

1 Introduction

1.1 Setting the Scene

Of all the issues on the global political agenda in 2007, global warming and its associate, climate change, is truly one of those topics that do not require an introduction because they are so well-known. In this past year the topic has received great media attention around the globe from the United States, to Japan, from Sweden to South Africa. 2007 has also been the year when climate change was raised to the top of the agenda of mainstream politics, on national and on global levels. Not only have former sceptics of climate change, such as President George W. Bush, recognised the problem and the urgency of addressing it but the issue has also been debated in the Security Council of the United Nations (UNSC) as well as in the smaller circle of the G8. The European Union has begun to devise extensive policies not only of mitigation but also of adaptation to climate change and global warming.

With the move of climate change into the mainstream political optic and into the top level of government and global governance, the issue has rubbed off on one of the hallmarks of 'high politics', namely security politics. Acting on the initiative of the United Kingdom, the UNSC debated the topic from this perspective. Although not all members of the UN were positive to deliberating the issue in that particular forum, the connection between climate change and security seemed to have established itself in the political sphere. Within the scientific community, a great degree of familiarity and certainty has also been achieved. The latest reports of the United Nations Intergovernmental Panel on Climate Change, (IPCC), have now reached a state of unprecedented accuracy and certainty in their conclusions that the climate of the planet is changing.

Drawing on this extensive evidence of familiarity, one may indeed concur with the opening sentence of this report, that climate change needs no introduction and perhaps that previous gaps in our knowledge about it have been filled. According to this view, what now remains is further perfection of knowledge and political action. Somewhat surprisingly, this report argues the contrary, not least concerning the consequences of climate change for societies and states across the globe as well as for the international system itself.

Amid the certainty regarding those aspects of climate change that are studied by the natural and physical sciences such as meteorology and geography and the familiarity which the general public and politicians alike display concerning the phenomenon of climate change, a great degree of uncertainty still prevails

concerning the aspects of climate change that are best approached through the social sciences such as sociology, political science and international relations (IR). This uncertainty and lack of clarity, or indeed lack of an analytical framework with which clarity could be produced, is particularly pronounced in the interface between climate change and international security.

Such lack of clarity is disquieting, not only because of the gravity of both issues and of their possible interconnections but also because of the interactive nature of international security. As opposed to the proverbial perils of crying wolf that too many false alarms result in nobody listening when it is too late and the wolf is at the door, 'crying wolf' in matters of security always causes people to listen intently and both crier and listeners may by their mutual fears conjure up the wolf.

Therefore, this report aims to provide a framework for understanding and further researching and debating the security impacts of climate change, as well as describing the current state of research, in order to provide a map of possible consequences and to discuss the specifically political dynamics of security in relation to climate change.

Specifically, the report addresses the following research questions:

- Will climate change have a significant impact on world politics and affect global security politics?
- Will climate change have a significant impact on politics in regions of the world and affect regional security politics? If so which regions are likely to be affected?
- Will climate change have a significant impact on politics within states and affect their internal and external security politics?

This report extends until the year 2050, which is a very long time in the social sciences. The reason for choosing this date is that the changes in climate are not predicted to become substantial before this time. Some of the changes projected by the IPCC and other reports, such as the Stern Report, are of such magnitude and complexity that although fifty years is a very long time in some respects, substantial foresight is required in order to adapt to them. A long period of adaptation of states, societies and the international system may be necessary in order to deal with the challenges ahead thoroughly and in a way that is perceived as equitable by all parties concerned. The alternative, rushing changes and rapid adaptation may not only be more costly but also more destabilising to states, societies and international relations.

