Herausgeber

Prof. Dr. **Michael Brzoska**,
Institut für Friedensforschung
und Sicherheitspolitik an der
Universität Hamburg (IFSH)

Dr. **Walter E. Feichtinger**,
Landesverteidigungsakademie,
Institut für Friedenssicherung
und Konfliktmanagement, Wien

Dr. **Volker Franke**, Bonn Inter-
national Center for Conversion
(BICC)

Prof. Dr. **Hans J. Giessmann**,
Berghof Forschungszentrum für
konstruktive Konfliktbearbei-
tung, Berlin

Prof. Dr. **Heiner Hänggi**,
Genfer Zentrum für die
demokratische Kontrolle der
Streitkräfte (DCAF), Genf

Kapitän zur See **Heinz-Dieter
Jopp**, Führungsakademie der
Bundeswehr, Hamburg

Dr. **Patricia Schneider**, IFSH

Schriftleitung

Prof. Dr. **Michael Brzoska**

Redaktion

Dr. **Patricia Schneider**

(V.i.S.d.P.), IFSH

Sybille Reinke de Buitrago

Dr. **Martin Kahl**

Susanne Bund

Beirat

Dr. **Alyson J.K. Bailes**,
University of Iceland, Reykjavik

Dr. **Detlef Bald**, München

Prof. Dr. **Joachim Betz**, GIGA,
Institut für Asienstudien,
Hamburg

Prof. Dr. **Hans-Peter Dürr**, Träger
des Alternativen Nobelpreises,
München

Prof. Dr. **Pál Dunay**, Genfer Zen-
trum für Sicherheitspolitik (GCSP)

Dr. **Sabine Jaberg**, Führungsaka-
demie der Bundeswehr, Hamburg

Prof. Dr. **Charles A. Kupchan**,
Georgetown University,
Washington, D.C.

Dr. **Martin Kutz**, Hamburg

Dr. **Krzysztof Ruchniewicz**,
Willy-Brandt-Zentrum für
Deutschland- und Europastu-
dien, Wrocław

Prof. Dr. **Susanne Feske**,
Universität Münster

Dr. **Martina Fischer**, Berghof
Forschungszentrum für Kons-
truktive Konfliktbearbeitung,
Berlin

Prof. Dr. **Sabine von Schorle-
mer**, TU Dresden

Bates Gill, PhD, SIPRI, Stock-
holm

Prof. **Ljubic Jelusic**, Universität
Ljubljana, Slowenien

THEMENSCHWERPUNKT

The securitization of climate change and the power of
conceptions of security

Michael Brzoska*

Abstract: This paper looks at recent studies that have addressed climate change as a security issue. Posing climate change as a problem for security has provided it with a major boost in attention. However, it raises the potential of ‘securitization’, i.e. that the issue is primarily addressed via traditional means of security policy. The paper analyses how selected studies frame the issue of climate change and security and considers what recommendations they make on dealing with the problem. Among its findings are that the framing of climate change as a security issue is not based on well founded analysis but is rather largely driven by ad hoc theories on the links between environmental degradation and violent conflict. A second finding is that different conceptualisations of security lead to different types of recommendation on how to deal with the consequences of climate change as they relate to peace and security. Securitizing the issue therefore does not necessarily lead the authors of studies to prescribe predominantly traditional security instruments for dealing with crises. However, although the authors reach different conclusions, their diagnosis of climate change as a security issue is likely to push the climate change discourse towards the use of traditional security instruments. A third finding of the paper is therefore that the mixing of different conceptions of security may increase the ‘attention grabbing’ power of studies but also muddle their messages.

Keywords: Climate change, securitization, security, framing, security instruments
Klimawandel, Securitization - Versicherheitlichung, Sicherheit, framing, Sicherheitsinstrumente

1. Introduction

In 2007 climate change finally began to attain the public attention it deserves. One key reason for this was the suggestion that climate change, if not addressed forcefully, would lead to wars, mass migration and terrorism. In short, climate

change was posed as a security issue. In this paper I seek to deconstruct the ways in which this was done in a select number of major studies. In particular, I emphasize how the problem is ‘securitized’. As what kind of security problem is climate change portrayed? How is this portrayal justified? Which recommendations are made to address the problem? The second objective of the paper, in addition to analysing the ‘securitization’ of climate change, is to see whether a key assumption of ‘secu-

* Prof. Dr. Michael Brzoska ist Wissenschaftlicher Direktor des Instituts für Friedensforschung und Sicherheitspolitik an der Universität Hamburg (IFSH).

ritization' analysis, namely that securitizing an issue fosters the adoption of traditional security policy measures, is valid for the current debate on climate change and security.

2. Climate change, a problem securitized?

Climate change, like any major change in the conditions of human societies, will create and fuel conflicts, affecting the living conditions of many people. In many cases, such change will be for the worse. This may, in turn, lead to violent conflict. The deterioration of the human environment and the resulting violent conflict may induce large numbers of people to migrate, thus also creating conflicts in areas less negatively affected by climate change. Beyond local and regional effects, climate change increases the global risk of violent conflict by adding another element of contention to the competition among major powers.

