

OVERHEATED SECURITY?
The Securitisation of Climate Change and the Governmentalisation of Security

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List of Abbreviations

ASP	American Security Project
BMU	Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit - Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (German Environmental Ministry) (renamed BMUB in 2013)
BMUB	Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit - Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (German Environmental Ministry)
C2ES	Center for Climate and Energy Solutions
CAN	Climate Action Network
CAP	Center for American Progress
CCC	Centro de Colaboración Cívica - Civic Cooperation Centre
CCS	Center for Climate & Security
CDM	Clean Development Mechanism
CDU	Christlich Demokratische Union - Christian Democratic Union
CENAPRED	Centro Nacional de Prevención de Desastres - National Centre for Disaster Prevention
CENTCOM	US Central Command
CEMDA	Centro Mexicano de Derecho Ambiental - Mexican Centre for Environmental Law
CFR	Council on Foreign Relations
CIA	Central Intelligence Agency
CICC	Comisión Intersecretarial de Cambio Climático - Inter-Ministerial Commission for Climate Change
CISEN	Centro de Investigación y Seguridad Nacional - Centre for Research and National Security
CLISAP	Climate System Analysis and Prediction
CMM	Centro Mario Molina - Mario Molina Centre
CNAS	Center for a New American Security
COP	Conference of the Parties
CPI	Climate Performance Index
CSIS	Center for Strategic & International Studies
CSS	Critical Security Studies
DHS	Department of Homeland Security
DOD	Department of Defense
DPG	Deutsche Physikalische Gesellschaft - German Physical Society
ENACC	Estrategia Nacional de Cambio Climático 2007 - National Strategy on Climate Change 2007
ENCC	Estrategia Nacional de Cambio Climático 2013 - National Strategy on Climate Change 2013
EPA	Environmental Protection Agency
ESS	European Security Strategy
EU	European Union
FEMA	Federal Emergency Management Agency
FONDEN	Fondo Nacional para el Desarrollo Nacional - National Development Fund
FOPREDEN	Fondo para la Prevención de Desastres Naturales - Disaster Prevention Fund
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit - German Federal Enterprise for International Cooperation (formerly GTZ)
GLOBE	Global Legislators Organisation for a Balanced Environment
HDI	Human Development Index
IfP-EW	Initiative for Peacebuilding - Early Warning Analysis to Action
INE	Instituto Nacional de Ecología - National Institute for Ecology

INECC	Instituto Nacional de Ecología y Cambio Climático - National Institute for Ecology and Climate Change
IPCC	Intergovernmental Panel on Climate Change
MAB	Military Advisory Board
MCII	Munich Climate Insurance Initiative
NAFTA	North American Free Trade Agreement
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organisation
NOAA	National Oceanic and Atmospheric Administration
NSS	National Security Strategy
ODUSD-ES	Office of the Deputy Under Secretary of Defense - Environmental Security
OECD	Organisation for Economic Co-operation and Development
PAN	Partido Acción Nacional - National Action Party
PDCI	Partners for Democratic Change International
PECC	Programa Especial de Cambio Climático - Special Programme on Climate Change
PEACC	Plan Estatal de Acción ante el Cambio Climático - State Level Plan for Climate Action
PIK	Potsdam Institut für Klimafolgenforschung - Potsdam Institute for Climate Impact Research
PRI	Partido Revolucionario Institucional - Institutional Revolutionary Party
QDR	Quadrennial Defense Review
RUSI	Royal United Service Institute
SAGARPA	Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación - Mexican Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales - Secretariat of Environment and Natural Resources
SEGOB	Secretaría de Gobernación - Secretariat of State
SERDP	Strategic Environmental Research and Development Program
SPD	Sozialdemokratische Partei Deutschland - Social Democratic Party of Germany
SWP	Stiftung Wissenschaft und Politik. Deutsches Institut für Internationale Politik und Sicherheit - German Institute for International and Security Affairs
UK	United Kingdom
UN	United Nations
UNAM	Universidad Nacional Autónoma de México - National Autonomous University of Mexico
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNSC	United Nations Security Council
US	United States
WBGU	Wissenschaftlicher Beirat der Bundesregierung für Globale Umweltveränderungen - German Advisory Council on Global Change
WWF	World Wide Fund for Nature

1. Introduction: Climate Change, Multiple Security Discourses and the Role of Power

[...] climate change poses a serious threat to America's national security (CNA 2007: 6).

Climate change conditions and reduces economic growth and social progress, multiplies and magnifies territorial vulnerability and exacerbates environmental degradation, and thus constitutes a human security problem (UNSC 2011a: 29).

These findings clearly indicate a growing risk for low-latitude regions at quite low levels of temperature increase and a growing risk for systemic global problems above a warming of a few degrees Celsius (World Bank et al. 2012: 43).

As the three quotes above exemplify, a number of influential political actors have linked climate change to security concerns since it first became a matter of political debate in the late 1980s. In a first phase that peaked around the early to mid-1990s (Floyd 2010: 75), climate change was part of a broader debate on environmental security. This changed in the second phase that roughly originated in the mid-2000s, in which climate became the main focus of attention (Brzoska and Oels 2011: 51). Politically, the constant discussion of the security dimension has not been without consequences. Even though the connection between climate change and security or conflict is far from uncontested in the academic literature (Scheffran *et al.* 2012c; Barnett 2000), the persistent linking of the two has established climate change as one of the defining security problems of the 21st century and has legitimised a range of policies (Floyd 2010; Diez *et al.* 2016; Oels 2012a; UNGA 2009b; WBGU 2008). However, despite the widespread consensus in the political debate that climate change is not anymore only an environmental or economic problem but will have tangible security implications, the three quotes also illustrate the considerable diversity of security conceptions and policy recommendations when it comes to representing the dangers of climate change.

Some have predominately pointed to its national security consequences e.g. direct threats to the territorial integrity of states and the increase in violent conflicts. As a consequence, they have urged to integrate climate change into the planning of traditional security institutions to prepare for a future ravaged by climate induced violent conflicts (CNA 2007: 6; CNA Military Advisory Board 2014: 21). In contrast, others have emphasised the

repercussions of rising temperatures for human security, meaning the general deterioration of living conditions of poor populations mainly due to resource scarcity and an increase in extreme weather events (WBGU 2008: 1; see also GTZ 2008b: 8). To handle the resulting problems, they have recommended lowering the vulnerability of affected populations by transforming problematic behaviour, to scale up adaptation efforts and to increase development aid (GTZ 2008a: 55; WBGU 2008: 10, 115). Finally, many have refrained from concrete threat constructions and have instead depicted climate change as an overall risk that will gradually affect countless variables and in turn pertain a whole range of risk groups and areas around the world (adelphi 2012: 31; World Bank *et al.* 2013: xviii, xx). From this standpoint, the appropriate response is to develop sophisticated risk management schemes to increase the resilience of risk groups and areas in order to eventually keep the overall risk at a tolerable level (Greenpeace México 2010: 57; World Bank *et al.* 2013: xvii).

Thus, despite the agreement that climate change is linked to security problems, the exact nature of the threat, the affected referent objects as well as the political consequences of handling climate change as security issue are far from clear. This is not only true for the political debate but even more so for the academic literature, which on the one hand has analysed the empirical validity of the ‘climate security nexus’ (Scheffran *et al.* 2012b) and on the other hand the second-order political consequences of linking climate change to security (Brauch 2009; Diez *et al.* 2016; Detraz and Betsill 2009; Corry 2012; McDonald 2013). The aim of this thesis is to contribute to this debate by exploring how specific representations of climate change have influenced political debates, policies and practices. It thus asks how we can theoretically make sense of the diversity of security conceptions that are associated with climate change; how different discourses of climate change as security issue have come about in diverse contexts, and whether they make a difference in terms of political consequences.

1.1 The Construction of Climate Change as a Security Problem

Much of the alarming political debate on climate security is based on a body of academic literature on the ‘climate security nexus’, which to a considerable extent draws on older debates on environmental security and conflict originating in the 1980s and 1990s. On the one hand, this literature was of theoretical nature and wanted to ‘broaden’ and ‘deepen’ the traditional understanding of state or military security, which led to the establishment of ‘new’ security threats such as environmental security (Ullmann 1983; Booth 1991; Krause and Williams 1996,

1997; Mathews 1989; Dalby 1992; Pirages 1991). On the other hand, the debates at that time also sparked a more empirical research agenda. Scholars began to inquire into the question whether and how environmental change could initiate or contribute to social, political or ultimately violent conflict (Homer-Dixon 1991). The core argument was that environmental degradation and resulting resource scarcity in combination with accelerating population growth could contribute to conflicts (Homer-Dixon 1991, 1994b) as well as to hundreds of millions of environmental refugees (Myers 1995). Notwithstanding the fact that the empirical evidence for environmental conflicts and mass migration was far from conclusive, rested on a small number of studies and was largely based on estimates of key authors (Hartmann 2010: 235; Greenpeace 2007; Oels and Carvalho 2012), a range of different political actors eagerly adopted this argumentation to advance their political agenda.

Two Phases of the Climate Security Debate

At the beginning of these debates in the late 1980s and early 1990s, climate change was only discussed as one issue besides other environmental problems that were increasingly linked to security concerns and conflict. However, due to its global reach and overall magnitude, climate change soon became one of the key dangers. Thus, at the beginning of the 1990s, several environmental non-governmental organisations (NGOs) (Oels 2012a: 186; Myers 1995) picked up the security framing to raise attention for climate change. Amongst other factors, this contributed to important breakthroughs in the international negotiations on climate change. Examples are the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, the commencement of the yearly Conferences of the Parties (COP) in 1995 and the adoption of the Kyoto Protocol in 1997. Apart from the international level, these early articulations of climate change as a security issue also had an impact on the domestic handling of climate change in various countries, as the case studies of this thesis show in detail in *chapters 4-6*.

While environmental and climate security debates became less prevalent towards the end of the 1990s and early 2000s, the increasing scientific evidence for the far reaching implications of global warming epitomised in the ever more detailed reports of the Intergovernmental Panel on Climate Change (IPCC) (IPCC 2001, 2007b), restarted the debate in the mid-2000s (Brzoska and Oels 2011; Oels and von Lucke 2015). In contrast to the earlier discussions, other environmental problems largely ceased to play an important role and climate change became the undisputed centre of this novel environmental security debate.

Academically, this led to a renewed interest in questions about how environmental degradation contributed to violent conflict, thereby sparking an extensive research agenda on the ‘climate security nexus’ (Scheffran *et al.* 2012c; Barnett 2003; Barnett and Adger 2007b; Scheffran *et al.* 2012b; Hsiang *et al.* 2013; Gleditsch 2012). While the findings of this research were mixed (Scheffran *et al.* 2012a; Barnett and Adger 2005, 2007a; Salehyan 2008; Gleditsch 2012), this did not prevent numerous political actors from claiming that climate change indeed was one of the main security challenges of our times and necessitated urgent action, which entailed genuine climate mitigation but also the development of military counter strategies.

One of the first political actors that actively waged this debate were security policy think tanks in the United States (US), which particularly since 2007 have repeatedly drawn a connection between climate change and national security (CNA 2007; Campbell *et al.* 2007; Campbell 2008). Beyond these, the former Vice President of the US and Democratic Presidential candidate Albert ‘Al’ Gore at various occasions highlighted the far reaching security implications of climate change (Gore 2007). On the other side of the pond, the German Governmental Advisory Council on Global Changes (WBGU) published a widely received report on ‘Climate Change as Security Risk’ (WBGU 2008) and the European Union (EU) as well discussed the security implications of climate change in 2008 (Solana and EU Commission 2008). Moreover, several environmental and human rights NGOs began to frame climate change as security issue (Greenpeace 2007, 2013; Christian Aid 2006, 2007; Smith and Vivekananda 2007). Eventually, even the United Nations Security Council (UNSC) discussed the repercussions of climate change for ‘global peace and security’ in 2007, 2011 and 2013 (UNSC 2007b, 2011a, 2013) and the Secretary General published a widely noted report on its possible security implications (UNGA 2009a).

While debates about the cost of inaction (Stern 2006), justice argumentations (Caney 2006, 2010; Finley-Brook 2014), and growing scientific evidence (IPCC 2007b) also mattered, constructing climate change as security issue was a crucial force for raising attention for the issue at that time. This became particularly evident throughout the COP15 in Copenhagen in 2009, which received unparalleled attention in the media and public debates and during which climate security argumentations played a central role (Oels 2012a; Methmann and Rothe 2012). Beyond the international level, linking climate change to security concerns also changed the domestic debates and influenced a range of policies in various countries (see *chapters 4-6*). Yet, as the quotes at the beginning exemplify, the widespread climate security debate on the

international and domestic level did not result in consensus about what specific kind of security issue climate change is, what the appropriate countermeasures could entail, and whether linking climate change to security is to be welcomed from a normative stance. The academic literature on the climate security nexus is not of much help here because even though it casts serious doubts on the direct connection between climate change and security, it has not looked at the political debates *per se*. This begs the questions why and how climate security discourses (entailing different conceptions of security) have become so prominent in the political debate notwithstanding their very weak empirical foundations and what political consequences this ‘securitisation’ has had exactly.

