CLIMATE CHANGE ADAPTATION and HUMAN CAPABILITIES

Justice and Ethics in Research and Policy

David O. Kronlid

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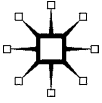HUMAN CAPABILITIES**

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palgrave
macmillan

This one goes out to the ones I have left behind and the ones that have moved along, but above all, this one goes out to you Petra.

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Preface

Make no mistake, this is not just a political issue, not just a market issue,
not just a national security issue, not just a jobs issue. It is a moral issue.
—Al Gore

On a More Personal Note

This quote from former vice president of the United States and international climate change evangelist Al Gore emphasizes the growing story in the climate change discourse: that climate change is an issue of grave moral significance. Scholars note that equity is a core principle of the Framework Convention on Climate Change, and there is an extended discussion about mitigation rights (and wrongs) in the framework and in the wider discourse on climate change.

In Sweden, the place where I live, this story is quite often accompanied by pictures of lonely polar bears stranded on small pieces of ice moving through the arctic waters due to sea-ice loss, an image that also is well known by many outside of Sweden, which evokes our moral sympathy for the furry predator.

The well-being of future generations and the increased suffering of already vulnerable individuals in the global South are other issues that—rightfully—are being addressed. Climate change discourse highlights actual and potential moral relationships across a time-lapse continuum, which we to a great extent are not used to engaging in, and sometimes do so in a way that escapes the moral demands intrinsic to moral relationships. Often, a call for moral attention is justified by the claim that climate change is anthropogenic. This argument also includes the logic that moral responsibility for one another is established only if a morally relevant, cause-and-effect relationship between those suffering from climate change exposure and those who are causing it is established. I have never sympathized with this logic. It seems to risk leaving those who do not have a designated suffering genealogy outside the moral embrace. It is too fragile. The

duty to acknowledge and act upon a present responsibility for the other without having an identified historic responsibility seems to me to be imperative in its own right.

Nevertheless, based on the anthropogenic thesis, there is a call from scholars, researchers, NGOs, community and national leaders, school leaders, and climate change witnesses to say that climate change is a question that needs to be dealt with, and that dealing with climate change has moral connotations that cannot and should not be neglected.

However, I sometimes ask myself, as an ethics scholar, whether climate change ethical reflection and moral value-laden action are the way to go. NGOs and activists all over the world argue that we lack proper climate change leadership on community, regional, and state levels on all continents. A considerable number of critics also argue that we lack global climate change leadership, and assert that the climate change summit circuit is a failure in both process and content.

Consequently, I wonder whether it is the lack of legitimate and efficient global climate change politics that drives us to turn to the moral dimension of climate change for answers. Climate change is a crisis at the outermost political and ecological boundaries of Earth. The so-called planetary boundaries are not merely physical phenomena, but are co-constituted by discursive practices in an ongoing syntheses of physical phenomena, political discourses, and meaning-making processes. Atmosphere and politics and meaning—there seems to be no buffer for us behind which we, and nature, can heal. Perhaps climate change justice can be such a buffer. Morality is, however, a peculiar species, a sweet nectar to us when we are in the right that easily turns to sour grapes on our palates when we are in the wrong, and even more so when we are faced with the intrinsic complexities of being a moral agent—never quite right, never quite wrong.

The other day I was watching a YouTube clip of stand-up comedian and actor Louis C. K., as he was performing on *Conan*. For those of you who are not familiar with US comedy TV, I'll explain that *Conan*, with host Conan O'Brien, is a popular talk show in the United States. In a very funny talk about why he hates cell phones, Louis C. K. addressed the deep endless pit of loneliness that we all are facing from time to time, which opens up as an abyss when we stop and contemplate. His talk reminded me of scholars like Levinas and Løgstrup and what we in Sweden refer to as *continental ethics*. In particular, Zygmunt Bauman's writings about the aporia of moral space came to mind. Living in moral space means that we have an absolute

duty to do the right thing to the other, yet we are always aware of the fact that we will always fail in our efforts to do so. In other words, the moral condition means that the sweet nectar of being in the right is always an illusion. And in some respects, we are always alone in shouldering this moral calling from our fellow beings, since there is always some grain of responsibility that cannot be shared. According to Bauman, this experience of moral failure haunts many of us to the degree that we take our refuge in aesthetic and cognitive space.