These dangers associated with climate change are by now quite well rehearsed. But how high is the probability that they will occur? How likely is it that climate change will lead to more interstate wars, intrastate wars or terrorism? How much do we know about the links between climate change and violence? Are these dangers 'real' in the sense of having a high likelihood of occurring or are they largely fictitious, edge-of-range possibilities that are used to draw attention to climate change, a level of attention that would not be attainable by stressing the more likely, but less spectacular economic and social consequences of the problem? The latter would be understandable but potentially counterproductive.

In the literature on securitization it is implied that when a problem is securitized it is difficult to limit this to an increase in attention and resources devoted to mitigating the problem (Brock 1997, Waever 1995). Securitization regularly leads to all-round 'exceptionalism' in dealing with the issue as well as to a shift in institutional localization towards 'security experts' (Bigot 2006), such as the military and police. Methods and instruments associated with these security organizations – such as more use of arms, force and violence – will gain in importance in the discourse on 'what to do'. A good example of securitization was the period leading to the Cold War (Guzzini 2004). Originally a political conflict over the organization of societies, in the late 1940s, the East-West confrontation became an existential conflict that was overwhelmingly addressed with military means, including the potential annihilation of humankind. Efforts to alleviate the political conflict were, throughout most of the Cold War, secondary to improving military capabilities.

Climate change could meet a similar fate. An essentially political problem concerning the distribution of the costs of prevention and adaptation and the losses and gains in income arising from change in the human environment might be perceived as intractable, thus necessitating the build-up of military and police forces to prevent it from becoming a major security problem. The portrayal of climate change as a security problem could, in particular, cause the richer countries in the global North, which are less affected by it, to strengthen measures

aimed at protecting them from the spillover of violent conflict from the poorer countries in the global South that will be most affected by climate change. It could also be used by major powers as a justification for improving their military preparedness against the other major powers, thus leading to arms races.

This kind of reaction to climate change would be counterproductive in various ways. Firstly, since more border protection, as well as more soldiers and arms, is expensive, the financial means to compensate for the negative economic effects of reducing greenhouse gas emission and adapting to climate change will be reduced. Global military expenditure is again at the level of the height of the Cold War in real terms, reaching more than US \$1,200 billion in 2006 or 3.5 percent of global income. While any estimate of the costs of mitigation (e.g. of restricting global warming to 2°C by 2050) and adaptation are speculative at the moment,¹ they are likely to be substantial. While there is no necessary link between higher military expenditures and a lower willingness to spend on preventing and preparing for climate change, both policy areas are in competition for scarce resources.

Secondly, the acceptance of the security consequences of climate change as an intractable problem could well reduce efforts to find peaceful solutions to the conflicts that will inevitably come with climate change. Climate change will have major consequences, particularly in countries where living conditions are already precarious (IPCC 2007, WBGU 2007). The consequences of climate change on some basic foundations of life, such as fresh water supplies, arable land and agricultural productivity in various parts of the world can already be roughly estimated for various global-warming scenarios. There are also more or less well founded predictions of the consequences of reduced availability of natural resources such as arable land and water on hunger and disease, even though such consequences are highly dependent on counter-measures and adaptation efforts in affected regions. There is no inevitability about these consequences.

This is even more the case for violent conflict of various types. The links between reductions in resource availability and violent conflict are complex. A deterioration in human security – threats to the 'vital core of life' (Commission on Human Security 2003, p. 4) does not necessarily imply an increase in violent conflict. To assume the opposite may lead to the neglect of opportunities for conflict resolution and the prevention of conflict from turning violent.

Those who do not accept the 'securitization' argument have argued that framing a problem as a security issue does not necessarily have these consequences (Knudsen 2001; Jackson 2006). While raising military preparedness and favouring military over civilian approaches to dealing with conflicts may have been the predominant reaction in the Cold War, this is supposedly not the case any more. It is argued that the rethinking of the best approach to security in the final phases of the Cold War – relevant keywords include Common Security and Comprehensive Security – as well as the expansion of the concept of security to cover a wide range of issues, including the environment and

1 One example of the difficulties is the discussion of the cost calculations in the Stern Review, see e.g. Nordhaus 2007 and Tol 2006.

economics and culminating in the concept of human security already mentioned, decoupled 'security talk' from instruments particularly connected to the military and the police.

The issue at stake here is whether the framing of an issue as a security matter can have different outcomes depending on the understanding of security used. Does it make a difference whether those 'securitizing' an issue are arguing in terms of 'hard' security – of wars, weapons, and armies – or in terms of 'human security' – of hunger, disease and refugees? Or put differently, can the 'exceptionalism' signified by use of the word 'security' have different configurations, for instance, can it be limited to the application of greater attention and more financial resources than 'normal', or will it inevitable be linked to the use of violence?

While often talking past each other, proponents and critics of the 'securitization' argument have had major debates in the past, on environmental security in the early to mid-1990s, and on the development/security link, migration and terrorism in the early 2000s. Neither of these debates has been conclusive.

Climate change offers another opportunity to investigate the validity of the claims of the 'securitization' critique. In what follows here, I will do this on the basis of four selected recent studies, which all 'securitize' climate change, albeit with differing understandings of security. None is limited to a narrow conception of 'hard' security, and all include 'soft' security concerns. However, they differ in their emphasis, which ranges from a conception of human security that encompasses all threats to human life and well-being, to national security. My question in this paper is whether differences in understanding lead to differences in the presentation of the problem, the analytical instruments and the policy recommendations. These three aspects structure the paper.