1.2 Analysing the Securitisation of Climate Change and Main Research Questions

The above questions have given rise to yet another strand of literature that has analysed the climate security debate from a securitisation perspective and hence has focused on the political consequences that come with constructing climate change as security issue (see for example Floyd 2010; Trombetta 2011b; Oels 2012a; McDonald 2005, 2008, 2013; Corry 2012). According to the original securitisation theory – the Copenhagen School (CS) (Buzan *et al.* 1998) – , a successful securitisation establishes a political platform for the legitimisation of extraordinary measures to counter a threat (Buzan *et al.* 1998: 21). While some might understand the yearly COPs or international climate regimes such as Kyoto or the latest Paris Agreement as extraordinary, most scholars agree that they do not go beyond normal politics, particularly given their more than questionable effect on the abatement of climate change (Oels and von Lucke 2015: 47; Gardiner 2004b; Caney 2016). Theoretically, one conclusion hence could simply be that the securitisation of climate change has been unsuccessful, at least from the perspective of the CS (Oswald Spring and Brauch 2011; Oels 2012a).

Yet, notwithstanding the absence of a successful securitisation in CS terms, many scholars have continued to analyse the climate security debate from a broader securitisation perspective. Based on the ‘stubborn persistence’ (Ciuta 2009: 312) of so many political practitioners to keep calling climate change a security threat, these scholars assumed that there must be political advantages in doing so that the CS has not in its focus. Thus, the literature has increasingly gone beyond the narrow understanding of security and successful securitisation that are at the core of the CS. Instead of a clear-cut threshold between politicisation or normal politics and securitisation, this literature understands the process as a continuum (Diez *et al.*

2016: 18-19; Oels and von Lucke 2015; Bigo and Tsoukala 2008b). In order to assess the effects of securitisation it has largely focused on a counterfactual reasoning and measures the degree of success based on policies that without the securitisation would not have been accepted or seen as legitimate in the political debate (Trombetta 2008: 600). This has opened up a whole range of research avenues in relation to (different) climate security debates. A common finding of these debates is that there are multiple forms of securitisation in the case of climate change that heavily depend on the broader context in which they take place and that can have very different political consequences (Diez *et al.* 2016; Grauvogel and Diez 2014; Detraz and Betsill 2009; McDonald 2013; Trombetta 2011b; Oels 2011; Corry 2012). These consequences are not necessarily extraordinary but nevertheless distinguish themselves considerably from how the issue was handled before the security dimension was considered.

The debate thus has already come a long way in overcoming some of the problems of the CS when it comes to analysing the securitisation of climate change. However, as the next *chapters 2 and 3* will show in more detail, the literature still has considerable blind spots, not only concerning the theoretical conception of securitisation and its political consequences, but also in terms of its limited empirical focus.

Theoretical Gaps: Where is Power in the Conceptualisation of Securitisation?

Concerning theory, I argue that the existing literature has so far not sufficiently problematised the role of power in securitisation processes in general and in analysing the climate security debate in particular. Yet, taking a closer look at the micro dynamics and actual practices of power (Adler-Nissen and Pouliot 2014; Barnett and Duvall 2005; Burgess 2011) can help to theoretically substantiate several of the core findings of the securitisation literature and thus benefits the development of a more coherent understanding of securitisation in general. A closer look reveals that power relations are involved in enabling securitisation in the first place by forming the basis or context from which certain actors can legitimately speak security, by working as catalyst and burning glass for political attention and by setting issues onto the agenda (Burgess 2011: 40–41; Hansen 2000: 303). Moreover, they constrain the securitising actors' choices concerning the security arguments they can use (i.e. which stand a chance of resonating within a specific context) and hence lead to very different forms of securitisation entailing a diverse set of security conceptions (Balzacq 2011a: 26; Trombetta 2011b: 141). Beyond that, different forms of power shape the political consequences that specific security discourses can have by transforming governance practices and making possible particular

policies and ruling out others (Trombetta 2011b: 142; Balzacq 2011a: 16; Elbe 2009: 15). Finally, understanding the underlying power dynamics can also contribute to a more thorough and nuanced discussion of the normative implications of securitisation (Elbe 2009: 157–158; Floyd 2007a, 2011).

In general, one of the key problems of the existing literature in relation to power is that on the one hand, the CS and some of its extension have mainly operated with a state centred top-down conception of security. In many cases, this implies a traditional and one-dimensional understanding of political power (Trombetta 2008: 600; Trombetta 2011b: 139; Williams 2003). This does not adequately capture the much more nuanced pathways of power in securitisation processes, as the extensive debates about different forms of climate security exemplify. On the other hand, the Paris School of (in)securitisation around Didier Bigo and Jef Huysmans (Bigo 2002; Huysmans 2002, 2004; Bigo 2008, 2009) and the literature on risk (Kessler 2012: 20; Aradau and van Munster 2007; Lobo-Guerrero 2007; Neal 2004; Hameiri 2008; Hameiri and Jones 2013) have gone towards the other extreme. Here, securitisation is predominantly conceptualised as an ongoing and low key process in which professionals of (in)security slowly expand a never ending state of exception (Bigo 2002: 73; Bigo and Tsoukala 2008b). Based on Stefan Elbe and others (Elbe 2009; Oels 2011), my argument here is that neither of the two strands of the literature does justice to the multifaceted and dynamic pathways of power that are involved in contemporary climate security discourses.

In between these two more extreme poles on the power continuum are studies that have looked at different ‘frames’ or ‘discourses’ of climate security (McDonald 2013; Detraz and Betsill 2009; von Lucke *et al.* 2014; Grauvogel and Diez 2014). These works circumvent the problem of overestimating one particular understanding of security or power. However, as *chapter 2* will show in more detail, they primarily derive these different climate security discourses from the existing literature. In doing so they lack a deeper theoretically grounded problematisation of how exactly different forms of political power lie at the heart of different securitisations and enable different political consequences.

Empirical Gaps: Going Beyond the Global Debate, Exemplary Data and Western Contexts

Another substantial gap in the existing literature on the securitisation of climate change concerns its empirical scope and depth. Apart from notable exceptions (Detraz and Betsill 2009; McDonald 2012, 2013; Diez *et al.* 2016; Rothe 2016; Floyd 2010), most of the literature on the

climate security debate primarily tries to make a theoretical point. That is, it uses the climate security debate to exemplify the shortcomings of the CS or to show how alternative approaches to securitisation can give us a more thorough understanding of certain aspects (Corry 2012; Methmann and Rothe 2012; Oels 2011, 2012a; Trombetta 2011a). While this is legitimate and necessary, it nevertheless has led to a large amount of studies that merely rely on exemplary data without substantively contributing to our understanding of the climate security debate and its political consequences in actual empirical cases. Moreover, a large part of the literature either focuses on the global debate on climate security and its implications for the international climate negotiations (Oels 2011, 2012a, 2013; Methmann and Rothe 2012; Methmann 2011, 2014b; Trombetta 2011b; Trombetta 2008; Corry 2012) or on individual case studies (McDonald 2012), mainly on the US (Floyd 2010; Brzoska 2009; Hartmann 2009; Fletcher 2009; Harris 2002; Leiserowitz 2005; Nagel 2011; Richert 2009). Only very few studies compare different securitisation processes in diverse political and cultural contexts (Diez *et al.* 2016; Rothe 2016), which, in my opinion, is necessary in order to understand the context dependence and multiplicity of securitisation and its political consequences.

Another gap in the securitisation literature in general is its Western bias as it has largely failed to study securitisation processes in the Global South (Boas 2014; Bilgin 2010; von Lucke 2016). This is especially surprising in the context of climate change, as most climate security discourses as well as the estimates of the IPCC (IPCC 2015: 13, 50, 54) predict the first and most severe effects to take place in (poor) Southern countries, which begs the question whether the political effects of securitisation differ under these circumstances. In addition to that, the neglect of non-Western cultural contexts (Joseph 2010a; Opitz 2008a; Milchman and Rosenberg 2009) as well as a one-dimensional understanding of the actual implementation of governmental effects (van Dyk and Angermüller 2010: 13; Bröckling and Krasmann 2010: 25; Methmann 2011: 7) has also been a central criticism of the governmentality literature. Thus, there is considerable space for detailed comparative empirical studies that analyse the securitisation of climate change across different political and cultural contexts. Such studies can help to move the debate beyond the development of ever more sophisticated theoretical approaches without actually applying them to empirical cases. Taken together, these theoretical and empirical gaps inspire the main research questions of this thesis:

How can we understand different forms of securitisation and their political effects?

- *What are the dominant forms in different countries?*
- *What are the country specific domestic political effects of such different securitisations?*
- *What are the normative implications? Is it possible to distinguish between good and bad securitisations of climate change?*

1.3 Developing a Different Theoretical Understanding of Securitisation

I have identified the insufficient problematisation of power as one of the main obstacles to a more comprehensive understanding of securitisation in general and the climate security debate in particular. While several extensions of the CS and entirely new approaches to securitisation have already touched upon this issue, I argue that to fully understand the role of power in securitisation processes and to answer my particular research questions, an alternative theoretical approach is needed. Thus, in this thesis (*see chapter 3*) I draw on a Foucauldian governmentality framework (Foucault 2006b, 2006a; Dean 2010; Dillon 2006), which several authors have extended in order to apply it to securitisation processes (Dillon and Lobo-Guerrero 2008; Elbe 2009, 2011; Oels 2011, 2012a, 2013).

A governmentality perspective conceptualises securitisation as a political strategy to render issues governable through the lens of different conceptions of security and different forms of power. The framework primarily rests on Michel Foucault's governmentality lectures, which claim that political rule in general has undergone a decisive transformation leading to what he calls the 'governmentalisation of the state' (Foucault 2006b: 163). This means that political rule does not only rest on direct top-down interventions by the state, which Foucault describes as sovereign power. Instead, at least since the 18th century, it increasingly consists of a power triangle, which also includes productive forms of power such as disciplinary and governmental power that try to control the behaviour of individuals or to govern the population through indirect risk management strategies (Foucault 2006b: 161–165). Based on this premise, Elbe and others (Oels 2011, 2012a, 2013; Elbe 2009) argue that we also witness a 'governmentalisation of security' (Elbe 2009: 9), which can help to understand the multiple security conceptions that we find in contemporary security debates. From this perspective, securitisation is conceptualised as a discourse that renders issues governable in a specific manner (Oels 2011, 2013). *Chapter 3* provides a more detailed discussion of securitisation as

exercise of political power and how I combine a focus on discourses of security with a governmentality analysis (Angermüller 2010; see also Bröckling and Krasmann 2010).

In relation to the gaps in the existing literature, a governmentality or power sensitive perspective can be of help concerning at least four interrelated points (*see chapters 2, 3 and 7* for a more detailed discussion of these points). Firstly, it establishes a theoretical framework for understanding the continuous transformation of security and the parallelism of (and connections between) different power forms. Resting on the notion of the governmentalisation of security and the power triangle, a governmentality perspective sets the concept of securitisation into a wider historical and cultural context, in which different security practices constantly struggle for political relevance. Secondly, it sheds light on the role of power in constituting the subjects and objects of securitisation. Based on its more nuanced understanding of political power, such a framework goes beyond the analysis of fixed securitising actors, referent objects and audiences and instead shows how these are constantly created, legitimised or discredited within different discourses of security. Thirdly, the multifaceted and dynamic conceptualisation of power inherent in the idea of the governmentalisation of security contributes to make sense of the varying political consequences of securitisation. Depending on which power forms overweigh and how they are combined and enacted in different political and cultural contexts, different policies seem legitimate or are discarded as irrelevant. Securitisation is hence linked to the exercise of political power by helping to put new issues onto the agenda, by acting as a catalyst and burning glass for the political debate and by directly influencing key policies. Finally, a governmentality perspective provides a theoretical frame of reference for discussing the normative effects and desirability of securitisation in general and different discourses of climate security in particular.