Naturally, this report makes no pretence at forecasting the political world in its entirety by 2050 as such a venture would be flawed at best and approaching

hubris at worst. Many of the features characterising international politics in 2007, such as the economic strength of South-east Asia, China and indeed Japan, the European Union, the territorially reduced Russia, satellite-guided warfare etc. were unforeseeable in 1957 and would have seemed improbable to most analysts and politicians of the time. Therefore, this report makes no pretence at forecasting political, social or economic innovations. Strictly speaking, from a methodological point of view, this makes this report of the world in the year 2050 anachronistic it projects our world in 2007 into the future of climate change. Regrettable as it may be from a strictly methodological point of view, this option is preferred here to the alternative, primarily because, the alternative of combining natural science forecasts with speculative social science would be worse than rigorous analysis of the social world as it is today combined with natural science forecasts. Whatever the flaws of the chosen method, this author believes that it is the least problematic of the alternatives at hand.

1.1.1 The Theoretical Framework of the Study

This study combines a number of theoretical perspectives in order to provide a comprehensive understanding of the interlinkage between climate change and international politics / international security. For a disciplinary point of view the study is grounded in International Relations (IR) theory but it makes no claim to exclusively be based on one school rather than another, e.g. it does not take sides in the long-standing debates on the relative merits of ‘Realism’ as opposed to ‘Liberalism’ but rather includes factors that the two ‘camps’ tend to emphasise. For example, organised, relatively large-scale violence is at the centre of interest of this study, which is reflected in its research questions. Privileging this aspect of societies and of politics might strike some readers as a ‘Realist’ trait. However, the study also considers trade and economy as highly important factors in determining whether the relations between states of a certain region will be bellicose or not. International institutions, ranging from ‘thin’ regimes like the WTO to ‘thick’ structures like the EU are also considered very important in determining what role organised violence will have on inter- as well as intra-state levels of politics. Although these factors may be seen as polarities in an IR context, they are integral to the (historical) sociological tradition ultimately harking back to Max Weber. Such a focus is also a trademark of the historical institutionalist strand within organisational theory.

Any reader familiar with the taxonomy of IR theory will identify the emphasis that the study places on intersubjective structures that constitute the scope in which social action occurs as reflective of a ‘constructivist’ heritage. Thus, within the theoretical repertoire of IR theory, the study seeks to cover as broad a

spectrum as possible in order to avoid the respective biases of the different traditions. In the study, this is done within a larger sociological framework that focuses on the generation of social action, again a highly 'Weberian' trait that was reinforced and explicitly outlined in the works of Talcott Parsons. The one aspect of the study that breaks with the Weberian-Parsonian heritage of the study is the use of Niklas Luhmann's Modern Systems Theory (MST) to conceptualise the bridge between natural systems, such as the climate system and social systems, such as the international political system. Luhmann's sociology departs from the classical sociological heritage in many ways, most notably for the peripheral part that agency plays in it. This study does not use MST to conceptualise phenomena on the level of action which avoids inconsistencies. Consequently, these combinations of the three main orientations within IR theory as well as the two principal strands in contemporary sociology, sociology of action and MST, have been chosen and designed to avoid biases and the partiality that any single one perspective would have entailed.

It should be stressed that this study does not deal with climate change per se but rather with its implications for international politics / international security. Therefore, it does not bring forward any new and / or substantial findings on global warming and climate change. Since the report has been written from the viewpoint of sociology and political science and not, say, meteorology, it will not discuss the methods of the IPCC. Nor will it direct criticism towards the findings compiled by the panel. The report differs from scenario-based studies and futurologist studies in the sense that it does not attempt to draw up a range of possible future developments. Coming from a different scholarly tradition outlined above, the report seeks to understand the structural conditions that would enable or even determine a certain scope of possible actions.

1.1.2 Further Research

This study does not have the ambitions to have the last word on this undoubtedly complex and large subject. Rather, a number of possible and desirable issues for future studies can be distilled from the findings and the perspective of this report.

The following are some examples:

1. The role of other macro-trends, such as developments in technology and the demographic structure of the world, will play in connection with climate change in shaping tomorrow's world.
2. The role of adaptation technology, with particular regard to finding alternative energy sources in the international security environment until 2050.