3. Climate change and the threat to security in recent studies

In 2007 a number of studies were published on the links between climate change and security. The award of the Nobel Peace Prize to Al Gore and the International Panel on Climate Change illustrates the level of attention being given to climate change as a problem for peace and security. But which threats and dangers are these studies identifying and on what basis? How likely are they judged to occur? What instruments for prevention and countering consequences are proposed?

The four studies used for analysis in this paper come from four different sources: *the Scientific Advisory Council on Global Environmental Change of the Federal Republic of Germany* (WBGU 2007) a body consisting of nine eminent natural and social scientists from Germany and Switzerland, *International Alert* (Smith and Vivekananda 2007), an international NGO supported by the UK Department for International Development, *the CNA Corporation* (Sullivan et al 2007), a think tank of the US Navy, and a study group of *the Center for a New American Security* (Campbell et al. 2007), which is primarily composed of former high-ranking members of the Clinton Administration.

These four studies are remarkably similar in their diagnosis of the main dangers of climate change for peace and security. Climate change is seen as a great, if not the greatest danger for international peace and security in the 21st century. A broad variety of risks associated with climate change are discussed, ranging from hunger to pandemics and massive population movements. Authorts of all four studies see some of these consequences as inevitable and others as dependent on the success of measures to mitigate the extent of global warming.

Broad and narrow security conceptions are used in all four studies. Discussion typically starts off with descriptions of the most proximate physical consequences of global warming, such as changes in rainfall patterns, melting of glaciers, rising sea levels and increasing extreme weather. Reports then turn to consequences for resource availability, focusing on the most affected regions, such as low-lying islands and coasts, and areas most likely to be affected by future water shortages. Resulting societal stresses, particularly in those regions, are described.

The authors of all four studies agree that 'hardest hit by climate change will be people living in poverty, in under-developed and unstable states under poor governance [...] climate change will add to the pressures under which those societies already live.' (Smith and Vivekananda, 2007. p. 3) In all four studies, the authors expect major consequences for human well-being in core areas, or to put it differently, for human security.

All four studies also predict threats to security in the narrow sense, unless major reductions in the emission of greenhouse gases occur very rapidly, including:

- an increase in the number of violent conflicts, including interstate wars
- military interventions in poor countries by armed forces of Western states, primarily to prevent humanitarian catastrophes but also further destabilization of states
- massive migration that risks bringing armed conflict to neighbouring countries and terrorism to industrialized countries
- new safe havens for terrorists
- deterioration of relations among major powers as a result of a mixture of energy-supply and climate-change issues
- conflict over changing coast lines and resource exploitation in the Arctic.

However, while all the studies have similar lists of dangers, which span the full spectrum of security conceptions, there are also important differences.

3.1 The WBGU study

This study is by far the most detailed and differentiated of the four studies. It lists and discusses in detail the full range of threats corresponding to narrow and wide conceptions of security threats. However, in the list of security threats that summarizes the study, human security concerns dominate. These dangers are (WBGU, p. 1):

1. A possible increase in the number of weak and fragile states due to climate change
2. Risks for global economic development
3. Risks of growing international distributional conflicts between the main drivers of climate change and those most affected
4. The risk to human rights and the industrialized countries' legitimacy as global governance actors
5. Triggering and intensification of migration
6. Overstretching of classical security policy

Points 1, 2 and 4 are closely linked to human security, while 6 addresses narrow security directly. The study also stresses human security in the broad sense of the Human Security Commission (2004), often called the Japanese conception of Human Security. The more narrow 'Canadian' conception of human security as the protection from all kinds of physical violence that, for instance, underlies the Human Security Report (2006) is not ignored but is given less weight. In point 5, human security and more narrow security concerns, such as terrorism, are mixed. Point 3 plays out as classical foreign policy/security issue.

3.2 The International Alert study

The authors of this study use narrowly conceived threats to security instrumentally to push their preferred way of dealing with the consequences of climate change, which is to strengthen conflict prevention as a key means of reducing the negative effects.

While their analysis lists the full spectrum of threats to security, Smith and Vivekananda focus on violence against communities and individuals, emphasizing on the Canadian concept of human security. They stress the importance of societies' capacities to adapt to the consequences of climate change as well as to manage conflicts non-violently. 'Vulnerability to climate change is the product of three factors – exposure, sensitivity and adaptive capacity. The first issue is whether a country – or a city, or community, or region – is going to be exposed to physical effects of climate change such as increased frequency of extreme weather. The second issue is how sensitive it is to that exposure – a storm may hit two cities but only cause floods in one of them because it is low lying. And the third issue is whether there is adaptive capacity which, for example, enables city authorities to build flood defences and be ready with quick and safe evacuation plans, while the national government has prepared to care for those who are displaced and can swiftly allocate resources for repair and rebuilding when the floods recede.' (Smith and Vivekananda 2007, p. 10)

In the above analysis, climate change does not need to have negative consequences for human security and security in the narrow sense. Societal capacity to deal with the consequences is decisive. However, in practice they see little of that capacity in failing states, leading to dire predictions. 'There are 46 countries – home to 2.7 billion people – in which the effects of climate change interaction with economic, social and political problems will create a high risk of violent conflict.' (Smith and Vivekananda 2007, p. 3)