1.4 Deepening the Empirical Dimension: Three Cases of Securitisation

A further aim of this thesis is to address the above-described gaps in the existing literature concerning empirical scope. Thus, the empirical analysis of this dissertation looks at three distinct country cases, in which climate change has been linked to security concerns, namely the United States, Germany and Mexico. Both the US and Germany are examples of affluent Northern industrialised countries, which have played major, though often directly opposed, roles in the international negotiations on climate change and at the same time have experienced intensive attempts to securitise the climate debate. As an emerging economy, which only

recently has undergone a process of democratisation and which is expected to be heavily affected by climate change, Mexico represents the Global South in my study. Untypically for similar countries, since 2006 it has been one of the forerunners concerning progressive climate policies and as well has witnessed attempts to securitise the climate debate (see *chapter 3* for a detailed discussion of the case selection). Looking at the domestic debates of these different countries instead of the international negotiations does not only close a gap in the literature but also has methodological advantages. It makes it easier to directly trace how different climate security discourses have legitimised and influenced specific policies instead of merely predicting that they have increased the possibility for these or that they have touched upon broader political programs. A further important aim was to study the securitisation of climate change in preferably diverse cultural, political and economic environments to inquire how the broader contexts matter in enabling and shaping specific securitisation processes. Beyond that, looking at different country cases also allows for a broad variation concerning the dominant climate security discourses to assess whether they matter in terms of political consequences.

Of course, one could argue that the focus on domestic debates and the comparative design goes beyond the scope of International relations (IR). However, the positions of these countries in the international negotiations and climate debates first and foremost depend on domestic struggles and cannot be understood without a deeper analysis at the country level. Understanding the effects of climate security debates on the domestic level, hence, is crucial for making sense of the international responses to climate change. Moreover, securitisation at large and especially the climate security debate have increasingly become one of the key issues of Critical Security Studies (CSS), which is firmly rooted in IR. Yet, even though there are ‘macrosecuritisations’ (Buzan and Wæver 2009) that also operate at the international level and despite the fact that global debates are certainly relevant for domestic securitisation processes, I argue that in order to advance our understanding of the internal mechanisms of securitisation, the study of more or less delimited domestic debates is more promising. Thus, closely analysing how climate change has been securitised in these different contexts, allows me in *chapter 7* to draw broader conclusions about how securitisation functions in general, what role power plays and how exactly climate security discourses have transformed political debates.

Besides an extensive review of the existing secondary literature on the securitisation of climate change (see *chapter 2*), this thesis rests on a range of original empirical data. To understand which discourses have been dominant in each country, the analysis includes an array

of reports that aimed at influencing the political debate, including studies of think tanks, NGOs, governmental advisory councils and scientific institutions. Moreover, I have also looked at parliamentary debates and policy documents in the three countries, which enables me to trace back how these discourses have transformed political debates and eventually legitimised specific policies. Beyond that, I draw on insights from several expert interviews with people working at NGOs, think tanks, scientific organisations and in government institutions (see *chapter 3* for more details on data and methods).

1.5 Main Argument and Key Findings

The theoretical core of this thesis is a three-part conception of securitisation as resting on sovereign, disciplinary and governmental power, which are respectively linked to national security, human security and risk conceptions. The main argument is that this framework allows me to better capture the ambiguous and diverse variants of securitisation and the ever-changing concept of security as well as to come to a more thorough understanding of the political consequences of constructing issues in terms of security.

Empirical Findings: Tracing Multiple Securitisations and Consequences

Applying this theoretical lens to my three distinct cases has allowed me to trace very different forms of the securitisation of climate change in diverse political and cultural context and has thus generated a range of novel empirical findings.

In the US, the securitisation of climate change was highly successful in terms of redefining what climate change meant as a matter of political debate and had considerable political consequences. With several defence policy focused think tanks playing a key role in the debate, climate change was primarily constructed as a threat to US national security, hence within the sovereign discourse. This helped to put climate change on the political agenda in the first place, fuelled its politicisation and eventually contributed to a range of legislative attempts. Rearticulating climate change as tangible national security threat increased the attention paid to the issue and particularly helped to reach new conservative audiences, which in the end contributed to partly bridging the heavily polarised debate on climate change in the early to mid-2000s. While ultimately failing to legitimise progressive climate legislation on the federal level, it nevertheless was instrumental in enabling a range of far-reaching changes in the defence sector, which included a transformation of institutional practices as well as an

integration of climate change in almost all relevant strategy documents. Others have fittingly described this process as a ‘climatisation’ of the defence sector (Oels 2012a). In general, the US case exemplifies the twofaced effects of national security and sovereign power. On the one hand, it has drawn attention towards climate change and reconstituted it as issue of ‘high politics’. On the other hand, it focused the debate on tackling the symptoms with rather short-term adaptation measures instead of engaging with the root causes of climate change.

In stark contrast, the securitisation of climate change in Germany included a much broader spectrum of actors and primarily rested on a representation of climate change as a human security issue and long-term risk. Consequently, it did not have a larger impact on defence policy but has led to Germany becoming one of the international climate vanguards and had a decisive influence on the concrete configuration of Germany’s climate policies. It enabled Germany’s legislators to justify a range of mitigation policies, which included an influential ecological tax reform, an energy transition and some of the most ambitious greenhouse gas (GHG) reduction commitments worldwide. The specific securitisation also helped to transform climate change from a predominantly environmental concern towards a key foreign policy priority. Finally, the focus on the direct threats for vulnerable populations in the Global South firmly established climate change as a core crosscutting theme in Germany’s development aid portfolio. While this helped to draw attention towards the problems of the most affected people, it also exemplified some of the more ambiguous consequences of evoking human security and disciplinary power such as constructing people as powerless victims, legitimising behavioural control, and paternalistic policy measures.

While in general being less intense and influential than in the US and Germany, securitising climate change still played a significant role in Mexico. Similar to Germany, it primarily rested on a construction of climate change as a threat to human security and as a diffuse risk. However, lacking a longstanding tradition of linking environment to security concerns as well as influential securitising actors, this representation was in parts overshadowed by a politicisation of climate change as environmental issue, economic opportunity and question of global justice. Thus, while climate security discourses were not without effect for Mexico becoming a surprising international champion of climate abatement, other factors played a more important role. Nonetheless, the specific construction of climate change as a direct threat to Mexico’s population and as a key long-term risk had a discernible impact on concrete policies and governance practices. It led to an extensive integration of climate change into Mexico’s

civil protection and disaster response sector and to various policies that tried to deal with climate change through risk management and resilience strategies. Beyond these case specific findings, the Mexican example offers some general insights into the conditions under which politicisation and securitisation reinforce or cancel each other out, illustrates the emancipatory effects of human security discourses and exemplifies some of the peculiarities of securitisation processes in the Global South (see also Boas 2014; Bilgin 2010).

Theoretical Insights: Securitisation as Political Power

Besides the empirical insights, linking securitisation to (different forms of) political power has allowed me to single out and better understand key characteristics of securitisation. At the centre stands Foucault's conceptualisation of power and discourse as productive, which helps to make sense of securitisation as a process of rendering issues governable i.e. as constructing them as political issues (Opitz 2008b: 216) and thus producing a specific 'security truth' (Burgess 2011: 39–40). In this sense, securitisation is not an isolated speech act that (always) abruptly pulls issues out of the normal and into extraordinary territory. Instead it is a process of exercising power that shifts the political meaning of issues alongside a continuum of different security truths and thereby coins what this normal means in the first place.

More concretely, securitisation is linked to power by acting as a *catalyst*, which includes an acceleration of political procedures, placing issues on the agenda and eventually contributing to their politicisation, all of which can be observed in the US and German cases. Secondly, it can also *narrow down* the debate by constituting specific objects and subjects of governance and suggesting specific 'solutions' to the problem as logical and without feasible alternatives (Opitz 2008b: 217). This also entails a considerable constriction of the political scope of issues and an empowerment or marginalisation of specific actors and their knowledge and understanding of a given issue. The US debate again serves as an illustrative example. The prevailing form of securitisation led to an increasing importance of defence policy specialised think tanks and their specific forms of knowledge, while environmental organisations and scientists and their 'solutions' were progressively marginalised. Finally, securitisation has powerful substantive consequences. On the one hand, this concerns the direct legitimisation of policies. On the other hand, it also entails an impact on the content of policies and their chances of being enacted by government institutions and private actors. Thus, while for example most climate policies in Mexico were not directly legitimised through climate security discourses,

specific political practices such as risk management strategies or insurance schemes increasingly found their way into key policies.

Based on Foucault's original idea of 'governmentalisation' as a constant rearrangement of political power within the triangle of sovereignty, discipline and governmental management, the framework has also proven valuable in conceptualising the continuous transformation of conceptions of security and securitisation processes (Opitz 2008b: 206). The empirical cases and theoretical discussion in *chapter 7* show that although we can find different discourses of climate security, which heavily lean towards specific conceptions of security and have led to diverse political consequences, their internal characteristics are never entirely fixed. Instead, in all cases I found instances where different discourses were closely linked together and in this process were able to transform the prevalent meaning of specific conceptions of security (and power) (Opitz 2008b: 202, 205). For instance, while national security played some role in Germany and Mexico, compared to the US its meaning was much broader and mostly subservient to human security considerations. At the same time, in the US debate, constructing climate change as a threat to human security, most of the time was only an argumentative entry point for introducing fairly traditional national security concerns. Besides underscoring the relevance of Foucault's tripartite conceptualisation of power for thinking about security, these findings underline the argument that securitisation neither only consists of the CS's extraordinary measures, nor of low-key Paris School like riskification processes (see Opitz 2008b: 204).

My findings also underscore that the concept of security and associated governance practices in specific policy fields are never fixed and cannot be understood from an a-historic perspective (Opitz 2008b: 204, 206; Elbe 2009: 64). Instead, the very process of securitisation alongside different forms of power and different issue areas has a discernible impact on the political concept of security itself (Trombetta 2011a). Linking securitisation to governmentality is hence particularly helpful to uncover these bidirectional qualities of securitisation and to understand the ever changing nature of security itself (Oels 2012a; Elbe 2011). Thus, the securitisation of climate change has not only had an impact on how climate change is governed but also initiated changes in how security was understood and practiced in different policy fields. The diverse understandings of national security in my case studies, the adoption of specific policy practices (e.g. associated with human security or risk) in the US defence sector and the 'greening' of the military exemplify this argument.

Approaching the securitisation of climate change from a power sensitive governmentality perspective has also given some insights into the ethical dimension of securitisation and has underscored the usefulness of a case-sensitive ex-post normative assessment (Floyd 2007b, 2011; Elbe 2009: 157). My own normative yardstick in this respect is an aspiration to keep the global temperature rise below two degrees and to prevent human suffering. Thus, based on the findings from the three empirical cases and on a discussion of the alternatives to securitisation, I conclude that the securitisation of climate change has had advantages, at least in the short and middle-term. In general, it has incited rather than closed necessary political debates and has helped to legitimise progressive policies while largely avoiding depoliticising panic politics or undemocratic extraordinary measures. At the same time, alternatives to securitisation such as an outright de-securitisation, or politicisations without reference to threats, e.g. a representation as issue of global justice or economic problem, come with their own sets of problems and in general have so far failed to stimulate necessary political momentum. Nonetheless, the analysis has also revealed that constructing climate change as (any kind of) security issue has very problematic side-effects. Most importantly, it refocuses the attention towards short to middle-term adaptation measures and hence distracts from more long-term mitigation measures that aim at the root causes of climate change, which in the end could seriously diminish its normative value.

This becomes even more relevant with a view on different discourses of climate security. Thus, with a view on the US case, especially the sovereign discourse has revealed a tendency to emphasise direct counter measures often in the defence sector that lack a future oriented mitigation perspective. Looking at Germany and Mexico, the disciplinary and governmental discourse at the other hand seem to be better compatible with a much-needed holistic strategy to halt global warming and at the same time protect vulnerable populations around the globe. Yet, even representations of climate change as human security issue or risk come with their own sets of problems. Focusing on human security and dividing the globe into vulnerable populations in the Global South and climate saviours in the Global North can construct or reactivate problematic identities and dependencies and legitimise paternalistic ‘the West knows best’ (Donnelly and Özkazanç-Pan 2014) approaches. Constructing climate change as a matter of risk can constitute specific risk groups as obsolete and predominantly focus on resilience and insurance measures that in the end as well do not tackle the root causes of climate change.

Having said that, it always depends on the specific context whether one conception of climate security can be considered more favourable than another and especially in (climate-wise) difficult political environments such as the US under George W. Bush (or Donald Trump), a sovereign securitisation might have been the only chance to re-start the political debate. In the end, while securitisation is no silver bullet, a careful construction of climate change as a threat that takes into account the specific political context and is vigilant of the dangers of evoking security, seems to be worth the risk.

