1996.
32. Takahashi, B. (2009). Social marketing for the environment: An assessment of theory and practice. *Applied Environmental Education and Communication* 8(2): 135–45.
33. Tarrow, S. (2011). *Power in Movement: Social Movements and Contentious Politics*. 3rd edition, revised. Cambridge University Press.
34. Thaler, R.H. & Sunstein, C. (2009). *Nudge.* Penguin Books; Revised & Expanded edition.
35. The EU Explained: Environment (2013). Retrieved from: http://europa.eu/pol/env/flipbook/en/files/environment.pdf
36. Van Schyndel Kasper, D. (2008). Redefining Community in the Ecovillage. *Human Ecology Review, Vol. 15, No. 1,* 12-24.
37. Wapner, P. (1996). *Environmental Activism and World Civil Politics.* SUNY Press.
38. WWF Partnerships: Coca-Cola. Retrieved from: http://worldwildlife.org/partnerships/coca-cola.

Chapter 4

1. Barry, B. (1999) Sustainability and Intergenerational Justice. In *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice* by Dobson, A. (ed.). Oxford University Press.
2. Brown Weiss, E. (1990). Our Rights and Obligations to Future Generations for the Environment. *The American Journal of International Law,* Vol. 84, No.1, pp. 198-207.
3. Calder, W. (2005). The UN Decade of Education for Sustainable Development—A Progress Report. *Association of University Leaders for a Sustainable Future,* 7 (2), 1–8.
4. De George, R.T. (1979). The Environment, Rights and Future Generations. *Ethics and Problems of the 21st Century*. Goodpaster, K.E. & Sayre, K.M. (eds.). University of Notre Dame Press.
5. De-Shalit, A. (1994). *Why Posterity Matters: Environmental Policies and Future Generations.* Taylor & Francis.
6. Dietz, T., Fitzgerald, A. & Shwom, R. (2005). Environmental Values. *Annu. Rev. Environ. Resour.* 2005. 30:335–72.
7. Dunlap, R.E. & McCright, M.A. (2010). Chapter 14. Climate Denial. *Routledge Handbook of Climate Change and Society.* Lever-Tracy, C. (ed.). Taylor & Francis.
8. Feinberg, J. (1971). The Nature and Value of Rights. *In The Journal of Value Inquiry* No 4.
9. Gardiner S.M., Caney, S., Jamieson, D. & Shue, H. (eds.). 2010. *Climate Ethics: Essential Readings.* Oxford, University Press.
10. H.E. Mr. János Martonyi, Minister of Foreign Affairs, Hungary. Statement delivered on September 30th 2013. Retrieved from: http://gadebate.un.org/.
11. Hardin, G. (1968). Tragedy of the Commons. *Science* 162: 1234-1248.
12. Hume, D. (2011). *A Treaties of Human Nature.* Series: Clarendon Hume Edition Series Publisher: Oxford University Press, USA; Reprint edition.
13. IPCC (2007). *Assessment Report 4: Synthesis report*. Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.
14. IPCC (2013). *Assessment Report 5*. Cambridge, U.K.: Cambridge University Press. Available at www.ipcc.ch.