3.3 The CNA study

The CNA study emphasizes national security, though human security issues are not ignored. However, loss of arable land, hunger and disease are largely seen as precursors of violence, in turn being of impact on US national security. 'Climate change acts as a threat multiplier for instability in some of the most volatile regions of the world [...] causing widespread political instability and the likelihood of failed states[...] [C]limate change has the potential to result in multiple chronic conditions, occurring globally within the same time frame [...] Weakened and failing governments, with an already thin margin for survival, foster the conditions for internal conflicts, extremism, and movement towards increased authoritarianism and radical ideologies' (Sullivan et al., p. 3). Little potential for avoiding these consequences for security in the narrow sense are seen through improvement of conflict-resolution techniques.

3.4 The Center for a New American Security study

The study by Campbell et al. combines security concerns to create an image of what can be termed 'global security'. While not ignoring the risks to individuals and communities, they stress the dangers for all states and the need for international co-operation.

Their severe scenario (average rise of global temperature of 2.6°C by 2040) predicts the following: 'Nations around the world will be overwhelmed by the scale of change and pernicious challenges, such as pandemic disease. The internal cohesion of nations will be under great stress, including in the United States, both as a result of a dramatic rise in migration and changes in agricultural patterns and water availability. The flooding of coastal communities around the world, especially in the Netherlands, the United States, South Asia, and China, has the potential to challenge regional and even national identities. Armed conflict between nations over resources, such as the Nile and its tributaries, is likely and nuclear war is possible. The social consequences range from increased religious fervour to outright chaos. In this scenario, climate change provokes a permanent shift in the relationship of humankind to nature.' (Campbell et al. 2007, p. 7) The primary risks emphasized in all scenarios are large-scale migrations, competition, conflict and wars over natural resources – both inside and among nations. They also stress security problems associated with activities against climate change, such as nuclear proliferation linked to greater nuclear power, and overloading of the United Nations (Campbell et al. 2007, p. 107). However, they do not see climate change as a national security issue. They argue as follows: 'At a definitional level, a narrow interpretation of the term "national security" may be woefully inadequate to convey the ways in which state authorities might break down in a worst case climate change scenario. It is clearly the case that dramatic migrations and movements of people (among other worrisome effects) will trigger deep insecurity in some communities, but it is far from clear whether these anxieties will trigger a traditional national security response.' (Campbell et al. 2007, p. 33)

4. Instruments for predicting security predicaments

All four studies are faced with the dilemma that the current state of research on the links between changes in the environment and various dimensions of insecurity described as future security risks, such as hunger, human rights violations, migration, violence, armed conflict, international military interventions and the overloading of international institutions, does not allow for strong statements – but that the authors want to make strong statements. This is true with regard to both the existence of causal links between the phenomena and the possible extent of the effects of environmental change on these risks.

All four studies take account of the latest conflict research. Relevant literature is reported with different degrees of comprehensiveness – the WBGU study goes into great detail, while the CNA study is somewhat cursory – but is mentioned in all studies.

‘So far, there has been no evidence that environmental problems are the direct cause of war – that is, there have been no “environmental wars” manifesting the most extreme form of interstate conflict. At least, no evidence exists to date to suggest any unambiguous causal links between environmental change and violent interstate conflict. Indeed there are some striking examples in which efforts to solve environmental problems have led to constructive and cooperative engagement between fundamentally hostile parties (e.g. water use between Israel and Palestine or Egypt-Israeli cooperation in the context of the Mediterranean Action Plan). However, it certainly cannot be ruled out that environmental degradation can have destabilizing impacts that may lead to conflict – this remains a plausible possibility, as can be seen from various conflicts in the recent past.’ (WBGU, p. 35)

The authors of all four studies, however, are rather unhappy about this state of affairs. They do not want to get bogged down by the lack of established causal links and the weakness of statistical estimations; they are keen on making predictions. So they employ alternative means for predicting the effects of climate change on security.

One way of doing this is to make predictions without stating probabilities. With few exceptions, the dangers discussed are treated as ‘possible outcomes’ of climate change. They *may* occur, but there is no guarantee that they *will*. Such predictions are almost impossible to contradict – no one knows the future and there are few things that cannot happen.

Nor are these kind of predictions very helpful when it comes to framing policies to address the future. The authors of the four studies employ additional means to argue that despite the lack of past empirical evidence of a strong direct connection between climate change and indicators of insecurity, there is a high probability that climate change will affect security negatively. The three most important means by which they do so are what I will call here ‘statehood’, ‘non-linearity’ and the ‘scenario technique’.

In all four studies, but most clearly in the one from International Alert, the prognosis of the effects of climate change on indicators of insecurity is differentiated by the degree of statehood in the affected countries. It is assumed, with some support from earlier studies of the link between environmental change and violent conflict (Homer-Dixon 1999, Baechler 2002), that the capabilities of governmental institutions to manage conflict are a strong intervening variable. Where such capabilities are weak or non-existent, reductions in the availability of resources are more likely to lead to violent conflict than in countries where institutions are available for preventing, mediating, regulating and suppressing conflict.