1.6 Structure of the Thesis

The remainder of this thesis substantiates these main arguments. *Chapter 2* describes the origins of the climate security debate in more detail and critically discusses the existing literature on securitisation and governmentality and its application on climate change. It also further develops the above criticisms about the missing conception of power and empirical blind spots in the existing literature. Based on this discussion, in *chapter 3* I develop and operationalise my theoretical framework. Mainly building on Michel Foucault's governmentality lectures (2006b, 2006a) and several contemporary extensions of his work, for example by Stefan Elbe (2009, 2011), Mitchell Dean (2010) and Angela Oels (2011, 2012a), the chapter develops three distinct climate security discourses that draw on different forms of political power and are linked to different political effects. Drawing on this theoretical framework, *chapters 4, 5 and 6* analyse the climate security debates in the United States, Germany and Mexico and discuss how specific national contexts and discourses, have led to diverse political consequences. *Chapter 7* then elaborates on the main findings and connects them to the broader theoretical debates on securitisation. The thesis closes with a brief concluding *chapter 8*, which discusses key points of criticism as well as further research avenues.

2. Towards a Power and Governance Focused Reading of Securitisation

2.1 Introduction

Beyond the debates within the climate security nexus literature on whether climate change constitutes a ‘real’ security issue and causes or exacerbates violent conflicts or mass migration, the concrete nature of climate change as a socially constructed security issue is highly contested in the literature. The same is true for the question whether climate security discourses had an impact on the broader political governance of climate change and whether one can speak of a ‘successful securitisation’ of the issue. As the previous chapter has already briefly discussed, the specific security concepts to depict climate change as a security problem differ considerably in both, the political and the academic debate. This makes it difficult to understand these multifaceted developments and to come up with a coherent theoretical perspective. The same is true for the question whether and how these diverse discourses lead to different political consequences. While there exist numerous approaches to answering these questions, I argue in this chapter that the proposed power centred governmentality framework is particularly suited for this endeavour. Such a framework conceptualises securitisation as a distinct way of governing – understood in a wider sense as constituting and arranging actors around a discursively constructed ‘governance-object’ (Methmann 2014b: 10; Corry 2010) –, hence as a means of rendering issues governable through the exercise of different forms of political power.

2.2 The Environment, Climate Change and Security

From the very beginning of the academic debates on ‘broadening’ (Krause and Williams 1996, 1997; Ullmann 1983; Mathews 1989; Crawford 1994) and ‘deepening’ (Booth 2005a) of traditional security conceptions, the environment and later climate change have played a central role (Dalby 1992, 2002; Pirages 1991; Barnett 2001; Ullmann 1983). Climate change embodies a whole series of ‘new dangers’ and referent objects, ranging from direct and immediate threats, to national or human security, to diffuse long-term risks for an unclear set of risk groups and areas. It is a global phenomenon, which involves an abundance of actors but at the same time has profoundly different local impacts. Thus, climate change is one of the archetypical issues over which the debates on different and above all constantly changing security conceptions have been waged in the late 20th and early 21st century.

2.2.1 The Origins of Environmental and Climate Security

The academic discussion about the connection between climate change and security started at the end of the 1960s when scientists began to consider climate change in general as a serious problem and hence increasingly connected it to the wider debates about environmental security. At first, this was often done in connection to theorising about the global dangers of nuclear weapon testing and the ‘nuclear winter thesis’, meaning the possibly catastrophic impact of a massive nuclear war for the global climate (Dalby 2009: 37–39; Gray 2010). Later, several crucial economic and environmental developments as well as central political reports further underlined the far-reaching consequences of environmental change and the connections to security policy. Examples are the oil crisis in the 1970s (Tänzler 2009: 5), the accelerating growth of the world’s population (Ehrlich 1968), the report on the ‘limits of growth’ (Meadows and Meadows 1972), and the appearance of the concept of ‘sustainable development’ (UN World Commission on Environment and Development 1987).

In the late 1980s, these discussions overlapped with the already briefly mentioned debates on the broadening and deepening of security. The broadening of security – elsewhere also referred to as ‘widening’ (Buzan *et al.* 1998: 2) – consisted of the idea that not only states and their military capacities can be understood as security threats but that these threats could be located in a whole range of different sectors (Krause and Williams 1996; Mathews 1989; Crawford 1994; Tickner 1992; Wæver 1993). The deepening of security entailed new conceptions of security concerning its ontology but also pertained the very epistemological foundations of studying security. Instead of focusing on new threats, the idea of deepening focused on the referent objects of security, which for example could include individuals or the whole of humanity (Booth 2005a: 14; Dunn Cavelty and Mauer 2010: 2). As a result of these debates, scholars increasingly began to debate a range of ‘new security problems’ such as economic, human rights and migration issues (Krause and Williams 1996: 230), which eventually also led to the today widely used concept of human security. Besides human security, not least due to the strengthening of environmental movements in many Western states at that time, ‘environmental security’ or ‘ecological security’ soon became one of the major research agendas in CSS (Ullmann 1983; Mathews 1989; Matthew 2010: 48–50; Dalby 1992; Pirages 1991).

This also sparked an extensive research agenda on the relationship between environmental change and security or conflict. The main argument was that increasing deterioration of the environment constituted a major threat itself and could spark numerous security problems (Ullmann 1983: 134). At the beginning of these debates, climate change understood as a warming of the Earth's surface and atmosphere due to the anthropogenic release of greenhouse gases (GHG) (UN 1992: 2) only played a minor role. On the one hand, climate change at that time often was used in a broader sense that included other atmospheric changes such as the degradation of the ozone layer. On the other hand, environmental problems such as a general degradation of the environment due to various reasons, forest diebacks, and the dangers of nuclear energy (Dalby 2009: 14; Litfin 1994) still played a more central role. Besides the seminal work of Richard Ullmann on 'redefining security' (1983), important contributions in the field of environmental security came from authors such as Simon Dalby (1992, 2002), Jon Barnett (2001, 2003), Daniel Deudney (1990; Deudney and Matthew 1999), and Dennis Pirages (2005, 1991, 2013). Besides these works, another important strand of the literature particularly looked at the relationship between environmental change and conflict. Based on ideas that Thomas Malthus had already brought up in the late 18th century (Malthus 1970 [1798]) – hence often labelled as 'neo-Malthusian (Hartmann 2010: 234)–, several scholars began to link population growth, environmentally induced resource degradation and scarcity to the onset, perpetuation and intensification of violent conflict (Homer-Dixon 1994a, 1999, 1991; Myers 1989, 1993, 1995, 2002), thereby coining the environmental and later climate security or conflict nexus.

While all of the above authors in some way connected the environment to the concept of security, their specific argumentation differed considerably between at least four different categories of arguments (Buzan *et al.* 1998: 81–85). Firstly, the environment as such, or specific environmental events, have been conceptualised as a threat to humans, for instance in the case of volcanic eruptions, earthquakes or the possibility of an asteroid impact. Secondly, some have argued that the environment itself is threatened by human activity, which is closely related to the broader environmental and conservation movements of that time. Examples are the destruction of ecosystems and species by military or commercial activity. A third argument pertained environmental problems caused by human interference with the planetary ecosystem, which in turn threatens the wellbeing of some humans or even the entire civilisation, for instance the destruction of the ozone layer or climate change (Pirages 1991; Dalby 1992). Finally, some authors particularly stressed the threats to states and humans emanating from

socio-economic and political problems that were caused by human made environmental problems. An example is the research on the connections between environmental degradation and violent conflict (Homer-Dixon 1991, 1994b; Kaplan 1994). Since human activity has been central in the making (and in the development of possible solutions) of category three and four problems, the environmental (and later climate) security debates primarily focused on these two categories (Buzan *et al.* 1998: 80). The following *table 2.2* gives an overview of the four categories including different threats and main referent objects.

Table 2.2: Different Types of Environmental Threats and Referent Objects			
Category	Threat	Referent Object	Examples
1	Environment	Humans	Earthquakes, volcanic eruptions, asteroid impact
2	Humans	Environment	Destruction/pollution of ecosystems, economic, military activity
3	Environment (caused by humans)	Humans	Environmental changes that threaten humans due to human interference, climate change, destruction of ozone layer
4	Humans	Humans	Environmentally induced violent conflicts

(Based on Buzan *et al.* 1998: 81–85)

From the late 1980s on, climate change gradually became one of the central issues when it came to linking environmental problems to security. On the political level, several NGOs such as the Friends of the Earth, the World Watch Institute and the Climate Institute began to stress the security implications of climate change to increase political attention (Oels 2012a: 186). On the academic level, similar to the debates on environmental security in general, the debate on climate security was heterogeneous and revolved around different aspects of the problem. It focused on different threats and referent objects, hence employed different conceptions of security and had different research interests on the ontological as well as on the epistemological level. Thus, in the debates about climate change and security, one must distinguish between at least two major strands of the academic debate. Firstly, those studies that focus on climate change as an ‘objective’ security threat, which mainly constitute the ‘climate security nexus’ (Scheffran *et al.* 2012b) and which mostly apply traditional conceptions of state centred or human security. These studies analyse the connections between climate change and the onset or perpetuation of violent conflict (*category four* problems) or they highlight the impacts of climate change on human security (*category three* problems). The second strand of research, which is more relevant for this thesis, looks at the climate security debate from a social scientific meta-perspective using different securitisation approaches and tries to understand what representations of climate change as a security issue initiate on the political level.

2.2.2 The Climate Security Nexus in Academic Debates

Climate Change and Conflict

Most authors within the *first strand* that connect climate change to violent conflict follow the ‘neo-Malthusian’ argumentation and try to find empirical proof for the hypothesis that a changing climate indeed is an objective security problem. They mostly look for quantitative correlations between increased temperatures or other changing environmental variables and the onset, intensification or perpetuation of violent conflicts. Common examples are climate induced water and resource scarcity that leads to violent conflict over the access or the distribution to these resources, or climate induced mass-migration (up to 200 million environmental refugees according to Norman Myers), which triggers problems in the receiving areas (Myers 1995, 2002). So far, these studies have resulted in mixed conclusions. While some find evidence for a correlation or even a causal relationship between the two (Smith and Vivekananda 2007; Hsiang *et al.* 2013; Brown and McLeman 2009), others question the relationship between global warming and violent conflicts (Barnett 2000; Raleigh and Urdal 2007). The majority of authors paint a much more nuanced picture coming to the conclusion that while there might be a connection between climate change and conflict, it is much more complicated due to various intervening variables that have to be included in the analysis (Scheffran *et al.* 2012a; Barnett and Adger 2005, 2007a; Salehyan 2008; Gleditsch 2012).

Climate Change and Human Security

While sharing the assumption of objective threats with the climate conflict studies, others have not so much focused on violent conflict and the dangers for states but have highlighted how climate change can directly undermine and threaten human security. These studies particularly focus on the above category three problem and point out how the direct physical effects of climate change such as extreme weather events, changed precipitation patterns or sea level rise become a problem for the daily lives of people (Barnett and Adger 2005; Matthew *et al.* 2010; Page 2002). Even though not always explicitly referring to human security, the research on the vulnerability and coping capacity of individuals and communities in the face of climate change as well can be subsumed under this category (Busby *et al.* 2013; Eakin and Luers 2006; Vogel and O’Brien 2004; Meyer-Ohlendorf 2009; Jaspardo and Taylor 2008; Adger 2006; O’Brien *et al.* 2007).

Most of these briefly discussed works on the climate security nexus focus on the question whether climate change is or should be regarded as a security problem. In a sense, these authors themselves exercise political power or act as securitising actors who contribute to and perpetuate the securitisation of climate change. While this does not always have to be problematic – to better understand how climate change might endanger individuals and to increase political attention for these problems could certainly improve the lives of many (Floyd 2007b; Booth 1991; Wyn Jones 2005) – it can also have negative consequences. Depending on the specific cases and argumentative structure, it can provide the scientific justification for problematic political measures such as the deployment of military forces or the strengthening of border security. Thus, many of these works do not inquire – at least not as their prime objective – into the question what the linking of climate change and security does itself on a political level. And yet, they play an important part in bringing about climate change as a political security issue, as their research forms the basis for several reports at the intersections between science and politics – e.g. the IPCC reports (2007a, 2010), as well as reports of governmental advisory bodies (WBGU 2008) and think tanks (Campbell *et al.* 2007).

Contesting the Climate Security Nexus

Thus, a key criticism on the above literature is that many of these authors highlight an empirically rather weak or even non-existent connection and at the same time miss out a reflection of the possibly dangerous effects of their own ‘securitising’ academic writing (Hartmann 2010, 2009; Huysmans 2002). A concrete example is the figure of up to 200 million environmental or climate migrants. In the political debates, this figure has given rise to various ‘horror-scenarios’ of Western states being flooded by masses from the South and the suggestion of problematic countermeasures such as military interventions or stricter border security measures (Christian Aid 2007; CNA 2007: 18; Schwartz and Randall 2003: 16). Originally, the estimate of 200 million environmental refugees was coined by Norman Myers (1995) but then has been taken up by many authors despite its very weak empirical grounding (Hartmann 2010: 235; Greenpeace 2007; Oels and Carvalho 2012). Another example is the research on water scarcity and resulting conflicts. Contrary to what many studies and especially reports of think tanks have uncritically assumed as given, there exist several studies showing that climate change and its secondary effects such as water shortages do not necessarily lead to conflict but can also trigger increased cooperation (Zeitoun and Mirumachi 2008; Yoffe *et al.* 2003).