3. How will climate change, both in terms of actual effects and in terms of expectations of change, affect the global security politics of the world's major players such as the United States, China, Russia etc. In other words, how will their relations to each other be affected?
4. What might the more specific effects of climate change on stability and prosperity in Russia be? 5) What could the more detailed consequences of a 'catastrophic' or 'worst-case' scenario of climate change be?

1.1.3 Guidelines for Readers

Something in the form of guidelines for reading this report may be appropriate. This report has been written with a wide and diverse readership in mind and therefore all parts may not be of equal interest or relevance to all readers. The two primary categories of users are, on the one hand, people active in policy formulation and policy advocacy and, on the other hand, scholars who take an interest in the connection between climate change and (international) politics in general and between climate change and violent conflict in particular. The disposition of the report reflects the differences between these groups and their needs.

Readers who are primarily interested in policy recommendations will probably find the conclusions in Section 5 best suited to their interests as these summarise the report in broad although not simplified strokes. Sections 1 and 2 are the most theoretical parts of the report and will probably be of most appeal to scholars interested in the subject. Specialists in a particular geographical or thematic area may find findings of particular relevance to their field in parts of Sections 3 and 4. Specialists may disagree with the arguments presented in these sections since they have been written by a non-specialist. Since one of the objects of this report is to act as a platform for more detailed studies, discussions and debates on the interface between the social and natural world in the shadow of climate change the hope is that any shortcomings will be seen as opportunities for continued inquiries rather than foreclosure of the debate. Having issued this description or, if you will, guidelines, it must be pointed out that the report is not only designed to be read as a smorgasbord, but is also intended to be approached in its entirety.

1.1.4 Climate Change as an Intellectual Challenge

It is often the case in intellectual puzzles that perspectives and findings are interdependent and the subject of this report is no exception. Some of the key arguments presented in this report result from critical examination of the

building-blocks of the problem at hand –the effects of climate change on international politics.

The complexity of the task at hand demands two conceptual clarifications in order to become manageable.

1. The way in which ‘security’ is defined matters for how the security impacts of climate change are to be understood. If one defines ‘security’ in a very wide sense then one recognises immediately the importance of climate change. However, such an approach renders it more difficult to draw structured conclusions. If a more restrictive definition is employed then one’s conclusions can also be more specific.
2. The relationships between climate systems, other natural systems and international politics are highly complex. A number of misunderstandings about the security impacts of climate change can be avoided if close attention is devoted to scrutinising this condition. A proper understanding of the possible connections between climate and politics may serve to remove some of the imprecision in the current debate. The two sub-sections below deal with these two issues.

1.2 The Understanding of Security in the Report

The concept ‘security’ used in this report denotes largely ‘traditional’ military-political concerns. However, ‘security’ is not considered to be the exclusive domain of unitary states, since many other entities are active in the field, either as protagonists or as objects of security. In addition, security is not only about large scale territorial conflict of the kind that has become known as ‘Clausewitzian’ conflicts. Rather, the nebulous category of actions that can be summarised as international interventions as well as interactions between states and non-state actors are included. Adopting this as the vantage point may seem unusual in a report on geopolitics and climate change since there have been many calls since the 1990s to widen the concept of security, particularly with regard to environmental factors. There is a simple reason behind this choice and it is to provide a concentrated analysis of the effects of climate change on international politics in general and on international security in particular.⁹ Since the report concerns climate change and its effect on natural systems that which usually goes under the term ‘the environment’ in already included and its potential connections to security are already acknowledged. Furthermore, the report

⁹ For a similar argument see Vayrynen 1998:12-15

acknowledges the powerful connections that exist between different social systems and policy areas. International security is connected to the sectors of economy, of finance, to aforementioned natural systems, to human security etc. It is connected, but for reasons of clarity the report assumes that it is a distinct and separate system.

One can also argue that there is justification in devoting a report to the possible consequences of climate change in the orthodox understanding of international politics in general and international security in particular. There have been many reports on climate change and its potential effects on the security of ecosystems (if indeed, it is meaningful to talk about their viability and survival in terms of security) as well as on 'human security' (i.e. the well-being, welfare and, ultimately, survival of human beings), but none that has systematically dealt with its potential effects on international politics/security.¹⁰ Therefore, for analytical as well as pedagogic reasons a starting-point of this report is that politics, security, economy and ecology are systems that are separate but in some ways connected to each other.