The authors of the studies use this conclusion to make prognoses of the effects of climate change on armed conflict based on the classification of states by their capabilities to prevent and regulate conflict, or ‘statehood’. For weak, failing and failed states, it is assumed that even small degradations in the environment will be the cause of violent conflict and migration. By contrast, it is expected that climate change will have no such direct effects on democratic states with a high national income. However, these states are likely to be affected indirectly by terrorism and migration originating from regions with low degrees of statehood. In the study by International Alert, the world is divided into three groups of states. The first group consists of 46 weak and failing states with 2.7 billion inhabitants, the second of 56 states with fragile statehood, and the third of the rest of the world. Climate change is only expected to have major consequences in terms of violent conflict and migration for the first group of states with a high level of confidence (Smith and Vivekananda, p. 3).

While most of the conflict research literature confirms the link between the capacities of conflict-solving institutions and the effects of reductions in the availability of resources on armed conflict, there is no automatic connection. In particular, it seems too narrow to look at governmental institutions only. Other means of conflict prevention and regulation, such as traditional institutions, are often also present in states with weak governments.

A second means of making predictions is the claim that historically unprecedented climate change will lead to historically unprecedented large-scale disruption in economic and social activities, conflict, and finally, the use of violence. In the WBGU study for instance, the historical record is said to be of little relevance: ‘As yet, environmental changes have triggered conflict and violence only in isolated cases. There is empirical evidence, for example, of outbreaks of violence and anarchy in the wake of storm and flood disasters. However, the manner and rate of climate change today are without precedent in the history of humankind. Fundamental changes in the biosphere are confronting humanity with entirely new challenges. Today’s civilization – with a population numbering some 6.5 thousand million, a finely woven global infrastructure, global flows of trade, information and transport, differentiation among industrialized, newly industrializing and developing countries, and disparate capacities for resolving problems and conflicts – may be threatened by climate impacts for whose management no historical models exist.’ (WBGU 2007, p. 16) The difference between the past and the future is declared not

only to be quantitative – no such large change in the environment has happened so quickly in human history – but to be qualitative, rendering earlier research irrelevant.

Finally, all four studies work with scenario techniques. Experts were asked to develop their predictions of the future for differing assumptions of the extent of global warming. With one exception – the WBGU study – the scenarios do not include considerations of countermeasures taken to combat the effects of climate change or efforts to adapt to changing conditions. Changes in resource use or the strengthening of capacities to regulate conflict or prevent violent conflict are not part of the scenarios. On this basis, climate change is judged to directly lead to security problems. Determinism dominates.

The techniques listed here are quite useful for raising the awareness of possible future dangers of climate change. However, they have a number of limitations:

- They do not allow for solid predictions of the likelihood of effects of climate change occurring. They are either too imprecise, such as the classification of states according to 'statehood', or subjective, such as the assumption of non-linearity in the relationship between climate change and measures of insecurity.
- As all four studies are about the effects of climate change on peace and security, they tend to emphasize the dangers. They have an inherent bias from the start, which they do not compensate for in their analysis. This is particularly noticeable in the scenarios. As is often the case with expert scenarios, those in the four studies are effectively examples of worst-case thinking. While the possibility of adaptation to the effects of climate change is mentioned in the literature review section of all the studies, the scenarios rarely consider deviations from the assumed direct effects of climate change on indicators of insecurity. Co-operation, a reaction that is found as often in studies of past cases of reductions in resource availability is hardly mentioned in the scenarios. Worst-case thinking, which dominated much of strategic thinking during the Cold War, is of great use when the risks described are very large, as this renders the probability of the event's occurring less relevant. However, it is not very useful for deciding on the allocation of scarce resources to manage risks, that all look to be of more or less similar – high – magnitude.
- Both societal processes of transformation and adaptation in response to the effects of climate change, and recursive increases in environmental change as a result of violence and migration are largely excluded from the generation of prognoses. Interestingly enough, this is very different in the recommendations sections of the WBGU and International Alert studies. Here adaptation and the development of institutions to manage conflicts and prevent them from becoming violent are at the centre. But not so in the prognosis sections where effects of climate change on measures of insecurity are seen as directly linked different classes of 'statehood'.

In view of these problems, the four studies cannot make reliable predictions about the future. They can well be seen as warnings of the possible effects of climate change. However, all of them

choose to emphasize the possible negative effects on peace and security. Since they all list human security alongside traditional national security concerns, they paint a grim picture – grimmer than to be expected in reality as adaptation measures are highly likely to be adopted, not least as a result of the recommendations made in the various studies.

All four studies present their own predictions as likely futures, at least in some sections. The two US studies are particularly adamant on this point, while the European reports more often mention their worst-case nature. In the CNA study, its main author, former U.S. Army Chief of Staff Gordon Sullivan, is quoted as saying: 'Military leaders see a range of estimates and tend not to see the stark disagreements, but as evidence of varying degrees of risk. They don't see the range of possibility as justification for inaction.' This is followed by the statement: 'Former U.S. Army Chief of Staff Gordon Sullivan enjoys a good debate. But he also knows there are times when debate must stop and action must begin. With respect to climate change, he says that time has arrived.' (Sullivan et al. 2007, p. 11)

The authors of the WBGU study strongly distinguish between short- and long-range predictions. For the next two decades they expect climate change to have little effect on matters of insecurity, while after that they foresee severe consequences for peace and security unless global warming is kept to below 2°C.