While these criticisms of the empirical validity of the climate security nexus and the possibly dangerous political consequences are important, they are only a first step in understanding the securitisation of climate change. Eventually, the question whether the security implications of climate change are ‘real’ or not is not the central one, at least not for this thesis. Thus, the more relevant debate revolves around the question whether we can witness (successful) securitisations of climate change, how these representations of climate change as a security issue have come about, how they function internally and what political consequences they have.

2.3 The Securitisation of Climate Change and the Missing Conception of Power

This is where the *second strand* comes into play. There is by now a large body of literature that analyses the political and academic debate on climate change as a security issue from a meta-level or securitisation perspective (see for example Floyd 2010; Trombetta 2011b; Oels 2012a; McDonald 2005, 2008, 2013; Corry 2012).

2.3.1 The Classical Concept of Securitisation: The Copenhagen School

The origins of the concept of securitisation lie in the theoretical debates on changing conceptions of security and its broadening and deepening. Scholars soon pointed to the problem that without clear criteria for identifying security threats or the confinement to a certain political sector, everything became a potential security threat or referent object. In this sense, the categorisation as ‘security problem’ only depends on the will or political agenda of the researcher (Buzan *et al.* 1998: 1–5). Following this argumentation, the whole concept of security runs the risk of becoming so unspecific that it turns out to be useless as a theoretical concept (Buzan *et al.* 1998: 4). Besides criticism from proponents of traditional Security Studies (for instance Walt 1991; Gray 1994; Dorff 1994), the seemingly unrestricted broadening and deepening of security also came under pressure from more critical authors. One of the most noticed criticisms came from Ole Wæver, Barry Buzan and Jaap de Wilde (Wæver 1995; Buzan *et al.* 1998; Buzan 1991). It eventually laid the ground for the concept of ‘securitisation’, which later became known as the *Copenhagen School*¹ of securitisation.

¹ The term is based on the origin of this approach at the Copenhagen Peace Research Institute (COPRI). There have been intense debates about the benefits and problems of the line-drawing between different ‘schools’ of thought in CSS (Dunn Cavelty and Mauer 2010: 1; C.A.S.E. Collective 2006; Fierke 2007). While using such labels undoubtedly erects and reinforces boundaries, it nevertheless can help to structure the vast research field.

The starting point of the CS is a critique of traditional Security Studies and its positivist conception of security (Buzan *et al.* 1998: 24). According to the CS, security is not an essentialist concept that can be found in the ontology of world politics. There are no security threats out there waiting to be discovered by the analyst and no theory is able to objectively single out the ‘real’ threats (Buzan *et al.* 1998: 24). Instead, security has to be understood as socially constructed: “Security” is thus a self-referential practice, because it is in this practice that the issue becomes a security issue – not necessarily because a real existential threat exists but because the issue is presented as such a threat’ (Buzan *et al.* 1998: 24). Consequently, any topic can be turned into a security issue. However, to avoid an uncontrollable broadening and deepening of the concept (Buzan *et al.* 1998: 34), the CS makes a second point and proposes a grammar of security that every securitisation process has to follow in order to successfully securitise an issue that is, to turn it into a security issue (Buzan *et al.* 1998: 5).

A proper securitisation entails a *securitising actor* who utters an illocutionary ‘speech act’ (Austin 1975; Searle 1969; Buzan *et al.* 1998: 26) in which he or she points to an urgent and *existential threat* (Buzan *et al.* 1998: 24) for the *referent object*. Referent objects can be located on every level, ranging from individuals, states, to humanity as a whole (Buzan and Wæver 2009: 253). The aim of the securitising actor usually is to legitimise *extraordinary measures* to defend the referent object against the proposed threat. If the *relevant audience* can be convinced of the threat and the necessity of extraordinary measures, which constitutes the final perlocutionary act (Balzacq 2011c: 6), the topic is successfully securitised. Thus, in the case of success, the audience grants the securitising actor almost all means possible to counter the threat. This moves the securitised issue above normal and democratic procedures (Buzan *et al.* 1998: 5): ‘[...] ‘security’ is the result of a move that takes politics beyond the established rules of the game and frames the issue as above normal politics’ (Wæver 2012a: 53). If the securitising actor is not able to convince the audience, it remains only an attempted securitisation move (Buzan *et al.* 1998: 25). It is important to stress at this point that the extraordinary measures only have to be accepted as possible solution to the threat, they do not have to be enacted already for a securitisation to be classified as successful (Buzan *et al.* 1998: 25).

Moreover, omitting these labels altogether would obscure the historical and ideological embeddedness of all theoretical research and construct new implicit boundaries as well (Mutimer 2010: 53), which is why I keep referring to different schools of securitisation.

Enacted or not, the CS conceptualises these extraordinary measures as inherently negative from a normative perspective, i.e. as problematically accelerating or even bypassing normal democratic procedures and as depoliticising the debate (Buzan *et al.* 1998: 29). The emphasis on extraordinariness is based on the understanding of securitised situations as instances of survival (Ciuta 2009: 306). The securitising actor presents the situation in such a way, that if one would not apply all means possible to halt the threat, the democratic order one is trying to protect by sticking to its rules and procedures would not survive anyway (Buzan *et al.* 1998: 24).

2.3.2 The Copenhagen School and Climate Security

As most well-known and original approach to securitisation, some authors have relied on the CS or on its extensions to understand the representation of climate change as a security issue. From a classical CS securitisation perspective, the first question to ask was whether there have been any securitising moves (driven by specific securitising actors) concerning climate change. Today there is a consensus in the literature that there have been indeed various of such moves and that we can identify several securitising actors having presented climate change as an urgent and existential threat (Oels and von Lucke 2015; Brzoska and Oels 2011; Brauch 2009; Floyd 2010). Examples are utterances by influential politicians (Gore 2007; Blair 2003; Obama 2009), debate in the UNSC (UNSC 2007b, 2011a, 2013), think tank (CNA 2007; Campbell *et al.* 2007; Werz and Conley 2012) and NGO reports (Smith and Vivekananda 2007; Christian Aid 2007) as well as studies by governmental advisory bodies (WBGU 2007c; Stern 2006). However, when it comes to questions about whether this securitisation was successful, which specific security conceptions it entailed, what political consequences it has legitimised, and how we should evaluate these consequences from a normative standpoint, the conclusions in the literature differ considerably (Brzoska and Oels 2011; Brauch 2009; Trombetta 2011b; Hartmann 2010; von Lucke *et al.* 2014).

The securitisation of climate change, in the reading of the traditional CS, has been unsuccessful because securitising moves have not (yet) legitimised any extraordinary measures (Buzan *et al.* 1998: 24; Buzan and Wæver 2009). Evidently, due to the underspecified nature of extraordinary measures, one could debate whether far-reaching international processes and agreements such as the UNFCCC negotiations or the Kyoto protocol already represent such

measures. However, most scholars still see these developments as anchored in the realm of normal politics and as not crossing the threshold to what the CS sees as extraordinary, not least because of their marginal influence on global CO₂ emissions (Stripple 2002; Oels 2011; Oels and von Lucke 2015). Thus, one could stop the analysis at this point because no successful securitisation can be detected. Naturally, this is unsatisfying due to several connected factors that stem from genuine theoretical problems of the CS but especially from its empirical application to the climate security debate for which it is not well equipped in the first place.

Today, there is a large body of literature on numerous problems of the CS in general, several of which have also surfaced in relation to the analysis of the climate security debate (see for instance Williams 1998, 2003; Hansen 2000, 2011; Huysmans 1998; Balzacq 2011c). I cannot discuss them here in any detail but will instead focus on the, in my eyes, main problem, which is a narrow and one-dimensional understanding of political power. On the one hand, the CS neglects that even ‘normal’ politics, democratic processes and legitimate procedures are not free from the exercise of power. On the other hand, just as political science as whole for some time, the CS prescribes to a traditional, top down and state centred conception of power in its conceptualisation of processes and outcomes of securitisation. It thereby neglects less direct and productive forms of power, as described by Michel Foucault (2006b). Based on such a more nuanced understanding of the subject, power relations are involved in enabling securitisation in the first place by forming the basis or context from which certain actors can legitimately speak security (Burgess 2011: 40–41; Hansen 2000: 303). They constrain the securitising actors’ choices concerning the available security arguments (i.e. which stand a chance of resonating within a specific context), and they shape the political consequences that specific security discourses can have by transforming governance practices and making possible particular policies.

Thus, questions of power (or the lacking problematisation of them) lay at the core of several of the key criticisms that scholars have raised in relation to the CS and to its application on ongoing securitisations outside the military sector such as the climate security debate (see Trombetta 2011b; Oels and von Lucke 2015). These include a critique of the CS’s focus on elite speech acts and the neglect of the wider context; a discussion of the fixed logic of security and the possibility of multiple threat constructions; and debates about the consequences of securitisation beyond or below extraordinary measures. In the following paragraphs, I briefly

discuss how the literature has approached these problems so far and where I think a power focused governmentality reading could tie in.

2.3.3 Approaching the Climate Security Debate Beyond Copenhagen

Contextualising Elite Speech Acts

Several criticisms have looked at the formative stages of securitisation that include questions about the context and the actors that get to speak security. As a vast and global issue that touches on various policy fields, includes a great deal of actors and connects to a whole range of different domestic issues, climate change inevitably raises questions about the focus on isolated speech-acts by political elites that build the core of the CS. More theoretically, many scholars have questioned whether this focus does not underscore the importance of the enabling *context* in which the securitisation takes place (Balzacq 2011a; Oels 2012b; Salter 2011; Oels and von Lucke 2015; Ciuta 2009). While the CS does include the context to some extent by mentioning certain facilitating conditions (Buzan *et al.* 1998: 31–32), it nevertheless has its main focus on speech acts by political elites and thus privileges actors vs. the structure.

Against this position, some authors have convincingly argued that these elite speech acts for example by high ranking politicians are only ‘the tip of the iceberg’ and can very well stand at the end of a more unnoticed and slowly progressing securitisation (Bigo 2009: 126). The elites that utter the speech acts draw on the current context and underlying discourse and take up certain topics as ‘policy’ or ‘discursive’ entrepreneurs (Léonard and Kaunert 2011: 68; Diez *et al.* 2016: 147). Moreover, certain actions and practices can also bring about an issue as security issue in the absence of elite speech acts (Büger and Stritzel 2005: 5; McDonald 2008: 564). Thus, in relation to the climate security debate, a discursive understanding of securitisation in which actors, referent objects and political consequences are constituted at the same time seems more promising (Hansen 2000). Focusing on a more nuanced concept of power directly ties in with this endeavour because it calls into question the prevalence of political elites wielding power at will in a direct and top-down manner. Conceptualising power as a productive and enabling factor that is at the basis of all actors and their capabilities to speak (specific forms of) security can enhance the understanding of complex securitisation processes such as in the case of climate change. Thus, securitising actors always operate in a specific

context and are themselves subjected to broader discourses, which empowers but also constrains their actions.

Moreover, what can be seen as ‘extraordinary’ measure, or more general as successful securitisation in the sense that it has legitimised policies and practices that otherwise would not have been seen as legitimate always, depends on the specific context. Consequently, one cannot assess whether a securitisation has led to extraordinary measures or been successful without relating it to the ‘normal’ context in which the securitisation took place (Ciuta 2009: 313). Concerning climate change, this context differs considerably for instance between ‘climate laggard’ countries such as the US or progressive ‘climate vanguard’ countries such as Germany or Mexico (von Lucke *et al.* 2014; Diez *et al.* 2016). On the one hand, this calls for studies that include different contexts. On the other hand, a focus on questions of power can help us to understand how a specific context relates to different forms of governance becoming dominant and hence facilitates the evolvement of different climate security discourses.