This is where my worries about the increased interest in the moral dimension of climate change kick in. Will it actually result in proper action, or are we letting our moral concerns transform into ethical reflections in cognitive space only? According to Bauman, an escape from moral space to cognitive space is a coping strategy that we use in order to dodge the anxiety bullets that we have to face daily as moral beings. It is not very altruistic at all. It happens when we can no longer endure that we are part of the pressures that exacerbate the sufferings of others, and when we realize that the turn-off-the-lights adaptation does not cut it, that we are bound to moral failure; then we turn to ethical theories to organize our moral anxiety in cognitive space. Alas, some refuge! This organizing of concepts, models, typologies, distinctions, and definitions in cognitive space, however, resembles compulsive activity disorders. It is as if, driven by moral anxiety, we strive to set up messy morality in coherent and consistent packages. Thus, rather than taking us closer to doing the right thing, ethics may prove to be a poor basis for moral action simply because it constitutes cognitive space.

Speaking from Sweden, many of us used to turn to the Protestant Christian deity (God), to nature, or to political deliberation for solace. I now wonder, however, if another reason for why we are turning so feverishly to ethical space in climate change research and policy is that we have outsourced God and formal religion to other countries, that we spend less and less time in the wild, and that we are witnessing the dismantling of the Social Democratic welfare system?

So far, the climate change regime has primarily focused on mitigation as a matter of justice. This is to be expected, as mitigation is in symbiosis with the drivers of economic growth and therefore is embedded in the intertwined history of and current economy of affluence. However, present-day climate change vulnerability and need for adaptation are rapidly gaining interest in climate change research as well as policy.

With this in mind, I present to you my book about climate change adaptation and human capabilities. You can argue that I am doing

exactly that which I seem not to like that much: organizing the moral challenges constituted at the climate change adaptation and well-being nexus into a neat ethical order of *things*, taking my refuge in Bauman's cognitive space. However, I know as well as you do that books like this never can save us from the ethical demand that is constituted by and reproduced in and through the ever-growing number of morally relevant reciprocal relationships that climate change (re)presents. And why would we want such books to save us? Because, if we can refrain from seeing this book and other books like it as the philosophical equivalent of climate change anxiolytics, they might be of some value. My hope is that this book will contribute to upholding the aporia of moral space rather than contribute to erasing it.

—David O. Kronlid
April 15, 2014
Uppsala, Sweden

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Chapter 1

Introduction

David O. Kronlid

About the Book

As Martha Nussbaum writes, people all over the world are struggling for a worthy and dignified life, a fully human life (Nussbaum 2009). Climate change adds a dimension to this struggle, and climate change adaptation is a recent potential answer to the question of how a fully human life may be accomplished in the face of increasing climate change vulnerabilities and risk.

In this book I and my co-authors take a normative position in addressing what adaptations are recommended from the perspective of the capability approach, a term famously coined by Amartya Sen and developed by Sen and a large number of development and capabilities scholars (Sen 1999). In the subsequent chapters I explore, together with co-authors, the meaning of the capabilities of play, health, mobility, and learning in a climate change adaptation context. This does not necessarily mean that I find the capabilities approach to be the most convincing normative model for discussing climate change justice. In fact, as we all know, all models have their advantages and drawbacks. Rather, the book is normative in the sense that it is interested in the ethical limits of climate change adaptation (Hulme et al. 2007; Adger et al. 2008) and because it uses the capabilities approach theoretically and methodologically to say something about this issue. Another way of reading this book is as an effort to explore the meaning of vulnerability in terms of human capabilities, as "The concept of vulnerability is central for climate justice because it ties the concerns of adaptation policy and planning [and I would add research to this list] to those of moral philosophy" (Paavola and Adger 2006, 604).

The book adds to the small but growing list of books in the social sciences and humanities on climate change. One of our aims is to

explore how the capabilities approach can add knowledge of how climate change impacts affect human well-being. In doing so, we want to offer in-depth knowledge about the meaning of mobility, learning, play, and health as climate change capabilities. Thus we hope to offer something to the development of the capabilities approach through supplementing it with additional social theories (Robeyns 2003a). An equally important aim is to explore what is meant when we say that certain human capabilities are affected by climate change. This discussion about capabilities and climate change concerns how climate change literature and capabilities literature treat mobility, learning, play, and health, and the function of these capabilities for various visions and ways of adaptation. A third aim is to explore what these discussions mean for climate change research policy and research, with a particular focus on the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel on Climate Change (IPCC).