5. Policy recommendations and conceptions of security

Despite largely agreeing in their analysis of the problem, the four studies only partly concur on policy recommendations.

All four stress mitigation as the most important policy objective. Limiting global warming is a common theme running through all of them, and failing to achieve quick reductions in greenhouse gas emissions is seen as leading directly to danger. However, beyond the call for mitigation, the studies promote differing agendas.

The CNA report emphasizes the importance of mitigation, the need to improve energy efficiency, and calls for the US to become a more constructive international partner to prevent destabilizing effects of climate change (Sullivan 2007, p. 7). In addition, it argues that the 'US should commit to global partnerships that help less developed nations build the capacity and resilience to better manage climate impacts' (ibid). Given the study's origins, it is not surprising to read that US armed forces regional commanders should be part of this effort.

While recommendations compare to those in the other studies, the CNA study goes further. It recommends that climate change be made a national security issue by being addressed in the US National Security Strategy and the US National Defense Strategy. The goal should be to develop 'appropriate guidance to military planners to assess risks to current and future missions caused by projected CC', for instance in the next Quadrennial Defense Review.

These suggestions put climate change squarely into the field of traditional security and defence policy. The authors of the study are somewhat vague about the actual role of the military in preventing or reducing the dangers of global warming, so they emphasize preparedness, in particular preparedness for 'natural disasters from extreme weather events, pandemic disease control and other related missions.' (ibid) The study quotes one of its contributors, Admiral Bowman, who said: '[W]e should begin developing plans to shore up our own defenses against the potentially serious effects of climate, regardless of the probability of that occurrence, while making more resilient those countries ill-prepared today to deal with that potential due to disease, poor sanitation, lack of clean water, insufficient electricity, and large coastal populations. In doing so, these plans must recognize the interdependency of energy and security.' (Sullivan et al. 2007, p. 41) The Department of Defense should also 'conduct an assessment of the impact on US military installations worldwide of rising sea levels, extreme weather events and other projected climate change impacts over the next 30 to 40 years.' (Sullivan et al. p. 7)

The *Center for a New American Security* study focuses almost exclusively on climate change mitigation. It recommends, in particular, the return of the US government to effective international cooperation. With respect to adaptation or other forms of reaction, few recommendations are made. However, some warnings are given against reactions that might be problematic. One of these is an increase in nuclear power production. 'Climate change may well mean a global renaissance in nuclear energy – driven partly by the expectation that its increased production and consumption will reduce the use of carbon emitting fossil fuels – which could worsen problems of nuclear safety and proliferation.' (Campbell et al. 2007, p. 107) Another is the recommendation to strengthen the United Nations. The option of strengthening the military is briefly considered but rejected: 'It is clearly the case that migrations and movements of people (among other worrisome effects) will trigger deep insecurity in some communities, but it is far from clear whether these anxieties will trigger a traditional national security response.' (Campbell et al. 2007, p. 107)

The authors of the *International Alert* study stress the use of their predictions of violent conflict as wake-up calls for action, particularly the strengthening of the resilience of societies against the effects of climate change. 'What is required is international cooperation to support local action, both as a way of strengthening international security and to achieve the goals of sustainable development. Without dropping or downplaying mitigation, the international policy agenda thus needs a significant increase in the energy and resources that are focused on adaptation' (Smith and Vivekananda 2007, p. 4). They argue that more resources be made available for adaptation. However, they see it as even more crucial that it is the right kind of adaptation: 'To organise adaptation as top-down programmes will alienate local communities because it will feel like a series of external impositions, decided by government authorities from which they feel distant and explained by outside experts with whom they have nothing in common. A different approach is possible, based on peacebuilding, engaging communities' energies in a social process to work out how to adapt to climate

change and how to handle conflicts as they arise, so that they do not become violent [...]. The double-headed problem of climate change and violent conflict thus has a unified solution – peacebuilding and adaptation are effectively the same kind of activity, involving the same kinds of methods of dialogue and social engagement, requiring from governments the same values of inclusivity and transparency.' (ibid, p. 4) They introduce the concept of 'social resilience', understood as the 'capacity to absorb stress or destructive forces through resistance or adaptation; the capacity to manage or maintain certain basic functions and structures during disastrous events; and the capacity to recover after the event.' (ibid, p. 31) External actors should strive to strengthen the key characteristics of a resilient society, which are 'that it is well governed, understands the risks it faces, can manage those risks and minimise its vulnerability to them, and that it is prepared to respond to unpreventable disasters. Being well governed, the society has clear policies and a strong framework of law and regulation, implemented by capable institutions'. (ibid)