15. Jickling, B. (2006). The Decade of Education for Sustainable Development: A Useful Platform? Or an Annoying Distraction? A Canadian Perspective. *Australian Journal of Environmental Education,* 22(1): 99-104.
16. Kavka, G. (1982). The Paradox of Future Individuals. *Philosophy and Public Affairs*, 11:2 (Spring, 1982), pp. 92-112.
17. Kyoto Protocol to the United Nations Framework Convention on Climate Change. (1998). Retrieved from: http://unfccc.int/kyoto_protocol/items/2830.php.
18. Lukas, M. (2010). Intergenerational Justice. *The Stanford Encyclopedia of Philosophy* (Spring 2010 Edition). Zalta, E.N. (ed.). Retrieved from: http://plato.stanford.edu/archives/spr2010/entries/justice-intergenerational.
19. Mulà, I. & Tilbury, D. (2009). A United Nations Decade of Education for Sustainable Development (2005-14): What Difference will it Make? *Journal of Education for Sustainable Development*, 3, 87.
20. Parfit, D. (1984). *Reasons and Persons.* Oxford University Press.
21. Partridge, E. (1981). *Responsibilities to Future Generations: Environmental Ethics.* Prometheus Books. Available at:http://gadfly.igc.org/papers/wcaf.htm.
22. Partridge, E. (1990). On the Rights of Future generations. *Upstream - Downstream: Issues in Environmental Ethics.* Scherer, D. (ed.). Philadelphia: Temple University Press.
23. Partridge, E. (2003). Future Generations. *A Companion to Environmental Philosophy.* Jamieson, D. (ed.). Willey Publishing.
24. Pigozzi, M. J. (2010). Implementing the UN Decade of Education for Sustainable Development (DESD): achievements, open questions and strategies for the way forward. *International Review Education*, 56, 255–269.
25. Rawls, J. (1971). *A Theory of Justice.* Harvard University Press.
26. Rawls, J. (1999). *A Theory of Justice.* Oxford University Press.
27. Sandler, R. (2007). *Character and the Environment*. New York: Columbia University Press.
28. Sauvé, L. & Berryman. T. (2005). Challenging a "Closing Circle": Alternative Research Agendas for the ESD Decade. *Applied Environmental Education and Communication,* 4, 229–32.
29. Schlottman, C. (2012). *Conceptual Challenges for Environmental Education.* Peter Lang Publishing, New York.

30. Schlottmann, C. (2008). Educational ethics and the DESD: Considering trade-offs. *Theory and Research in Education*, 6, 207.
31. Schwartz, T. (1978). Obligations to Posterity. *Obligations to Future Generations.* Barry, B.M. & Sikora, R.I. (eds.). Philadelphia, Temple University Press, pp. 3-13.
32. Singer, P. (2011). *The Expanding Circle: Ethics, Evolution, and Moral Progress.* Princeton University Press.
33. Stern, N. (2012). Ethics, Equity and the Economics of Climate Change. Centre for climate change Economics and Policy, Working Paper No.97.
34. Sunstein, C.R. & Weisbach, D.A. (2008). Climate change and discounting the future: A Guide for the Perplexed. *Reg-Markets Center Working Paper* No. 08-19; *Harvard Public Law Working Paper* No. 08-20; *Harvard Law School Program on Risk Regulation Research Paper* No. 08-12. Available at SSRN: http://ssrn.com/abstract=1223448 or http://dx.doi.org/10.2139/ssrn.1223448.
35. UNESCO (2005). *Decade of Education for Sustainable Development: Implementation Scheme.* Retrieved from: http://unesdoc.unesco.org/images/0014/001486/148654e.pdf.
36. UNESCO (2009). Education and the search for a sustainable future. *Policy dialogue: ESD and development policy.* 1 Publ., illus.; ED.2009/WS/7.
37. UNESCO (2009). *Review of Contexts and Structures for Education for Sustainable Development*. Retrieved from: http://unesdoc.unesco.org/images/0018/001849/184944e.pdf.
38. UNESCO (2010). *Universalism and Ethical Values for the Environment*. Retrieved from: http://unesdoc.unesco.org/images/0018/001886/188607e.pdf.
39. UNESCO (2010). *Universalism and Ethical Values for the Environment*. Report.
40. UNESCO (2012). *Shaping the Education of Tomorrow: Report on the UN Decade of Education for Sustainable Development*. Retrieved from: http://unesdoc.unesco.org/images/0021/002166/216606e.pdf.
41. United Nations (1992). Framework Convention on Climate Change. FCCC/INFORMAL/84. Retrieved from: http://unfccc.int/resource/docs/convkp/conveng.pdf
42. United Nations (2012). *The Future We Want.* Conference on Sustainable Development outcome document. Rio de Janeiro, 2012.

43. United Nations (2013). *Secretary General's Report on intergenerational solidarity and the Needs of Future Generations.* Retrieved from: http://sustainabledevelopment.un.org/content/documents/2006future.pdf.
44. Ward, H. (2012). *Committing to the Future We Want: a High Commissioner for Future Generations at Rio+20.* Retrieved from: http://www.library.cornell.edu/resrch/citmanage/apa.
45. Weiss, E. (1989). *In Fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity.* Transnational Publishers, Incorporated.
46. Wolf, C. (2007). Intergenerational Justice. *A Companion to Applied Ethics*. Frey, R. G. & Wellman, C.H. (eds.). Blackwell Publishing Ltd, Oxford, UK.