On the basis of this understanding of security and arguments presented below the main argument of this report is that many of the adverse consequences of climate change on human and natural systems will not have security effects in a direct sense and only indirectly on the conditions underlying international politics. This perspective in no way denies the suffering and hardships that climate change might bring, consequences that are necessary to address. It does, however, stress that they may not be more than indirectly related to security concerns. In order to clarify and further the argument we have to take a closer look at the issue of causality.

1.3 How Does the Climate Affect Politics and Societies?

1.3.1 The Climate is not a Cause – It is a Condition

Some of the fundamental assumptions of this report have to do with the causality of climate change. Scholarly literature, political discourse and media coverage of climate change tend to portray it as a single phenomenon or set of phenomena that directly causes other events to happen. This automatic view is not shared by this report. Instead, here the climate is regarded as one of the conditions in which

¹⁰ For a recent argument that environmental change should be conceptualised as an issue for human security see for example O'Brian 2006

human action - cultural, economical, political, social etc - takes place. Therefore changes in the climate may in turn alter some of the other conditions in which humans act. This report is interested specifically in political action. In order to clarify this argument and to make the distinction between it and views that imply an 'automatic' character of the relationship between natural phenomena and social action a brief expatiation on different theories of causal connections is necessary.

Ever since Aristotle the theory of science has distinguished between different kinds of causes.¹¹ The most common perception of causality is that of an event (a) directly preceding and giving rise to another (b). In the taxonomy of causation this is called effective or proximate causation. Sometimes it is called Newtonian causation, a name that reveals its intimate connection to the natural sciences as well as social sciences seeking to emulate the latter. Another type of causation is material or permissive causation, which signifies an event or process that enables, but does not directly lead to, other subsequent events. Permissive causes relate to their effects in the following way. The effect would not have been possible without the previous cause, but the effect did not follow with necessity from its cause. An example would be nationalism being a permissive cause of the mass mobilisation of World War One. Nationalism allowed mobilisation to occur but it did not lead to the war in a deterministic way. For an event that is the product of human action, to occur decisions have to be made. Such decisions are the products of human cognition and human volition. This means that in the realm of politics, things can always turn out differently, and that there is no simple determinism.

The climate, or to be precise, the different climate systems of the world, are important conditions for the scope of human action. Humans depend on a number of natural systems for their survival and for the stability of their societies. The degree to which they do so and the ways in which this dependence is expressed and managed varies greatly between different societies in history as well as across the contemporary world.

1.3.2 Climate Change will not Transform Political Systems – Political Systems will Interpret Climate Change

As noted above, climate change and global warming entered the mainstream political debate and mainstream media in full force during 2007. This entrance

¹¹ Concerning causation in Aristotle see Marc-Wogau 1996:179-182. For recent examples of reasoning in the social sciences that distinguishes between these two kinds of causation see Wendt 1999:165, 2002:6-8, Dessler 1989:453

was accompanied by speculations about climate change giving rise to ‘new conflicts’ or of drastic transformations of political structures. Some of these speculations took the form of visions of ‘back to the past’ scenarios of conflicts over land or of apocalyptic movies such as ‘Mad Max’ in which Mel Gibson’s character traversed a devastated post-nuclear Australia where modern society had disappeared only to be replaced by quasi-tribal ‘every man for himself’ anarchy.¹² Even observers who avoided such hyperboles nevertheless presented arguments that implied that climate change may of itself introduce new conditions previously alien to the contexts in which they would appear. This report argues that this mode of thought builds on problematic assumptions of how socio-political systems change and of the relationship between nature and society. Climate change, or the effects of climate change (such as drought, sea level rise, floods etc.), will probably affect social and political affairs, including security interactions. However, the natural effects of climate change cannot introduce wholly new social conditions but will rather play into existing conditions.¹³

In order to ascertain whether climate change could change existing socio-political structures, including those relating to international politics and security, as well as the ways in which such a change could occur, two clarifications must be made. The first concerns the relationship between natural and social systems and the second concerns how change occurs in social systems. In the following, the relationship between natural and social systems will in the following be understood with the help of Modern Systems Theory (MST) as formulated by Niklas Luhmann.