The book is not a critical inquiry into the theoretical and practical pros and cons of different theories of climate change adaptation, climate change justice, or the capabilities approach. Nor does it engage in a critical reflection of the strengths and weaknesses of the particular theories of transformative learning, holistic mobility, salutogenic health, and play that are used in an effort to deepen our understanding of the capabilities discussed. Thus, many readers will most certainly object to this as a discussion that is too shallow and uncritical. I hope that this will be amended through any positive outcomes that the coupling of these theories and fields will bring to our understanding of the relationship between human well-being and climate change adaptation in the spirit of the deeply interdisciplinary nature of the capability approach (Robeyns 2006a; Robeyns 2006b; de Haas and Rodríguez 2010, 178).

It is clear that researchers, churches, economists, lay people, climate experts, policymakers, artists, and educators are voicing concern about how climate change involves serious moral challenges to communities and individuals all over the world, now and in the future. These moral challenges connect to climate change exposure and vulnerabilities. As Schneider and Lane report, the IPCC

> …has produced a list of likely effects of climate change that includes more frequent heat waves and less frequent cold spells; more intense storms, including hurricanes, tropical cyclones, and a surge in weather-related damage; increased intensity of floods and droughts; warmer surface temperatures, especially at higher latitudes; more rapid spread

of disease; loss of farming productivity and movement of farming to other regions, most at higher latitudes; rising sea levels which could inundate coastal areas and small island nations; and species extinction and loss of biodiversity. (Schneider and Lane 2006, 25)

As the field of cross-disciplinary climate change research continues to grow, it is accompanied by a similar evolution in policy discourse. With the climate change summits as its mother ship, there is a steady stream of local, regional, and international climate change policy and activist conferences and meetings. Moreover, climate change is also sprawling into atypical academic disciplines and public discourses in education, ethics, art, theology, theater, slam poetry, film, and music.

This book takes part in this cross-disciplinary movement and is one voice in a slowly expanding field of cross-disciplinary climate change research. It finds its place in response to the scholars who argue that "relatively little attention has been paid to the social justice aspects of adaptation to climate change" and that a large part of climate change justice research "fails to address the multiscale and multifaceted issues produced by climate change and its impacts" (Adger, Paavola, and Huq 2006, 1).

No doubt there is enough research about the negative consequences of climate change exposure to conclude that it causes and exacerbates human suffering (Watson et al. 2001; Bergmann and Gerten 2010; Field et al. 2014), to the extent that it stops people from expanding their personal freedoms, hence their opportunities to live a life in dignity and integrity.

Despite the slow start in moral philosophy, a growing number of scholars have recently suggested that social justice offers promising theoretical frameworks for addressing the moral challenges associated with climate change adaptation (Adger et al. 2006). Some scholars argue that climate change justice as an issue of fair distribution of mitigation rights has blindsided discussions about adaptation and justice (Adger, Paavola, and Huq 2006). Other social justice models that are discussed in adaptation contexts are procedural justice (Adger et al. 2006) and structural justice. Although I concede that these models of social justice have a lot to offer to climate change justice, I am convinced that the capabilities approach is a promising yet underdeveloped model for exploring human well-being in the context of climate change adaptation.

Although it might seem trivial which particular social justice model you apply to climate change, it is in fact crucial to extend the variety of justice models to climate change and human well-being

(Adger, Paavola, and Huq 2006, 1). The capabilities approach discusses dimensions of human well-being that are not easily reduced to any other climate change justice model (Grasso 2007). At the same time, the capabilities approach and other models of climate change justice complement each other (Page 2007). Probably the most valuable contribution of the capabilities approach is that it addresses intrinsic dimensions of human well-being rather than only or predominantly its means. It allows us to discuss and assess how climate change exposure affects individual freedom and dignity; how adaptation action may be instrumental to the expansion of capabilities; how adaptation actions and strategies may hinder or preclude people's valued beings (various states of a human being's existence, such as being well nourished, being educated, being illiterate) and doings (functions such as traveling, caring for a child, voting in an election); and how these beings and doings may form social—that is, ethical—limits to climate change adaptation actions. From this it follows that a capabilities analysis can help in understanding the content and value of backward-looking or reactive adaptation (adapting as a response to experiences of climate change stress) and of forward-looking or proactive adaptation, defined by Pelling (2011, 6–7) as "to identify ethically proper future responses to anticipated climate change stress or ethically proper current actions for the future."