Breaking Up the Fixed Logic of Security

Other critics have focused on the process of securitisation and have suggested that there are various ways to construct a threat as well as different audiences and forms of consent. Looking at the climate security debates one immediately notices the diversity of security conceptions, ranging from national security, human security to risk. By trying to understand this diverse debate from a classical CS perspective its focus on a relatively fixed logic of security and specific consequences of securitisation becomes a problem (Trombetta 2008; Trombetta 2011b; Guzzini 2011; Stritzel 2007; Oels 2013; Ciuta 2009). Despite their criticism of mainstream Security Studies and the idea of socially constructed security problems, the authors of the CS remain fairly traditional when it comes to the underlying security logic (Opitz 2008b: 215). For the CS, security is closely linked to questions of survival, threat and defence (Ciuta 2009: 306). Thus, although sticking to a post-positivist conception of the *process* of securitisation, the CS conceptualises the *result* of successful securitisation as rather static and traditional (Trombetta 2011b). The authors of the CS do acknowledge that the logic of security is not fixed to the state and military matters for eternity. However, they insist that due to historical developments the meaning can be assumed as largely stable in the analysis for the time being (Buzan *et al.* 1998: 35). Yet, one could argue that exactly these historical variables have indeed changed in recent years, thereby transforming what security can mean and how political practitioners try to use it. By sticking to the assumption of a fixed security logic, the CS lens cannot see varying, in some

instances even positive or emancipating, security discourses (Booth 1991, 2005b; Wyn Jones 1999, 2005; UNDP 1994).

Thus, various authors have pointed to situations and political developments where securitisation processes do not necessarily rely on this traditional conception of security, do not lead to extraordinary measures, but nevertheless have had political consequences and have affected policies (Floyd 2010, 2007b: 328; Trombetta 2011b; Detraz 2009: 308; Brzoska 2009: 144). Examples often come from the environmental sector, for instance the debates that led to the adoption of the convention to protect the ozone layer (Trombetta 2011b: 143–145) or the framing of deforestation as national security issue in Brazil, which eventually led to improved environmental legislation (McDonald 2003, 2005). The climate security debates as well contain several different conceptions of security. Ultimately, all these different security representations, although missing out the extraordinary responses, have had important but very diverse consequences (Brzoska 2009, 2012b; Oels and von Lucke 2015; Diez *et al.* 2016).

These arguments have sparked various studies trying to understand different and non-exceptional securitisations and their varying consequences. The debates revolve around different threat constructions and different referent objects that in combination give rise to very different climate security ‘discourses’ (McDonald 2013; Diez *et al.* 2016; von Lucke *et al.* 2014) or ‘frames’ of climate security (Grauvogel and Diez 2014). Nicole Detraz and Michelle Betsill (2009) for instance, distinguish between a (normatively favourable) ‘environmental-security discourse’ and a (more problematic) ‘environmental-conflict’ discourse. This line of research has been expanded to even more referent object levels ranging from individuals, states, the environment to the global level (McDonald 2012, 2013). Others ask which climate security discourses are brought forward by certain major political actors (Brzoska 2009) and analyse how that coincides with the proposed measures or with the security strategies of states (Brzoska 2012a). A step further goes Olaf Corry (2012) who brings the theoretical research on risk into the debate and claims that climate change primarily has been ‘riskified’ instead of securitised. Finally, Diez *et al.* have combined the risk dimension with different referent object levels leading them to six different climate security discourses (von Lucke *et al.* 2014; Grauvogel and Diez 2014; Diez *et al.* 2016).

All these studies have considerably improved our understanding of securitisation in general and have underlined that particularly in the environmental sector it seems reasonable to open up the concept of security to different threats, referent objects and outcomes (Trombetta

2008: 600). However, they also come with shortcomings. They deliver convincing frameworks to structure empirical studies and to differentiate between different discourses or frames of climate security. However, they lack a coherent theoretical conceptualisation of the transformation of security practices, security discourses and their political effects. They mainly base their different discourses and assumptions about specific political consequences on individual empirical observations, the older environmental security literature and on the distinction between different categories of referent objects and threat constructions. In doing so, they lack a deeper discussion of how different forms of power underscore different climate security discourses and how they are involved in leading to these very different political outcomes. Thus, they particularly fall short of theorising the ‘prognostic dimension’ of security discourses.

While the idea of different climate security discourses is not entirely new, existing studies develop their climate security discourses on the basis of the older literature on environmental security and primarily on the distinction between different categories of referent objects and threat constructions (Diez *et al.* 2016; McDonald 2013). Most of these studies do not primarily focus on a comprehensive theoretical understanding of how these different climate security discourses lead to the varying political consequences and what role relations of power play in this process. They thus lack a deeper theorising of the prognostic dimension of climate security frames or discourses.

This is surprising, as representing something as security threat, be it by pointing to national security, human security or risk, means also to govern the issue in a certain way, which naturally requires the exercise of power. Every climate security discourse legitimises certain actors to speak and act, prescribes certain modes of action, points to certain financial schemes, and most importantly also precludes many other options and actors from the debate. Thus, securitisation processes entail very different pathways of power, ranging from state centric top down measures to safeguard the national security, to prescribing a certain desirable behaviour to minimise threats to human security, to even more indirect ways of interference by setting the agenda and by influencing certain societal variables in the background to lower the overall risk. A closer view on these different forms of power can help us to understand the divergent political consequences of securitisation – an argument, which I will pick up in *section 2.4* of this chapter when I introduce my governmentality reading of securitisation.

Finally, several authors have discussed the outcome or consequences of securitisation. They have particularly questioned whether it is useful to focus exclusively on extraordinary measures as political results and whether the distinction between normal and extraordinary politics is helpful in the first place (Stritzel 2007; McDonald 2008; Oels and von Lucke 2015; Vuori 2008; Roe 2008, 2012; Jackson 2006; Williams 2003; Wæver 2008).

As my examples above have illustrated, it is difficult to clearly define extraordinary measures and the point where they are fully legitimised (thus when the political debate is closed down), particularly in the field of climate change (Oels and von Lucke 2015: 21; Brauch 2009; Hartmann 2010). Eventually, the search for ‘extraordinariness’ blinds the view for important developments below this threshold (Oels and von Lucke 2015: 60). Moreover, it often constructs a dichotomy between the researcher and the empirical developments they look at. Thus, from a narrow theoretical perspective, the absence of extraordinary measures would deny the label of security even though political practitioners ‘stubbornly speak security’ (Ciuta 2009: 312). This is why several authors have called for a disentanglement of exceptional measures and successful securitisation: ‘Exceptional measures might therefore not always be security measures, and security measures might not always be exceptional’ (Ciuta 2009: 314). In the end, a contextual definition of what should count as security and as successful securitisation might be a more promising strategy and would also be more compatible with the observation of different climate security discourses.

Even though a CS perspective would qualify them as failed securitisation as they did not legitimise extraordinary measures, the security discussions surrounding climate change have had important political effects. This includes putting climate change onto the agenda in the first place, the discussions about its security implications in the UNSC, but also the fact that several heads of state have directly debated the issue during the climate negotiations (Trombetta 2011b: 140; Brzoska 2009; Brauch 2009). Accordingly, we should not measure the success of the securitisation of climate change solely in terms of extraordinary measures. Rather, it is in order to either loosen the success conditions to the counterfactual criterion of policies that without the security discourse would not have been legitimate (Trombetta 2011b: 136), or to abandon the dichotomy between success and failure altogether and understand securitisation as continuous process that can gradually reframe issues and their political handling (Bigo 2002; Diez *et al.* 2016: 18–19).

A more fine-grained analysis of power can help in this endeavour and contribute to looking beyond or rather beneath these extraordinary measures, as it is exactly the less extraordinary manner in which power is exercised in modern societies that several scholars have identified as often most influential (Lukes 2005: 25; Foucault 2006b: 163; Cox 1983: 169). In this sense, a power focused governmentality reading of securitisation can help us to make sense of the non-extraordinary policies and practices that often follow from specific security discourses.

Normative Questions

Looking beyond the extraordinary effects of securitisation has also led some scholars to criticise the a priori judgment of all securitisations as negative (Floyd 2007b; Elbe 2009: 163). If one accepts the possibility that securitisations are based on different security logics or (productive) forms of power and hence can have divergent political consequences, it becomes possible to judge the outcome of securitisation as positive or conducive to the political debate (as for instance the Welsh School of CSS does, see Booth 2005a; Wyn Jones 1999, 2005). It also raises questions about whether certain security discourses are more ‘just’ than others (Floyd 2012, 2011) or whether de-securitisation should always be the goal (McDonald 2011; Hansen 2012). The qualities of generating attention and speeding up processes that come with securitisation are precisely the reason why environmental activists have time and again relied on security discourses (Floyd 2013: 287–288). Thus, under certain circumstances securitisation can be regarded necessary to bring the topic on the agenda or to politicise it (Trombetta 2011b: 145; Floyd 2007b: 337; Elbe 2006).

In the end, we cannot answer the normative question in a universal manner. It depends on each individual case, which is why detailed case studies of securitisation and a consequentialist ex-post judgment are all the more important (Floyd 2007b; Elbe 2006, 2009: 163). As *chapter 7* will show in greater detail, a closer analysis of the forms of power involved in processes of securitisation and their diverse ways of influencing political rule, can – in the spirit of Foucault’s famous quote about everything being dangerous but not necessarily bad (Gutting 2007: 115) – contribute to such a consequentialist and ex-post normative discussion. The main questions in this regard are whether a securitisation of climate change is desirable in general, whether certain climate security discourses are preferable and whether there are

feasible alternatives to a representation of climate change as a threat in order to incite progressive political action.

2.3.4 From Copenhagen to the Paris School and Risk Conceptions

Most of the authors discussed so far have tried to address the shortcomings of the CS concerning ‘unsuccessful’ securitisations in the environmental sector within a wider Copenhagenian framework. While this has undoubtedly brought the debate forward, it cannot entirely solve all the problems and might overstretch the CS to the point where it is better to approach the issue from a new perspective.

The Paris School: Practices and Professionals of (In)Security

Particularly the questions about the importance of the context, the threshold between ‘normal’ and ‘exceptional’ and the role of elite-speech acts have inspired the idea that unnoticed and slowly proceeding ‘(in)securitisations’ might be much more important than the CS would suggest (Bigo 2002, 2008). Eventually, this has led to the ‘Paris School’ of ‘(in)securitisation’ (Bigo 2002; Huysmans 2002, 2004; Bigo 2008, 2009: 124). It takes up ideas from Bigo’s previous work in sociology and criminology (Bigo and Walker 2007) and combines Bourdieu’s concept of ‘the field’ (Bourdieu and Coleman 1991) with Michel Foucault’s works on power and governmentality (Foucault 2006b, 2006a). For the Paris School, the elite speech act is only the most visible part, made possible by a long lasting securitisation process in which besides those speech acts, various incremental practices of professionals of (in)security play a much more important role (Bigo 2002: 73). Thus, it is the uncounted and often unnoticed ‘little security nothings’ (Huysmans 2011) that gradually transform an issue towards security. The continuing securitisation of migration in Europe, with ever increasing security measures at the borders is the prime example of this line of thought (Huysmans 2008).

Concerning the securitisation of climate change, the Paris School emphasises the multiplicity of actors involved in the securitisation process. It makes visible the diverse forms of securitising articulations, ranging from parliamentary debates, political reports to scientific climate models and specific practices. And it highlights the long-term nature of the securitisation process, which in the case of climate change has been unfolding at least since the late 1980s. However, the Paris School also has some characteristics that inhibit its usefulness

for analysing the securitisation of climate change, which is why there are, to my knowledge, no studies that solely rely on it for studying climate security debates. Its unique micro level of analysis, meaning the focus on traditional professionals of (in)security, does not really enhance our understanding of what has happened in the case of climate change. In contrast to for example migration, where border security and customs agents as well as surveillance technologies play a vital role, climate change has not been primarily governed and securitised by those traditional professionals of (in)security. Instead, a wide range of actors such as scientists, environmental activists and organisations as well as think tanks and political elites have been the central players. These have contributed to the securitisation of climate change through the articulation and popularisation of different climate security discourses, which construct climate change as a specific political issue. One could of course conceptualise defence policy think tanks as ‘professionals of insecurity’, however, they are not the actual agents of insecurity in the Paris sense. They do not carry out the direct practices of insecurity such as controlling border traffic, which from a Paris School perspective drive (in)securitisation processes in the first place. Thus, while adding to our understanding, the Paris School alone may be not the first choice to analyse the securitisation of climate change.