This report argues that like other natural events, climate change does not have effects independently from socio-political contexts. Therefore, contrary to popular belief, one cannot say that changes in climate or effects of changes in climate will in themselves cause social and political events. Instead, the effects of climate change will vary with prevailing socio-political contexts within and between states. This is why any analysis must be based on an understanding of these. To clarify this argument and to address the question of whether climate change will lead to new conflicts in a sociologically rigorous way, an excursion is required into thinking about the generation of action.

¹² The similarity of the imagery in resource scarcity scenarios to the movie the ‘Road Warrior’ have also been noted by Matthew, Gaulin, and McDonald, 2003:866

¹³ It is erroneous to believe that social and political systems are or can be transformed by external factors. Rather all changes, including those for which the proximate causes are ‘external’ occur on the basis of existing conditions.

Armed conflict is, basically, a kind of human action and sociological thinking has for over a century been occupied with the problems of why people act and what makes them act in the ways that they do. These problems are usually addressed in terms of the generation and direction of action.¹⁴ In turn, it must be stressed that human actions are events that can be expressed and understood in intersubjectively meaningful ways.¹⁵ Indeed, intersubjective understanding is necessary for action to take place at all. This means that action is always connected to systems of beliefs and ideas about the world and that rational human action always proceeds from purposes or motives of some kind. These purposes and motives in turn are derived from what we may call social and political systems.¹⁶ For example, paying taxes is an action that presupposes a great number of socio-political systems in order to be meaningful; such as the state, notions of citizenship and obligations etc. Changes in socio-political systems will also change the meanings of actions, for instance the introduction of welfare provisions changed the extraction of taxes from amounting to little more than protection money to something more like investment in a mutual insurance fund.

When studying climate change, however, we are interested in what kind of actions may be generated by changes not in socio-political systems, but in natural systems. In this regard social theory faces an unusual puzzle since it is conventionally concerned with how social causes generate social effects. However, in contrast to previous arguments in the field of environmental security, we argue that the connection between natural causes and social action cannot occur in an unmediated way.¹⁷ The idea that human beings act directly upon changes in nature is based on false assumptions about action, cognition and nature. All occurrences in natural systems must be interpreted through a socio-political context in order to acquire meaning and thereby to become the focus of human action.

The relationship between natural and social systems can be usefully clarified by using the terminology of Niklas Luhmann, and Modern Systems Theory (MST). MST conceptualises the world in terms of discrete functional subsystems, such as law, politics, economics etc. These systems are closed systems that operate

¹⁴ Parsons 1968

¹⁵ This view is, of course essentially that of Hans-Georg Gadamer for an expatiation see Gadamer 2004

¹⁶ See for example Scott 2001

¹⁷ For example, Deudney 1999 argues in favour of the view that natural causes can produce social effects

according to their own logics.¹⁸ Systems are also ‘autopoietic’, which means that, like living organisms (in Luhmann’s terms, ‘physical systems’) they reproduce themselves. Although autonomous, functional subsystems are connected to other systems in their environment by means of ‘structural coupling’. Since each system is closed, events that occur in other systems have to be translated into the terms in which the social systems in question (e.g. politics, law) operate in order to become intelligible.¹⁹ Intelligibility, as argued above, in turn is necessary for action to be generated. In Luhmann’s view, systems observe other systems in their environment and react to changes in them, but they do so according to their own logic. This means that the social and the natural world can be conceptualised as two closed ‘functional subsystems’ and that the social subsystem observes natural systems, such as the climate system, and reacts to it according to its own logic. In the terms of the present report, the conception of ‘social system’ as a functional subsystem as opposed to ‘natural systems’ encompasses political, legal, social (in the more strict sense) systems, in other words, systems that rely on human cognition and volition.