The interdisciplinary scope of *Climate Change Adaptation and Human Capabilities* makes it relevant for scholars in three distinctive fields of research: human development and capabilities research, climate change justice, and climate change adaptation. Because it doesn't limit itself to a specific discipline, but entwines theories, methods, and traditions of interpretation from humanities and social science, this book is situated in social theory (see Jacklin and Vale 2009). The conceptual elaborations and theoretical explorations will hopefully also satisfy the interests of scholars, activists, policymakers, and educators who want to know more about how challenging questions of social justice can be related to climate change adaptation.

Although the book is an example of how to apply the capabilities approach to climate change adaptation, it cannot scrutinize the capabilities approach as a climate change justice model, or cover the field of adaptation research. Rather, it elaborates on both to understand how climate change and climate change adaptation relate to human capabilities. We will develop ideas on how climate change adaptation research and policy can be furthered by an interdisciplinary analysis of holistic mobility, transformative learning, salutogenic health, and play as human capabilities. The book is also a contribution to

capabilities research through exploring some particular capabilities to be able to say something about implementable policy and research.

Adaptation and Capabilities

The IPCC has been paying a growing amount of attention to adaptation. Together with mitigation and vulnerability, adaptation belongs to the group of themes that have important direct and indirect connections to human well-being, hence to climate change justice. The Fifth Assessment Report of the IPCC defines adaptation as "The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate and its effects" (Agard and Schipper 2014).

Agard and Schipper (2014) distinguish between the potential consequences that adaptation may have in human and in natural systems. In this book, we focus primarily on adaptation and its effects in human systems.

Schneider and Lane surely are right in that "unlike mitigation, adaptation is a *response* to rather than a *slowing of* global warming" (Schneider and Lane 2006, 45), because there is an important difference between adaptation, coping with short-term climate change impacts, and mitigation, a long-term slowing of greenhouse gas emissions. However, it is not necessary to view adaptation and mitigation as competing strategies, since a better understanding of future mitigation impacts "would improve understanding of limits to adaptation" (Klein, South, and Preston 2014, 31). We also can consider mitigation actions as a form of long-term adaptation that occurs on both individual and collective levels. Adaptation relates to vulnerability as vulnerability is a combination of climate change exposure and access to adaptation capacity (Adger et al. 2006).

Adaptation is not autonomous. Rather, it "always take place within the constraints and opportunities engendered by antecedent collective action and collective inaction" (Adger et al. 2006, 7). This aspect of adaptation is particularly interesting in relation to the capabilities approach, since it mentions both moderating harm and exploiting opportunities. I take this definition of adaptation as starting point, but do not restrict adaptation to systemic action. Rather, without neglecting that individual action is only possible in and is always constituted by collective and systemic relationships, my focus is largely on individual adaptation capacity and adaptation action.

Scholars have recently suggested that the contemporary discourse of climate change adaptation has two focuses: "First, how can adaptation to climate change be facilitated and enhanced...Second...are there limits to adaptation by society beyond which politically or ethically undesirable outcomes occur?" (Hulme et al. 2007, 2).

As Pelling and others show, adaptation does not consist of morally neutral perspectives and actions but is always situated on moral space as it will "touch every aspect of social life" and because "adaptation in society can exaggerate existing inequalities or generate new ones" (Pelling 2011, 68). Adger et al. (2006, 7) further emphasize this connection between adaptation and social justice, as "all adaptation decisions have justice implications because they alter the set of alternatives or 'room for maneuvering'...available for collective and individual actors." Moreover, there are ethical limits to adaptation insofar as adaptation actions threaten peoples' well-being (Adger, Paavola and Huq 2006, 7). In this book, I also address the latter question of a negative connection between adaptation and peoples' valued beings and doings.

Climate change adaptation is about both the capacity to act and adaptation action. Moreover, adaptation actors are individual, collective, and institutional and occur on local, national, and international levels. In addition, adaptation actions can be backward looking (reactive) and forward looking (proactive). We may argue that sometimes inactive adaptation would be the best choice, whereas maladaptation actions that lead to increased vulnerability should always be avoided. In fact, one of the main interests that I and my coauthors share in this book is which adaptations would be maladaptive from a capabilities perspective, and which would not.

There is a growing number of scientific articles and books on climate change adaptation. However, for the purpose of this book, my main sources of inspiration have been *Adaptation to Climate Change: From Resilience to Transformation* (Pelling 2011) and *Fairness in Adaptation to Climate Change* (Adger et al. 2006).