Chapter 5

1. Abbott, K. W., Green, J. & Keohane, R.O. (2013). Organizational Ecology and organizational Strategies in World Politics. *Discussion Paper 2013-57.* Cambridge, Mass.: Harvard Project on Climate Agreements, August 2013.
2. Andersen, S. (1998). The Making and Implementation of Whaling Policies. *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice.* Victor, D.G., Raustiala, K., Skonikoff, E.B. (eds.). MIT Press, 737 pp.
3. Andersen, S. O. & Madhava Sarma, K. (2012). *Protecting the Ozone Layer: The United Nations History.* Earthscan, 548 pp.
4. Anderson, K. (2009). What NGO Accountability Means: And Does Not Mean. *The American Journal of International Law, Vol. 103, No. 1 (Jan., 2009), pp. 170-178.*
5. BBC News (1998). *Brent Spar's Long Saga.* http://news.bbc.co.uk/2/hi/science/nature/218527.stm.
6. Betsill, M. & Corell, E. (2008). *NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations*. Cambridge, MA: The MIT Press.
7. Block, B. (2012). Environmentalists Spar Over Corporate Ties. *WorldWatch Institute.* http://www.worldwatch.org/node/5934.
8. Clark, A. M., Friedman, E.J. & Hochstetler, K. (1998). The Sovereign Limits of Global Civil Society: A Comparison of NGO Participation in UN World Conferences

on the Environment, Human Rights, and Women. *World Politics*, Vol. 51, No. 1 (Oct., 1998), pp. 1-35.

9. Coca-Cola Arctic Home: www.arctichome.com.
10. Corell, E. & Betsill, M. (2001). A Comparative Look at NGO Influence in International Environmental Negotiations: Desertification and Climate Change. *Global Environmental Politics* 1:4, November 2001.
11. CorporateWatch. Newsletter, 25 August / September 2005. Retrieved from: http://www.corporatewatch.org/?lid=1873.
12. Dauvergne, P. & LeBaron, G. (2014). *Protest Inc.: The Corporatization of Activism.* Polity Press, 2014.
13. Edelman's Trust Barometer (2014). *NGOs Most Trusted institution Globally.* Downloaded fom: http://www.edelman.com/insights/intellectual-property/2012-edelman-trust-barometer/trust-in-institutions/ngos-most-trusted-institution-globally/
14. Edwards, M. & Sen, G. (2000). NGOs, Social Change and the Transformation of Human Relationships: A 21st-Century Civic Agenda. *Third World Quarterly Vol. 21, No. 4, NGO Futures: Beyond Aid* (Aug., 2000), pp. 605-616.
15. Falk, R. (1992). *Explorations at the Edge of Time*. Philadelphia: Temple University Press.
16. Fisher, W.F. (1997). Doing Good? The Politics and Antipolitics of NGO Practices. *Annual Review of Anthropology, Vol. 26 (1997), pp. 439-464.*
17. Gemmill, B. & Bamidele-Izu, A. (2002). The Role of NGOs and Civil Society in Global Environmental Governance. *Global Environmental Governance Options & Opportunities*, Esty, D.C. & Ivanova, M.I. (eds.). Yale Center for Environmental Law & Policy 255.
18. Gerring, J. (2008). Case selection for Case Study Analysis: Qualitative and Quantitative Techniques. *The Oxford Handbook for Political Methodology*. Box-Steffensmeier, J.M., Brady, H.E. & Collier, D. (eds.). Oxford University Press.
19. Gilfillan, C. (2002). Environmental NGOs, the Ozone Layer and the Montreal Protocol. *Protecting the Ozone Layer: The United Nations History.* Andersen, S.O. & Sarma, K.M. (eds.).
20. GlobeScan (2012). *High public trust in NGOs, but is it built on shaky foundations?* 04 April, 2012. http://www.globescan.com/news-and-analysis/blog/entry/high-public-trust-in-ngos-but-is-it-built-on-shaky-foundations.html.