This conceptualisation provides us with a much stronger epistemological foundation for understanding the relationship between the social and the natural world. It also enables us to recognise that changes in natural systems have to be interpreted, in the widest sense of the word, in order for social systems to be able to act upon them. It is easy to understand that a predominantly agrarian society in which the majority of people survive on subsistence farming, reacts to (or in MST terms, interprets) a drought differently from an advanced industrial society with a well-developed division of labour, mechanised irrigation systems and market mechanisms (both domestic and international) for the procurement and distribution of foodstuffs. In other words, different socio-political contexts give rise to different interpretations of natural events and give rise to actions towards them.²⁰ It should also be noted that different socio-political contexts produce different effects on natural systems. Climate change is of course a good example of this since it the changes in the climate system (a natural system) are reactions to the fossil fuel emissions produced by a historically particular system, namely industrial civilisation.

¹⁸ For a good overview see Bania-Dobyns 2005:14

¹⁹ Luhmann 1995 & 1997

²⁰ It should be noted that some natural events, like volcanic eruptions, have a very strong impact on societies. However, their effects will vary according to the characteristics of the selfsame society, both with regard to socio-economic impacts and how the society in question interprets it (e.g. as the wrath of the gods or as a profane natural phenomenon).

In less abstract terms, this argument means that the kind of consequences that climate change effects will have on a certain country varies with several socio-political factors. Examples that will be studied in this report are: state-society relations in a country, the kind of regime the country has (e.g. democratic, authoritarian, patrimonial), the kind of relations the country has with its neighbours, whether there are deep fractures in the society and whether there is latent or actual internal strife in the society. Consequently, this report's analysis of the potential for conflict in different regions of the world is based on the histories of the respective regions. The main thrust of this argument is, hence, that climate change will not give rise to new conditions or actions in an 'automatic' fashion. Rather, it will play into dynamics and structures that exist in the regions and in the time when they occur. This argument is first and foremost applicable to initial reactions of socio-political systems to climate change. The following paragraphs expand more fully how socio-political systems may change in connection with climate change.

This argument can be clarified by allowing ourselves a counterfactual mental experiment and assuming that climate change occurred in the world of the nineteenth century.²¹ During this time, the international system was dominated by a few European empires whose mutual relations were characterised by balance of power and great power rivalry. Their attitudes towards extra-European peoples ranged from bare tolerance (e.g. the Japanese) through condescension to cruel racism. Under such an international system, a country in, say, Africa, hard-hit by poverty, instability and a worsened climate (e.g. sea level rise, drought and water stress) would probably not be the target of peacekeeping operations and foreign aid operations. Instead, it would probably be abandoned by its colonising overlord and left to its own devices. On the European continent, great power politics would probably sharpen and full-scale inter-state wars would be a real possibility. The reasons why these developments were likely to happen in our hypothetical nineteenth century would be embedded in the international political system as well as in national political contexts of that age.

In contrast, the basic institutions of today's international system on both global and regional levels are very different from those of the nineteenth century. This means that the effects of climate changes in the near future will take place in this context rather than produce a new context altogether. Any future changes in socio-political contexts, either on a micro-level, i.e. within particular states, or on the macro-level, i.e. in the international system as a whole, in which climate change may play a part will be gradual modifications of today's conditions.

²¹ For an overview of counterfactual reasoning in history and political science see Lebow 2000

For these reasons, simple ‘back to the past’ scenarios are unlikely to materialise. Since we have different systems of resource allocation, communication and co-ordination and diplomatic relations than in previous historical periods, international politics will not revert to historical interaction patterns, peaceful or conflictual, simply because of changes in natural systems. For that to occur, political and social systems would have to change first.²² This is not to say that climate change cannot change political and social systems (such as the international system) in a more conflict-prone direction. However, the possibility span of such changes will be determined by today’s structures.