I am using Pelling's framework of adaptation partly because I am thrilled by typologies and how they throw our minds in different directions, and partly because I believe that Pelling's focus what adaptation is *for* is necessary to discuss in order to adaptation from a climate change justice perspective. The framework includes climate change adaptation for resilience, transition, and transformation (Pelling 2011). I do not intend to give a full report on the framework. Rather I am allowing myself to be inspired by it. However, the framework will be revisited throughout the chapters.

Adaptation for Resilience

The IPCC's Fifth Assessment Report refers to the distinction between incremental and transformative adaptation and defines *incremental adaptation* as "adaptation actions where the central aim is to maintain the essence and integrity of a system or process at a given scale" (Agard and Schipper 2014, 1). The IPCC further uses *incremental adaptation* to refer to "actions where the central aim is to maintain the essence and integrity of the existing technological, institutional, governance, and value systems" (Noble and Huq 2014, 5).

This definition comes close to Pelling's definition of adaptation for resilience. According to Pelling (2011, 51), the goal of adaptation for resilience is "functional persistence [of socio-ecological systems] in a changing environment." Thus, according to both Pelling and the IPCC's Fifth Assessment Report, this kind of adaptation aims at preserving systemic status quo. Pelling suggests that acts of adaptation for resilience seek only "change that can allow existing functions and practices to persist and [are] in this way not questioning underlying assumptions of power asymmetries in society" (Pelling 2011, 50), and Leichenko and O'Brien (2006, 104–105) side with Pelling, opting for adaptation for resilience as merely "adjustments to a system in response to actual or expected physical stimuli, their effects, or impacts."

This idea contends that maintaining certain key functions of a particular socio-ecological system is imperative. Hence, the kinds of individual and collective adaptation actions that are being called for here aim at maintaining key functions in human systems in this context. It's important to note that although we refer to adaptation for resilience as status quo, it will have both beneficial and disadvantageous consequences for the individual and for social group well-being (Adger, Paavola, and Huq 2006, 13).

Adaptation for Social Transition

The goal of adaptation for social transition is to realize the full potential of governance regimes through the exercise of rights. This vision of adaptation aims to secure procedural justice through changes in practices of governance. The hope is that this may lead to "incremental change in the governance system"; its predominant perspective is "governance and regime analysis" (Pelling 2011, 51).

According to Pelling, adaptation for social transition is an intermediary form of adaptation, which may assist adaptation for resilience with a "greater focus on governance" and may assist adaptation for transformation that "falls short of political regime change" (Pelling 2011, 51).

Through working on this book, it has become clear to me that I am mostly interested in adaptation for resilience and for transformation. These two visions are at the extremes of the vision-of-adaptation continuum that Pelling introduces. However, from the perspective of adaptation agents, there are no clear-cut boundaries between the three visions. Rather, in a given situation, there would be reason to address all three adaptation strategies, depending on the adaptation agent in question, the vulnerability challenge addressed, and the adaptive capacity.

Adaptation for Transformation

There is a growing discourse about transformational adaptation (Klein, Midgley South, and Preston 2014, 31). In the Fifth Assessment Report, the IPCC defines transformational adaptation as "adaptation that changes the fundamental attributes of a system in response to climate and its effects" (Agard and Schipper 2014, 1). Similarly, the goal of Pelling's third vision of adaptation is to reconfigure development structures. It takes upon itself overarching political-economic regime change (Pelling 2011, 51). Pelling (2011, 50) presents this vision as the "deepest form of adaptation," as it seeks to transform political-economic regimes. Adaptation for transformation may focus on pervasive changes in discourses, values, and power structures in existing political-economic systems and on the needs for transformation in these dimensions of the social sphere of life in order to establish relevant and legitimate adaptation actions and strategies.

In another chapter in the Fifth Assessment Report, the IPCC fleshes out transformative transformation as adaptation that seeks to "change the fundamental attributes of systems in response to actual or expected climate and its effects, often at a scale and ambition greater than incremental activities. It includes changes in activities, such as changing livelihoods from cropping to livestock or by migrating to take up a livelihood elsewhere, and also changes in our perceptions and paradigms about the nature of climate change, adaptation, and their relationship to other natural and human systems" (Noble and Huq 2014, 5). Transformative adaptation and adaptation for transformation involve changes in actions, perceptions, and paradigms, suggesting that adaptation for transformation cuts through institutional, collective, and individual levels and addresses both tangible structures and values, worldviews and visions.

Basically, Pelling's framework coheres with the latest IPCC Report's ideas about incremental adaptation and transformative adaptation.