21. Gough, C. & Shackley, S. (2001). The respectable politics of climate change: the epistemic communities and NGOs. *International Affairs 77, 2 (2001) 329-345.*
22. Grant, R.W. & Keohane, R.O. (2005). Accountability and Abuses of Power in World Politics. *The American Political Science Review,* Vol. 99, No. 1 (Feb., 2005), pp. 29-43.
23. Greenpeace Annual Report (2013). Retrieved from: http://www.greenpeace.org/international/Global/international/publications/greenpeace/2013/GPI-AnnualReport2012.pdf.
24. Gulbrandsen, L.H & Andresen, S. (2004). NGO Influence in the Implementation of the Kyoto Protocol: Compliance, Flexibility Mechanisms, and Sinks. *Global Environmental Politics* 4:4, November 2004.
25. Haas, P.M. (1990). *Saving the Mediterranean: The Politics of International Environmental Cooperation*. Columbia University Press, 303 pp.
26. Haas, P.M. (1992a). Banning Chlorofluorocarbons: epistemic community efforts to protect stratospheric ozone. *International Organization* 46, 1, Winter 1992.
27. Haas, P.M. (1992b). Introduction: Epistemic Communities and International Policy Coordination. *International Organization, Vol. 46, No. 1, Knowledge, Power, and International Policy Coordination* (Winter, 1992), pp. 1-35.
28. Haas, P.M., Keohane, R.O. & Levy, M.A., eds. (1993). *Institutions for the Earth: Sources of Effective International Environmental Protection.* Cambridge: MIT Press, 448 pp.
29. Held, D. (1998). Democracy and Globalization. *Re-imagining Political Community Studies in Cosmopolitan Democracy*. Archibugi, D., Held, D. & Kohler, M. (eds.). Stanford, CA: Stanford University Press.
30. Humpfreys, D. (2004). Redefining the Issues: NGO Influence on International Forest Negotiations. *Global Environmental Politics*, 4.2 (2004) 51-74.
31. IKEA. *IKEA and WWF partnership*. Retrieved from: http://www.ikea.com/ms/en_GB/about_ikea/pdf/forest_fact_sheet.pdf
32. Jasanoff, S. (1997). NGOs and the Environment: from Knowledge to Action. *Third World Quarterly, Vol. 18, No. 3, Beyond UN Subcontracting: Task-Sharing with regional Security Arrangements and Service-Providing NGOs (1997),* pp. 579-594.
33. Jepson, P. (2005). Governance and accountability of environmental NGOs. *Environmental Science & Policy* 8 (2005) 515–524.

34. Jepson, P., Canney, S. (2003). Values-led conservation. *Global Ecology & Biogeography* (2003) 12, 271–274.
35. Jordan, L. & Van Tuijl, P. eds.. (2006). *NGO Accountability: Politics, Principles and Innovations.* London; Sterling, VA: Earthscan, 257 pp.
36. Keck, M.E. & Sikkink, K. (1998). *Activists Beyond Borders: Advocacy Networks in Inter- national Politics.* Ithaca NY, London: Cornell University Press.
37. LeBaron, G. (2013). Green NGOs cannot take big business cash and save planet. *The Converstaion*, 30 September 2013. Retrieved form : https://theconversation.com/green-ngos-cannot-take-big-business-cash-and-save-planet-18770
38. Leiserowitz, A.A., Kates, R.W. & Parris, T.M. (2006). Sustainability Values, Attitudes, and Behaviours: A Review of Multinational and Global Trends. *Annu. Rev. Environ. Resour.* 2006. 31:413-44.
39. Lewis, D. (2009). *Nongovernmental Organizations, Definition and History.* Retrieved from: http://personal.lse.ac.uk/lewisd/images/EncylCiv%20SocietyNGOs2009-DL.pdf.
40. Lipschultz, R. (1992). *Restructuring World Politics: The Emergence of Global Civil Society*. Millennium 21.
41. McCormick, J. (1995). *Reclaiming Paradise: The global environmental movement.* Wiley - 312 pp.
42. McGregor, C. (2011). Environmental NGOs as adult learning spaces: Reflections on the Friends of the Earth 40th anniversary conference, 9-11 September 2011, Nottingham University. *CONCEPT, the Journal of Contemporary Community Education Practice Theory*
43. Meyer, J.M., Frank, D.J., Hironaka, A., Schofer, E. & Tuma, B. (1997). The Structuring of a World Environmental Regime, 1870-1990. *International Organization, Vol. 51, No. 4 (Autumn, 1997), pp. 623-651.* MIT Press.
44. Morrison, T.H. & Lane, M.B. (2004). The Rise and Rise of Environmental NGOs: Unforeseen risks to democratic environmental governance in Australia. *Refereed paper presented to the Australasian Political Studies Association Conference, University of Adelaide.*