Risk Approaches: Governing Uncertain Futures

Connecting in many points to the Paris School, the rapidly expanding research agenda on concepts of risk and risk based securitisations seems promising for studying the climate security debate (Corry 2012; von Lucke *et al.* 2014; Aradau and van Munster 2007; Dillon and Lobo-Guerrero 2008; Dillon 2007). Risk and uncertainty are not entirely new in IR and Security Studies and scholars have already used these concepts in early realist works on the uncertainty of the balance of power and the security dilemma of states (Herz 1951; Morgenthau 2006). However, with the introduction of new epistemological approaches such as constructivism and post-structuralism, the meaning of risk has shifted decisively (Kessler 2012: 22–23). The core claim of the risk perspective is that instead of clear cut and immediate threats, in modern times politics is more about global, diffuse and seemingly incalculable risks (Beck 1992; Hameiri 2008; Hameiri and Jones 2013; Daase and Kessler 2007). Against these risks, one cannot defend oneself in the same manner as against classical threats, but it is only possible to keep them under control with risk management strategies or precautionary and pre-emptive approaches. Environmental issues regularly have been connected to concepts of risk (Lash *et al.* 1996; Charpentier 2008; Corry 2012; Davoudi 2012). In fact, certain key characteristics of modern risk approaches such as the ‘precautionary principle’ (derived from the German

‘Vorsorgeprinzip’) have first been introduced in connection to the environment (Raffensperger and Tickner 1999; Aradau and van Munster 2007: 103; Ewald 1991, 1999).

The origins of risk focused approaches on securitisation lie in the general debates on risk in Sociology and International Relations (Beck 1992, 2002; Giddens 2002; Luhmann 1993) but also in Michel Foucault’s works on biopolitics and governmentality (Foucault 1983, 1975, 1980, 2006a, 2006b). Similar to the Paris School, the general argument here is that it is not always immediate and existential threats but often rather long-term, diffuse risks that are evoked in securitisation processes. Works in the Foucauldian tradition conceptualise risk not as objective category opposed to security but as discourse or dispositive that enables to govern risks with certain technologies of power (Kessler 2012: 20; Aradau and van Munster 2007; Lobo-Guerrero 2007; Neal 2004). In this sense, risk discourses routinise and normalise the notions of ‘out of control’ and extraordinariness usually associated with the evocation of security. In addition, risk management technologies try to control the unknown future, try to bring back the future into the present by preparing for everything this future could hold (Methmann and Rothe 2012). Concrete technologies, for instance, are insurance schemes or hedging strategies (Kessler 2012: 24). Hence, risks are allowed to materialise (because being unknown they could not be prevented one way or another) as long as one is insured against or made resilient towards such events. Transferred to securitisation theory, the clear dichotomy between normal and exceptional situations drawn by the CS does not hold because risk management tries to normalise even this very state of exception and thus makes it permanent (Aradau and van Munster 2010: 76; Agamben 2005). As a long-term, global, highly uncertain but possibly devastating risk, global climate change is a prime example for the concept of risk, which has led some authors to speak of a ‘riskification’ instead of securitisation (Corry 2012). Others see the usage of diffuse and long-term risks as part of the securitisation concept, as the endpoint of a continuum and argue for a rethinking and extension of the original securitisation concept (von Lucke *et al.* 2014; Diez *et al.* 2016).

However, as climate change is not solely constructed as a long-term risk, but oftentimes presented as an immediate and concrete threat, exclusively looking at its securitisation through the lens of risk and Paris is problematic and can generate new problems. To a certain extent, these approaches replace the traditional security logic of classical securitisation theory, with a micro or long-term perspective that mainly looks at less confrontational everyday practices, security professionals and a risk based security logic (Opitz 2008b: 204; Larrinaga and Doucet

2008). Yet, climate security discourses are more dynamic and multifaceted; they entail elements of threat and survival, state and human centred security conceptions as well as diffuse risk constructions. Moreover, although implicitly included in the Foucault based Paris and risk approaches, questions of power, are not discussed sufficiently. Thus, these approaches do not engage, at least not as their primary focus, with idea of the parallel exercise of different forms of power (ranging from top-down and direct sovereign, to more indirect and productive forms such as disciplinary and governmental power) in securitisation processes that can help to understand the different forms of securitisation and varying political consequences. Moreover, beyond the argument of professional of insecurity and governance through risk, they do not spell out in detail how exactly relations of power are linked to processes of securitisation. Thus, to better understand climate security discourses we need a theoretical framework that can give us a more thorough understanding of the dynamic aspects of security and its interrelatedness with questions of power as well as its rootedness in the context where it is enacted (Ciuta 2009) – which, in my opinion, the CS, Paris and Risk approaches cannot entirely provide.

2.4 Towards a Governmentality Reading of Climate Security

The previous discussions have shown that although the existing literature was able to overcome some of the problems of the CS when it comes to analyse the climate security debate, blind spots prevail. While the CS remains focused on a state centred and top down security logic and conception of power, the Paris School and Risk approaches lean towards the other extreme. And while the works on different discourses of climate security to a certain extent circumvent such a one-sided focus, they too lack a coherent theoretical grounding. Ultimately, I argue that a more thorough problematisation of power can help us to address these problems.

A promising approach in this respect are Michel Foucault's ideas on the changing notion of political power and his concept of 'governmentality' (Foucault 2006b, 2006a; Dean 2010; Larner and Walters 2006; Walters and Haahr 2005). In its essence (see *chapter 3* for a detailed discussion), the governmentality approach problematises the mainstream understanding of governance or political power as exclusively tied to the state. It shows that classical top-down and state based governance is only one specific technique of governance and that in the process of the 'governmentalisation of the state' other less confrontational and visible ways of governance have become more important (Dean 2010: 24; Walters and Haahr 2005: 290, 293; Foucault 2006b: 162, 183). In the last decades 'governmentality studies' has become a vibrant

field of study and the governmentality approach, in its various forms and meanings, has been used by a variety of scholars to understand a broad range of topics, including climate change². A few scholars have also directly connected the governmentality approach to questions of security or securitisation theory (Elbe 2009, 2011; Oels 2011, 2013; Methmann and Rothe 2012; Rothe 2011b; Opitz 2008b; Ingram 2010; Opitz 2008b). These approaches particularly discuss the connections between security, power and governance and analyse how security practices, just as political rule in general, have undergone a constant transformation. Securitisation processes hence are understood as instances of governing that rely on different power forms such as sovereign, disciplinary and governmental power.

2.4.1 The Added Value of a Governmentality Perspective

A governmentality reading of securitisation hence can help us to overcome some of the above raised problems when it comes to analysing the diverse climate security debate. Most importantly, it helps us to understand the variety of different security discourses (i.e. the different security logics that are used) and their diverse political consequences by conceptualising them as resting on different power forms. Thus, analysing securitisation processes through the governmentality lens particularly strengthens the theoretical grounding of the prognostic dimension and goes beyond existing studies in many respects.

Firstly, the focus on the governmentalisation of the state and of security enables a more thorough account of the continuous transformation or evolution of security in general and thus of the dynamic qualities of the concept (Opitz 2008b: 206). Thus, although it distinguishes between different discourses of power and security for analytical purposes, the governmentality concept implies linkages between these discourses and that they are in constant transformation towards a more governmental way of governance (Elbe 2009: 12; Foucault 2006b: 76).

Secondly, the focus on power helps to problematise the idea of given subjects of security and the role of isolated elite speech acts. The governmentality perspective does not conceptualise the subjects of security (e.g. the securitising actors) and the audiences as given but instead claims that relations of power – and different discourses of security – precede them

² Walters and Haahr (2005); Lerner and Walters (2006); Dean (2010); Joseph (2010b); Leander and van Munster (2007); Lövbrand *et al.* (2009); Slocum (2004); Bulkeley and Stripple (2013); Bäckstrand and Lövbrand (2006); Okereke *et al.* (2009); Bröckling *et al.* (2012b).

and constitute and empower these subjects in the first place (Burgess 2011: 40). It is the specific discourse that constitutes their actorness and legitimisation to speak security (see also Hansen 2000: 303), which also means that they cannot freely use the power that comes with securitisation but are seriously restrained by broader discursive and power dynamics. This helps to contextualise securitisation processes but also to go beyond a one-sided focus on state actors. Since a governmentality reading does not solely rely on a sovereign and thus territorial and centralist notions of power, it breaks down the ‘cold monster of the state’ (Huysmans 2008: 40) and highlights the importance of non-state actors that also have played a crucial role in the climate security debates.

Thirdly, the missing problematisation of the power forms underlying security discourses prevents existing studies to come to a more theoretically driven understanding of the political effects of securitisation. More concretely, a power focused reading of securitisation highlights how power and truth are inextricably intertwined and thus what important role specific ‘security truths’ (Burgess 2011: 39–40) play in governance processes. It thus can show how certain power forms constitute specific subjects, objects and solutions, how they cancel out alternatives truths and hence can establish a specific understanding of the situation as nearly hegemonic (Laclau and Mouffe 2001; Cox 1983).

Fourthly, from this perspective it becomes possible to see securitisation not only as a one-way path that changes the governed objects (i.e. securitises issues) but as bidirectional. Thus, it opens up the framework for the reverse process that is for instance the ‘climatisation’ (Oels 2012a) or ‘medicalisation’ (Elbe 2011) of the security field, through which practices from the securitised issues transform the security field and the concepts of security themselves.

Finally, whereas a few studies (Diez *et al.* 2016; Corry 2012), incorporate risk conceptions into their analysis of climate change, they do so in a sometimes problematic manner. Diez *et al.* for instance combine a risk mode of securitisation with different referent object levels (Diez *et al.* 2016: 19, 21). While this is an important step forward, it runs counter to the original conception of risk from a Foucauldian viewpoint. From this perspective, risk functions on an aggregate level and primarily is an inductive or normalising process that generates certain risk calculations for the overall population. Thus, risk as probabilistic instrument cannot easily be tied to a definitive pre-given referent object, but this referent object as well as the subjects of the process are constituted within the very process of risk analysis.

A governmentality reading can thus give us a deeper understanding of how securitisation discourses rest on different power forms and how these specific forms can lead to diverse political consequences. It can also contribute to overcome the focus on extraordinary measures and to look beneath the threshold of the exception. Due to the conceptualisation of different security discourses as resting on different power forms, it provides a theoretical grounding for the diversity of political consequences that do not necessarily have to be extraordinary. Consequently, a governmentality reading abandons the clear-cut distinction between normal and securitised situations (and thus between success and failure) and conceptualises securitisation as a gradual process, which various degrees of success. Resting on these assumptions, it is also possible to come to an informed normative assessment as to whether certain forms of securitisation may be preferable to others (at least concerning a specific purpose). At the same time, a governmentality reading alerts us to the possibility that even at first glance favourable climate security discourses such as human security, can wield indirect and often less noticed power effects that from a normative perspective might not be desirable (Oels and von Lucke 2015; Larrinaga and Doucet 2008).

2.4.2 The Existing Literature on Governmentality, Securitisation and Climate Change

Besides works that discuss Foucault's ideas on governmentality in relation to IR research on security and securitisation in general (Opitz 2008b) or concerning different issue areas (Purtschert *et al.* 2008; Bröckling *et al.* 2012b), some scholars have already approached the climate security debate from a governmentality perspective. Angela Oels (2005, 2011, 2013) was one of the pioneers and in several works has shown how over the last two decades (1988-2010) the threat constructions used to securitise climate change on the global level can be conceptualised as a chain of different governmentalities or modes of risk management. In her terminology, they range from 'traditional risk management', 'risk management through contingency' to 'drastic pre-emption' and have influenced the political handling of climate change decisively (Oels 2011). Connecting to these findings and by combining the governmentality approach with Laclau and Mouffe's hegemony framework (Laclau and Mouffe 2001), Chris Methmann and Delf Rothe have argued that in the global climate security discourses technocratic and risk management arguments are intimately connected to exceptional accounts of security through a 'logic of the apocalypse' (Methmann and Rothe 2012: 324; Rothe 2011b).

Beyond these studies, although not focusing on climate change but on HIV/AIDS, the works of Stefan Elbe are of particular relevance for my work. They exemplify some of the general advantages of a governmentality reading of securitisation, which are transferable to the study of climate change. At the centre of Elbe's work is the idea of the 'governmentalisation of security', which materialises itself in a shift in the security logic from a solely traditional state and military based conception towards a more nuanced picture including individual referent objects and risk conceptions. He thus adds a dynamic aspect to securitisation research and provides an alternative reading of the gradual transformation of security practices since the 1980s and the links between different securitisations (Elbe 2009: 9). Elbe's work hence goes beyond diagnosing a temporal chain of governmentalities or one single all-encompassing governmentality (as for example the literature on risk frequently assumes). Instead, he follows up on Foucault's argument that although ways of governing and the exercise of power constantly evolve, new forms do not simply replace the older ones (Foucault 2006b: 161), which enables Elbe to capture the multiplicity of contemporary security discourses.