The importance of human cognition, volition and decision also means that the way in which political actors perceive changes in the climate and in the politics of climate change also matter greatly to the outcome. If major actors, i.e. states, perceive climate change as a prelude to military conflicts and begin an arms race, then that course of action will trigger similar reactions among their neighbours and lead to a worsened security dynamic. On the other hand, if climate change is portrayed and acted upon as a series of natural phenomena that have to be adapted to by means of enhanced civilian diplomacy, foreign aid, technology transfer etc. then the deteriorating security dynamics will not occur by themselves.

The argument presented above mainly proceeded along a static formula: Changes occur in natural systems, they are observed by social systems which in turn act according to their own logics. Although the relationship between natural and social systems has usefully been conceptualised in terms of closed systems that require a translation of external events into their own terms to be able to act, one must also be open to a conceptualisation of systems as dynamic. In other words, although systems operate on their own terms, they are also subject to change.

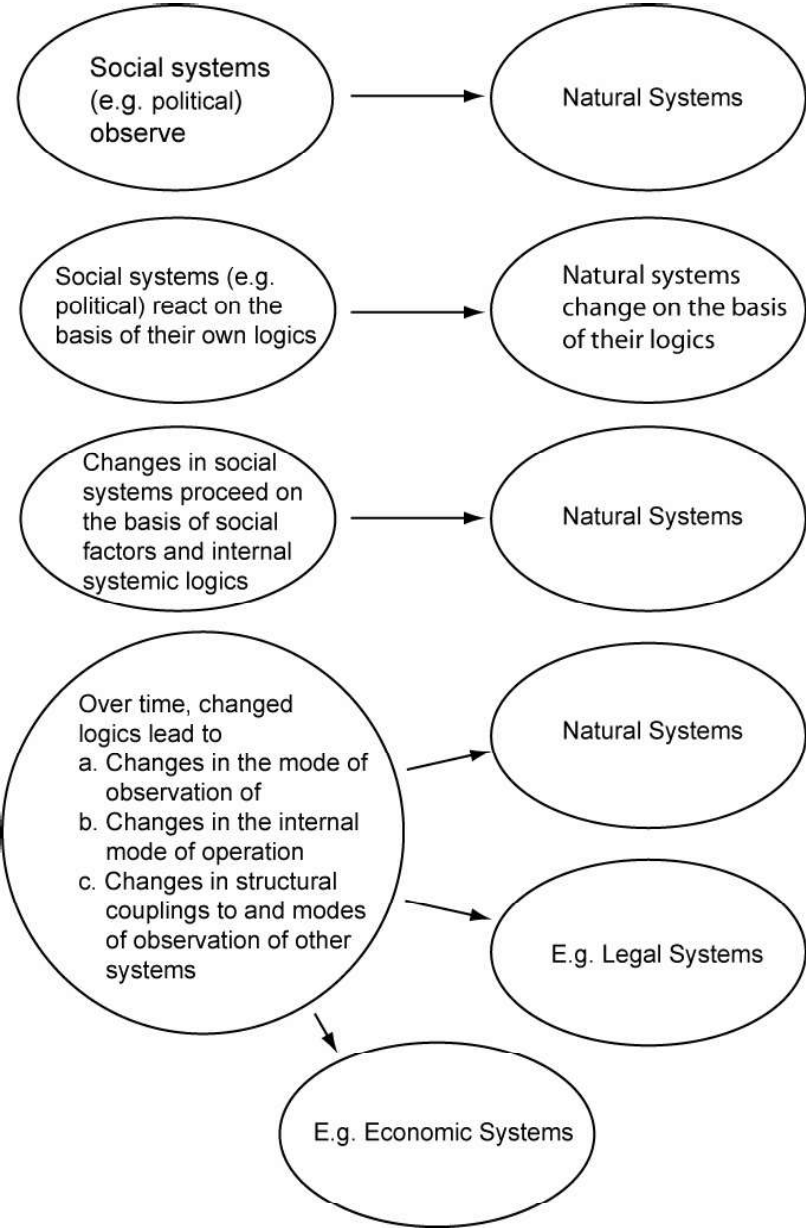
The need to react to changes in natural systems, such as those that will result from climate change, is in itself a change in the social system. In other words, the reaction in itself is a change. The argument presented above, that actions will proceed from social, not natural systems, still holds true but with an important caveat: The social systems that direct actions will themselves change, often slowly and in imperceptible ways, but sometimes in drastic and turbulent ways.