45. Nalinakumari, B. & MacLean, R. (2005). NGOs: A Primer on the Evolution of the Organizations That Are Setting the Next Generation of "Regulations". *Environmental Quality Management, Summer 2005.*
46. Nature Conservancy Annual Report (2012). Retrieved from: http://www.nature.org/media/annualreport/annualreport2012_global.pdf.
47. Nature Conservancy, The. *Working With Companies.* http://www.nature.org/about-us/working-with-companies/companies-we-work-with/british-petroleum-partnership.xml; http://www.nature.org/about-us/working-with-companies/companies-we-work-with/index.htm
48. NBC News. *Some in Sierra Club Feel Sullied by Clorox Deal.* Retrieved from: http://www.nbcnews.com/id/25708115/ns/us_news-environment/t/some-sierra-club-feel-sullied-clorox-deal/#.U06U7fldUz4.
49. Padilla, M.P.S. (2001). Environmental Education to Environmental Sustainability. *Educational Philosophy and Theory, Vol. 33, No. 2.*
50. Parson, E.A. (1993). Protecting Ozone Layer. Chapter 2. *Institutions for the Earth: Sources of Effective International Environmental Protection.* Haas, Keohane, Levy (eds.). Cambridge: MIT Press, 448 pp.
51. Princen, T. & Finger, M., eds. (1994). *Environmental NGOs in World Politics.* London and New York: Routledge.
52. Raustiala, K. (1997). States, NGOs, and International Environmental Institutions. *International Studies Quarterly* (1997) 41, 719–740.
53. Ringius, L. (1997). Environmental NGOs and Regime Change: : The Case of Ocean Dumping of Radioactive Waste. *European Journal of International Relations 1997 3: 61.*
54. Rohrschneider, R. & Dalton, R.J. (2002). A Global Network? Transnational Cooperation among Environmental Groups. *The Journal of Politics, Vol. 64, No. 2 (May, 2002), pp. 510-533.*
55. Sahagun, L. (2011). *Sierra club leader departs amid discontent over group's direction.* LA Times, November 19, 2011. Retrieved from: http://articles.latimes.com/2011/nov/19/local/la-me-sierra-club-20111119
56. Salamon, L.M. & Anheier, H.K. (1992). In search of the non-profit sector. I: The question of definitions.. *VOLUNTAS: International Journal of Voluntary and Non-Profit Organizations, Volume 3, Number 2 (1992), 125-151.*

57. Secrett, C. (2011a). Environmental activism needs its own revolution to regain its teeth. *The Guardian*. Retrieved from: http://www.guardian.co.uk/environment/2011/jun/13/environmental-activism-needs-revolution.
58. Secrett, C. (2011b). An Open Letter to the Green Movement. *The Guardian.* Retrieved from: http://www.guardian.co.uk/environment/2011/jun/21/charles-secrett-open-letter-activists.
59. Shellenberger, M. & Nordhaus, T. (2004). Death of Environmentalism: Global Warming Politics in a Post-Environmental World.
60. Singh, H.R. & Rahman, S.A. (2012). An Approach for Environmental Education by Non-Governmental Organizations (NGOs) in Biodiversity Conservation. *Procedia - Social and Behavioral Sciences 42 (2012) 144 – 152.*
61. Skodvin, T. & Andresen, S. (2003). Nonstate Influence in the International Whaling Commission, 1970–1990. *Global Environmental Politics*. November 2003, Vol. 3, No. 4, Pages 61-86.
62. Star, The (2010). *WWF Proposes New Policy for Environmental Education.* Available at: http://www.thestar.com.my/story.aspx/?file=%2f2010%2f4%2f26%2fnation%2f6127638&sec=nation
63. Tarrow, S. (1998). Fishnets, Internets and Catnets: Globalization and Transnational Collective Action. *Challenging Authority*. Hanagan, M. (ed.). Minneapolis: University of Minnesota Press.
64. The Guardian. 02.04.2009. "Ikea – you can't build a green reputation with a flatpack DIY material". http://www.guardian.co.uk/global/2009/apr/02/greenwash-ikea-diy-earth-hour
65. Thiele, L.P. (1999). *Environmentalism for a New Millennium: The Challenge of Coevolution*. Oxford University Press, Apr 29, 1999 – 336 pp.
66. Thomas, C. (1992). The Environment in International Relations. *The Royal Institute of International Affairs*, London.
67. UNESCO. *Education Themes.* Retrieved from: http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/education-for-sustainable-development/