The WBGU study is the most comprehensive in terms of analysis and recommendations. As mentioned above, a strong emphasis is placed on development instruments, including those for strengthening governments. But mitigation and adaptation are also stressed. Based on their distinction between short-term and long-term effects of climate change on security, authors see a particular need to strengthen national and global institutions for conflict management with largely civilian crisis management. In fact, they argue in favour of reduced military spending. For Germany, they recommend the adoption of 'an integrated approach to the financing of crisis prevention, development cooperation and military spending. Due to the clear overlaps between civilian crisis prevention and development cooperation, WBGU takes the view that there is no need for an additional funding target for crisis prevention. Instead, the political focus should be geared entirely towards compliance with the existing timetable for increasing ODA. WBGU proposes that security spending be critically reviewed, especially as regards its effectiveness for international peacebuilding, and adjusted accordingly. The German Government should drive forward the international debate and negotiating processes within the EU, NATO and beyond. Military budgets should be restructured in favour of preventive measures in the field of development cooperation. As military spending is realigned towards preventive security policy, the need for funding in the "classic" areas of military spending will be reduced.' (WBGU 2007, p. 13)

6. Conclusions

As the growth in attention to the possible effects of climate change in 2007 has shown, warnings of the consequences of global warming for peace and security have a strong influence on public discussion and political opinion. They contribute to the mobilization of measures for the reduction of greenhouse gases and the reduction of the vulnerability and the strengthening of the resilience of societies. However, they also carry the danger of securitizing the problem of climate change. This is particularly problematic when the limitations of predictions

of the security effects of climate change are ignored and the social nature of conflict is downplayed. Similar to the warnings of George Kennan at the beginnings of the Cold War, which argued for vigilance but against a militarized response to the danger of a totalitarian Soviet Union (Mayers 1998), the studies might have the effect of provoking a traditional security response to the risks of climate change.²

The analysis of four recent studies on the links between climate change and security gives a mixed result with respect to the dynamics of securitization. On the one hand, different conceptions of security yield different policy recommendations. Traditional security conceptions are still around, but they have lost their monopoly status both in discourse and in practice. They have been supplemented and – at least in rhetoric and non-governmental circles – replaced by wider conceptions of security. Broadly speaking, the studies’ recommendations correspond to the particular conception of security used by their authors. Thus the CNA study, looking at US national security, ultimately comes up with strengthening traditional security instruments, particularly the military, while the *Center for a New American Security* Study rejects both a national security perspective and traditional security instruments. Its emphasis is on strengthening a global approach to managing climate change, in addition to preventing it, reflecting its liberal orientation. The emphasis on conflict in the International Alert study, which is linked to an understanding of security as human security from violence and the threat of violence, stresses conflict prevention and crisis management. The comprehensive WBGU study, based on a broad conception of human security, also comes up with a wide range of recommendations including traditional development concerns.

Security concept	Study sponsor	Emphasis in policy recommendations
Human Security (Japanese conception)	WBGU	Mitigation and development instruments for adaptation
Human Security (Japanese conception)	International Alert	Strengthening ‘social resilience’ and institutions of conflict resolution
Global security	Center for a New American Security	Mitigation
National security	CNA Corporation	Mitigation and traditional instruments of security

So is ‘securitization’ an outdated concept? One that links the language of security to a particular set of instruments of tradi-

tional security policy that is no longer valid? The analysis presented here indicates that while there is indeed a spectrum of recommendations linked to the use of the language of security in the studies themselves, the analytical parts of these studies give a somewhat different impression. The tools for predicting the effects of climate change on peace and security, such as worst-case analysis, and deterministic predictions of consequences of changes in the environment on social phenomena such as migration and violent conflict strengthen the impression that countermeasures are not likely to have much success. In three of the studies, the one by the Center for a New American Security Study, which uses a global security framework, and the two from Europe, the WBGU and International Alert studies, which focus on human security concerns, this impression runs against these studies’ main recommendations. Contrary to recommendations that would emphasize traditional security instruments, the policy prescriptions actually found in these studies have little basis in the reports’ analytical sections. With a few exceptions in the two European studies, the analytical sections of the four reports contain no examples of how the negative security consequences of climate change have been avoided through the appropriate non-military measures, or of scenarios where such consequences are avoided through the application of such measures. If conflict prevention and regulation do not seem to be worth considering in the analytical parts of the studies, it is hard to convince readers that they should be at the heart of policy making in the future.

From here it is easy to conclude that other means need to be developed to combat the outbreaks of violence that are predicted in all four studies. However, it has to be emphasized that this conclusion is only drawn in the CNA study. It supports the view that ‘we should begin developing plans to shore up our own defences against the potentially serious effects of climate, regardless of the probability of that occurrence, while making more resilient those countries ill-prepared today to deal with that potential due to disease, poor sanitation, lack of clean water, insufficient electricity, and large coastal populations. In doing so, these plans must recognize the interdependency of energy and security.’ (Sullivan et al. 2007, p. 41) The WBGU study, on the other hand, explicitly recommends cuts in military spending to free financial resources for adaptation, and the other two studies warn against falling back towards the use of traditional security policy. But looking at the traditional security discourse, fallouts from the climate change debate can already be seen. In recent report on the future of NATO, seven former Commanders in Chief list climate change as the most important future threat (Henk van den Bremen et al. 2007). The European Union intends to put climate change at the top of its lists of threats to be addressed within its Security and Defence Policy³. Here, ‘securitization’ seems to be at work in the way predicted by ‘securitization’ analysis. In the end, however, the discourse is not uniform yet, and may never be. But the framing of climate change as a security carries the danger to strengthen those who see the need to strengthen traditional security instruments to manage its consequences.