²² From a scientific point of view, this analytical problem illustrates the *ceteris paribus* fallacy, which consists in believing that one and only one condition is different between two observed phenomena. In the case of arguments that climate change directly leads to ‘resource wars’ the different condition between our more peaceful age and previous ages in which conflicts over land occurred would be ‘scarcity of arable land’. Changes in this condition would, according to the argument, lead to a reversal of conflict patterns of a previous age. However, this line of reasoning ignores or downplays the numerous differences between the socio-political institutions of the two contexts.

Therefore, the argument that (re)actions to climate change will proceed from the socio-political systems of today will hold true in the near but not in the distant future.

It is well-nigh impossible to foresee what changes will occur in socio-political systems due, strictly speaking, to reactions to climate change, but it is probable that change will occur. This is another reason why this report deals with a relatively short time-span. Whether socio-political systems around the globe and the global system of international politics will change substantially within the time-frame covered by this report (~50 years) is difficult to say. Change, either (and probably) cumulative or in sudden bursts of events, that alter the socio-political structures of today to different forms may occur within the span between 2007 and 2050 or outside it. In strict terms, therefore, this report should be understood as dealing with initial reactions and responses to climate change. Over time however, political and social structures will change and new patterns of action will thereby be generated. Whether such patterns will take the shape of a greater or reduced proneness to violent conflict, we cannot say. The main point is still that such changes in the patterns of action require prior changes in socio-political structures, and that will probably take time. The diagram overleaf illustrates the argument and the conceptualisation.

The relation between social and natural functional subsystems



1.4 Summary

To summarise, this section advanced the following three interrelated arguments. They have two functions, firstly forming the basis of the perspective of this report and secondly in their own right constituting arguments about climate change and security:

1. For reasons of analytical clarity, we understand ‘security’ is understood here to be the politically mediated actions undertaken to affect the viability of organised social units, primarily states, but in some cases non-state entities. The actors seeking to affect the security of a state or other group do not have to be a state, but can be other kinds of organised groups as well. However, this report focuses particularly on states as actors as well as objects of security.
2. The climate is a conditioning factor – a permissive cause – of human action, not a deterministic, effective cause. This means that the report deals with how the conditions of international politics may be affected by changes in global and regional climates. It does not deal with social and/or political events that the climate causes in a direct sense. Furthermore it means that climate change in itself does not determine political actions. Thus, the climate is in itself not a threat and certainly not one that can be countered by military means.²³ It is a condition to which adaptation is necessary but whether military preparations are a necessary part of the process of adaptation is decided by political circumstances and by political actors, not by the climatic system.
3. Social and political actions proceed from social and political systems. Natural systems, such as climate systems, do not influence human action directly but are mediated through the political and social systems that already direct actions. This argument entails that in order for a world characterised by climate change to develop in a stable and less conflict-prone way, there will have to be are vital international and national (state) institutions that ensure that political divisions and conflict do not take the form of violent interaction between states or sub-state actors.²⁴

These three arguments are advanced with the intention of reducing the complexity of the problems that the present analytical task entails. Section 2.3 introduces a further complexity-reducing tool, a regional framework for analysing security interactions developed by Barry Buzan & Ole Wæver (2004). The purpose of using this model is to outline the regional patterns of security that exist in today’s world as well as the connections firstly between different regions and secondly between regions and the global level of politics. Section 2 outlines

²³ I owe this point to Mikkel Vedby Rasmussen

²⁴ A similar perspective underlies Clark 2007 see in particular pages 2, 15, 17-18