68. United Nations (2012). *United Nations Conference on Sustainable Development Fact Sheet: Rio+20 in Numbers.* Retrieved from: http://www.uncsd2012.org/content/documents/784rio20%20in%20numbers_final2.pdf.
69. Wapner, P. (1995). Politics Beyond the State: Environmental Activism and World Civic Politics. *World Politics, Vol. 47, No. 3 (Apr., 1995), pp. 311-340.*
70. Wapner, P. (1996). *Environmental Activism and World Civil Politics.* SUNY Press.
71. World Bank (2014). GDP. Available at: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?order=wbapi_data_value_2012+wbapi_data_value+wbapi_data_value-last&sort=asc
72. WWF Annual Report 2013. Retrieved from: http://awsassets.panda.org/downloads/ar2012_low_res.pdf
73. WWF Greece Journey to the Future City: http://www.frigoglass.com/sites/default/files/WWF_English_FINAL.pdf
74. WWF Hong Kong Education: http://www.wwf.org.hk/en/whatwedo/education/communityprog/
75. WWF Indonesia Education Programs: http://www.cbd.int/cepa/cepafair/2008/wwf-2008-05-en.pdf
76. WWF New Zealand Environmental Education Action Fund: http://www.wwf.org.nz/what_we_do/community_funding/funding_for_schools/
77. WWF New Zealand Environmental Education Program: http://wwf.panda.org/who_we_are/wwf_offices/new_zealand/projects/index.cfm?uProjectID=NZ0013
78. WWF Quick Facts: http://wwf.panda.org/wwf_quick_facts.cfm
79. Young, D.R. (2000). Alternative Models of Government-Nonprofit Sector Relations: Theoretical and International Perspectives. *Nonprofit and Voluntary Sector Quarterly 2000 29: 149.*
80. Young, O. (2010). Institutional dynamics: Resilience, vulnerability and adaptation in environmental and resource regimes. *Global Environmental Change* 20: 378-385.
81. Young, O.R. & Osherenko, G., eds. (1993). *Polar Politics: Creating International Environmental Regimes.* Ithaca, N.Y.: Cornell University Press, 1993, 276 pp.
82. Zaidi, S. A. (1999). NGO failure and the Need to Bring Back the State. *Journal of International Development 11, 259-271 (1999).*

83. Zurn, M. (1998). The Rise of International Environmental Politics: A Review of Current Research. *World Politics, Vol. 50, No. 4 (Jul., 1998), pp. 617-649.*

Chapter 6.

1. Berg, B.L. (2001). *Qualitative research methods for the social sciences.* Allyn & Bacon.
2. Edelman's Trust Barometer (2014). *NGOs Most Trusted institution Globally.* Retrieved from: http://www.edelman.com/insights/intellectual-property/2012-edelman-trust-barometer/trust-in-institutions/ngos-most-trusted-institution-globally/
3. Gerring, J. (2008). Case selection for Case Study Analysis: Qualitative and Quantitative Techniques. *The Oxford Handbook for Political Methodology*. Box-Steffensmeier, J.M., Brady, H.E. & Collier, D. (eds.). Oxford University Press.
4. GlobeScan (2012). *High public trust in NGOs, but is it built on shaky foundations?* 04 April, 2012. Retrieved from: http://www.globescan.com/news-and-analysis/blog/entry/high-public-trust-in-ngos-but-is-it-built-on-shaky-foundations.html
5. Greenpeace Global website: http://www.greenpeace.org/international/en/
6. Greenpeace YouTube channel: https://www.youtube.com/user/GreenpeaceVideo
7. Leiserowitz, A.A., Kates, R.W. & Parris, T.M. (2005). Sustainability Values, Attitudes, and Behaviors: A Review of Multinational and Global Trends. *Annu. Rev. Environ. Resour. 2006. 31:413–44.*
8. WWF Global website: http://wwf.panda.org/
9. WWF YouTube channel: https://www.youtube.com/user/WWF