2 The risks of climate change are frequently compared to the Cold War. For instance, in a 2007 *New York Times* op-ed, Thomas Homer-Dixon argued that “Climate stress may well represent a challenge to international security just as dangerous – and more intractable – than the arms race between the United States and the Soviet Union during the Cold War or the proliferation of nuclear weapons among rogue states today.” (New York Times, 24 April 2007). The CNA study (Sullivan et al 2007, p. 7) includes the assessment that “The Cold War was a specter, but climate change is inevitable. If we keep on with business as usual, we will reach a point where some of the worst effects are inevitable.”

3 Tony Barber, Climate ‘threatens’ European security, *Financial Times*, March 11 2008,

List of references

Baechler, Günther, ed. 2002. *Transformation of Resource Conflicts: Approach and Instruments*. Lang, Peter: Bern.

Barnett, Jon. 2003. Security and climate change. *Global Environmental Change*, Vol. 13, Issue 1, April 2003, pp. 7-17.

Bigo, Didier, ed. 2006. *Illiberal Practices of Liberal Regimes: The (in)security Games*. Paris: L'Harmattan.

Brock, Lothar. 1997. The Environment and Security: Conceptual and Theoretical Issues. In Nils Petter Gleditsch, *Conflict and the Environment*, Heidelberg: Springer.

Campbell, Kurt M. et al. 2007. *The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change*. Center for Strategic and International Studies, Washington, D.C.

Commission on Human Security, 2003. *Human Security Now*. New York, <http://www.humansecurity-chs.org/finalreport/index.html>.

Guzzini, Stefano 2004. The Cold War is what we make of it: When peace research meets constructivism in International Relations. In: Guzzini, Stefano/Jung, Dietrich (eds): *Contemporary Security Analysis and Copenhagen Peace Research*, London: Routledge, pp. 40-52.

Homer-Dixon, Thomas, 1999. *Environment, Scarcity and Violence*. Princeton: Princeton University Press.

IPCC (International Panel on Climate Change) 2007. Fourth Assessment Report. Working Group II Report "Impacts, Adaptation and Vulnerability", Geneva, <http://www.ipcc.ch/ipccreports/ar4-wg2.htm>.

Jackson, Nicole J. 2006. International Organizations, Security Dichotomies and the Trafficking of Persons and Narcotics in Post-Soviet Central Asia: A Critique of the Securitization Framework. *Security Dialogue*, Vol. 37, No. 3, pp. 299-317.

Knudsen, Olaf, 2001. Post-Copenhagen Security Studies: Deseccuritizing Securitization. *Security Dialogue*, Vol. 32, No. 4, pp. 355-368.

Mayers, David Allan, 1998. *George Kennan And the Dilemmas of US Foreign Policy*. Oxford: Oxford University Press Inc.

Nordhaus, William, *The Stern Review on the Economics of Climate Change*, Journal of Economic Literature, Vol. 45, No. 3, pp. 686-702; see also: http://nordhaus.econ.yale.edu/stern_050307.pdf.

Smith and Vivekananda. 2007. *A Climate of Conflict. The Links between Climate Change, Peace and War*. International Alert. London.

Stern, Nicholas, ed. 2006. *Stern Review on the economics of climate change*. HM Treasury, London http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm.

Sullivan, Gordon R. et al. 2007- *National Security and the Threat to Climate Change* CNA Corporation, Alexandria, May.

Tol, Richard J. 2006. *The Stern Review of the Economics of Climate Change*, Economic and Social Research Institute, Hamburg, Vrije and Carnegie Mellon Universities, <http://www.fnu.zmaw.de/fileadmin/fnu-files/reports/sternreview.pdf>.

van den Bremen, Henk et al. 2007. *Towards a Grand Strategy for an Uncertain Word; Renewing Transatlantic Partnership*. Noaber Foundation, Lunteren, Netherlands http://www.csis.org/media/csis/events/080110_grand_strategy.pdf.

Waever, Ole, 1995. Securitization and De-securitization'. In Ronnie Lipschutz, ed, *On Security*. New York: Columbia University Press, pp. 46-86.

WBGU (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen). 2007. *World in Transition – Climate Change as a Security Risk*. London: Earthcan (German Original: *Welt im Wandel – Sicherheitsrisiko Klimawandel*, Berlin et al.).

Afrika als Spielball von Interessen?

Afrika und externe Akteure – Partner auf Augenhöhe?

Herausgegeben von Helmut Asche, Antje Daniel, Franziska Gruber und Rainer Öhlschlager

2009, ca. 250 S., brosch., ca. 34,- €,

ISBN 978-3-8329-4915-0

(Weltregionen im Wandel, Bd. 8)

Erscheint ca. November 2009

Der Band greift die Frage auf, wie globale Akteure durch ihre politischen und ökonomischen Interessen Einfluss auf die politische Agenda afrikanischer Staaten nehmen und dabei deren Handlungsspielraum beschränken oder erweitern. Es wird analysiert, wie souverän afrikanische Staaten auf externe Interessen reagieren und welche Rolle eigenständige Entwicklungsvorstellungen dabei spielen.

Nomos

Bitte bestellen Sie im Buchhandel oder versandkostenfrei unter ► www.nomos-shop.de