2.4.3 The Shortcomings of Governmentality and Gaps in the Literature

Despite the discussed advantages, the governmentality literature in general and the existing studies on the climate security debate have their weak spots and leave room for further research. On a general level, some authors have questioned whether it is possible to apply the concept of governmentality to other societies than highly developed, liberal and democratic states (Joseph 2010a; Opitz 2008a; Milchman and Rosenberg 2009). They argue that the process of the governmentalisation of the state is not as advanced in these societies (i.e. that they do not have an 'advanced form of liberalism') and that 'older' forms of political rule and power still play a more important role. Thus, they caution against the assumption that one specific form of governmentality (e.g. neoliberal) should apply to all societies in the same way (Joseph 2010a: 223). At the same time, there are only a few studies that use a governmentality perspective in a comparative manner (e.g. Kipnis 2008; Frame and Bebbington 2012) – and even less that do so in relation to security (Joseph 2013) –, which would be able to address this problem. A further point of critique is that existing governmentality studies have mostly looked at political programmes and have often taken its implementation and effects for granted, thereby neglecting empirical counter findings, local resistance (Rothe 2011a, 2011b; Mckee 2009: 473–474; Bröckling *et al.* 2012a: 16–17) or a failure of governmentality (van Dyk and Angermüller 2010:

13; Bröckling and Krasmann 2010: 25; Methmann 2011: 7). A problem that already has been raised in relation to the study of discourses, which as well often stop before the actual implementation phase of discursively legitimised policies (Milliken 1999: 240; Bröckling *et al.* 2012a: 17).

Beyond these general criticisms, in relation to the climate security debate existing studies have so far mostly looked at the global level (Oels 2011, 2012a, 2013; Methmann and Rothe 2012; Methmann 2011, 2014b) and often lack a deeper empirical analysis or use only exemplary/explorative case studies (Rothe 2011a: 7). As a result, they have some problems with the above issues, as it is difficult to analyse the actual governmental effects in any detail on the global level without including a detailed analysis of the actual governance processes. Ironically, it was particularly the missing global focus that had been criticised in earlier works on governmentality (Walters and Haahr 2005: 296). Yet, in relation to climate change, the global dimension has been studied extensively whereas the study of domestic debates has been somewhat neglected, even though the domestic level often is much more important for legitimising actual policies. Furthermore, the focus of existing governmentality studies on the climate security debate is on a temporal transformation of the debate and a sequence of different governmentalities (Oels 2011; Rothe 2011b; Methmann and Oels forthcoming). These studies thus neglect Foucault's original idea of the parallel exercise of all three power forms. This problem already became apparent in the discussion of the risk literature, which also focuses too much on one specific form of power thereby neglecting the continuing influence and parallel existence of 'older' power forms (see Walters and Haahr 2005: 295; Larrinaga and Doucet 2008; Butler 2004 on this point).

This point of criticism ties in with the wider problem of governmentality studies that often seem to assume that there is only one direction in the development of societies, thereby neglecting the continuous renegotiation processes between different forms of political rule. While the general governmentality literature begins to approach this problem (Zanotti 2014; Vasilache 2014; Rothe 2011a), there are only few studies that directly focus on the simultaneous application of different power forms in securitisation processes (Collier 2009; Elbe 2009; Opitz 2008b). Thus, what is missing in relation to the climate security debate are studies that focus on an understanding of governmentality that consider the parallel exercise of different power forms. Moreover, to address the confinement of governmentality studies on the programmatic level, it seems in order to provide a more fine-grained empirical analysis, which looks at

concrete political debates, policies and laws as a result of specific forms of securitisation and governance. Eventually, such an empirically driven approach can provide a deeper understanding of the political effects of climate security discourses and hence certain manifestations of governmentality. A comparative approach that highlights the varying political effects of different securitisations of climate change on governance processes in different contexts could enhance our understanding in this respect. In order to address the proclaimed ‘Western bias’ of securitisation research (Boas 2014; Bilgin 2010; von Lucke 2016), it also seems to be in order to include case studies from the Global South.

3. Theory: Governing Through Climate Security

A power and governance focused approach based on a Foucauldian reading of securitisation can add to our understanding of ongoing securitisation process in non-traditional sectors such as the environment. Moreover, with its fine-grained analytics of political power it can help to make sense of the divergent political effects of different threat constructions. At the same time, some aspects of securitisation theory can help us to sharpen the lens of the governmentality approach by focusing our attention on a very specific but nonetheless influential field of governance. Designating something as a threat, be it to national or human security or as a diffuse risk construction, undoubtedly transforms the political debate and makes possibly a novel treatment of the issues at stake. It may not always elevate the issue into high politics or legitimise non-democratic exceptional measures. Yet, based on the specific threat constructions and underlying power forms, it enables new forms of governance that without the security framing would not have been accepted as legitimate or have had the same impact. Governance in this respect is understood broadly as: ‘Any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through desires, aspirations, interests, beliefs, for definitive but shifting ends with a diverse set of relatively unpredictable consequences, effects and outcomes’ (Dean 2010: 266–267).

Starting out from the original ideas of Michel Foucault on governmentality (Foucault 2003; 2006a, 2006b), but also based on the works of Stefan Elbe (2009), Angela Oels (2011, 2012a), Mitchell Dean (2010) and others, in this chapter I introduce a specific reading of the governmentality approach and discuss its relevance for securitisation theory. The structure of this chapter is as follows, I first point out the main foundations of the governmentality approach (in the following abbreviated GA) and explain core concepts. Then, I elaborate on how the GA can be combined with securitisation theory and with an analysis of the climate security debate leading me to the construction of three distinct climate security discourses that draw on three different forms of power. Eventually, I develop the specific operationalisation of the approach to answer my research questions and elaborate on the methodology and case selection.

3.1 The Original Governmentality Approach

The governmentality approach originally developed by Michel Foucault is not a fully elaborated theory (Walters and Haahr 2005; Bröckling *et al.* 2012a: 7-8, 15), and there is no consensus about its proper interpretation, scope or methodology. Rather, it is a starting point for critique or for the problematisation of existing theories, a way of seeing things differently and complementing other theories and concepts. Each application of the approach combines its various parts in new ways and creates a new operationalisation and understanding of the concept (Dean 2010: 13). Thus, the governmentality perspective developed in the following is not a general framework of governmentality, but a very specific version tailored to answer my research questions, to extend the concept of securitisation and to study contemporary climate security discourses.

3.1.1 Power and Governmentality: Cutting the Kings Head

Michel Foucault originally developed the governmentality approach in the 1970s based on his research on political power and particularly in his lectures at the College de France, which now have been published in two books ‘Security, Territory and Population’ and ‘The Birth of Biopolitics’ (2006b, 2006a). The starting point of these lectures is a critique of the Political Science research of that time, which, according to Foucault, focused too much on repressive forms of power and government (Foucault 1983: 83; Oels 2010: 172). To rephrase Foucault, Political Science still had not ‘cut the kings head’ (Foucault 1979, 1983; Lemke 2002: 51). Governance was widely understood as top down enterprise carried out by a sovereign state without too much interference of non-state actors or the governed entities themselves. Additionally, even though there had been some nuanced research on power (Lukes 2005; Bachrach and Baratz 1962), in the predominant, as Foucault calls it, ‘juridico-political discourse’ (1979: 88, 1983: 84), there persisted a view on power as something that could be possessed and wielded at will. Power was directly tied to the capacity of specific actors to control the actions of others (Barnett and Duvall 2005) and hence conceptualised as something constraining, dominating and essentially bad, exercised from a top down perspective over the governed subjects without many possibilities to resist.

Against this mainstream view on power, Foucault developed his own understanding of the subject as resting in the ‘discourse’ or later in the ‘dispositive’. Coming from a philosophical

and psychological background, Foucault took inspirations from many disciplines and sources often not to be found in Political Science or International Relations. Nonetheless, his conceptualisation of power contains various linkages to the central debates in those disciplines, which is why I briefly discuss some of the key arguments.

Skipping older debates on power that started in ancient times and culminated in Machiavelli's famous 'Prince' (2005 [1532]), one of the most basic understandings of power in modern Political Science goes back to Max Weber who defined power as the probability of an individual to realise its will over others despite their resistance (Weber 1976: 28). In their famous studies about the exercise of power in New Haven Robert Dahl and others later adopted and extended this understanding. Dahl's studies approached power from a behaviourist perspective defining it as getting things done i.e. prevailing in conflictive situations (Dahl 1961). Being discontent with this fairly narrow or 'one-dimensional' understanding of the concept, Peter Bachrach and Morton Baratz (1962) developed a 'two-dimensional' approach. Here, power was not only defined as directly enforcing one's will over others but also as preventing certain disputes from materialising, making 'non-decisions' and thus setting the agenda in the first place (Bachrach and Baratz 1962). In the 1970s Stephen Lukes (2005) added a third dimension in which the ultimate exercise of power happens when the addressees do not even become aware of power being exercised. In Lukes' view, power shapes the perceptions and preferences of individuals in such a way that they accept a given situation as natural and unchangeable (Lukes 2005: 28–30). Lukes' third dimension is in some respects similar to another important strand in the research on power coming from a Marxist tradition and focusing on the idea of hegemony. Going back to the ideas of Italian philosopher Antonio Gramsci, the 'neo-gramscian' approach, amongst others developed by Robert Cox (1981, 1983), states that power can be found exactly where it is least visible. That is, when almost all resistance is muted and a single viewpoint of particular social forces has become hegemonic over most others (Cox 1981: 137–138, 1983: 169).

Rather similar to the ideas of Lukes and Cox, but mostly resting on his extensive genealogical research on the history of political thought, Foucault developed his own concept of power. He sees power as taking very different forms, e.g. strategic games, structuring fields of possibility and particularly as being productive, as enabling things and constituting subject positions. The most important aspect in the Foucauldian understanding of power is the concept of the discourse. A discourse is a power-knowledge nexus constituting reality in a certain way,

thus defining what is right or wrong and who is empowered to speak the truth. It is only through discourse that humans can access reality and knowledge. Thus, all reality and truth are exposed to and shaped by certain power dynamics:

Power is a relationship between actors that produce knowledges and truths that lead to individual and social practices that in turn tend to disseminate those truths. Knowledge transmits and disseminates the effects of power [...], while truth is a status given to certain knowledge by power. [...] Truth is linked in a circular relation with systems of power which produce and sustain it. (Foucault 1980: 133).

Power in Foucault's sense is everywhere not only in instances of direct influence nor in the hands of seemingly powerful individuals. Instead, its most central functions include the constitution of subject positions, desires and truths in the first place. Since power in this view is productive and empowering it is not seen as something essentially bad from which people have to be rescued. In contrast, Foucault would call the common understanding of power, which is conceptualised as an asymmetrical force against which no resistance is possible, domination (Lemke 2002: 53; Dean 2010: 58). While discourse remained a central theoretical device in his thinking, Foucault later also used the term 'dispositive'. This is an extension of the discourse concept inasmuch as it also includes non-verbal practices such as architecture, institutions, or organisations (Foucault 2003; Dean 2010, 2012; Jäger and Meier 2009; Aradau *et al.* 2014a: 64). However, a broader understanding of 'discourse' also is not limited to verbal or textual representations because certain practices or architectural arrangements cannot become meaningful outside their discursive representation (Milliken 1999). Hence, it is a matter of debate whether this new concept really is necessary (Bührmann and Schneider 2008; Keller 2013) and I will largely stick to the concept of discourse in the following.

3.1.2 Developing the Concept of Governmentality

Working with this more nuanced concept of power and trying to overcome the shortcomings of the debate on governance, the concept that Foucault developed in the governmentality lectures starts out from an extensive genealogical analysis of the term 'to govern' and its underlying power forms since the ancient times. Foucault understands genealogy as a way of comprehending the present by problematising taken for granted assumptions and by refusing to use contemporary meanings of concepts to understand the past. Instead, the original meaning of concepts is used as a starting point (Dean 2010: 3). Thus, Foucault tries to condense the

dominant meaning of the term in different epochs to capture its continuous transformation. For Foucault's analysis, not the first appearance of the term is important but the point in time when people consciously deal with it, enabling the development of certain tactics, strategies and modes of action in relation to the term (Foucault 2006b: 425).

Concerning the contemporary debates on governance and power Foucault suggests a new line of thinking, which takes the older, much broader meaning of the term 'to govern' as starting point. Here, governing is not restricted to the state, but also applies to the governing of the family, the economy or even the self (Foucault 2006b: 183). Contrary to the mainstream understanding, Foucault claims that the term only gradually has become so closely tied to the idea of the state (Foucault 2006b: 135). Consequently, he takes the much broader meaning of governing and combines it with the idea of different 'mentalities' underpinning governance processes. The basic question that Foucault tries to answer here was how it became possible that in modern societies power and governance could concentrate in the institution of the state (Lemke 2002: 58). In this view, governance in the form of the state is only one very specific way to exercise power and the state itself becomes a specific 'tactic' of government. Government or governmental power³ as specific form of power does not work in a direct, top-down fashion but tries to influence processes at the level of what Foucault called 'the population' (Foucault 2006b: 103). It also tries to use the potential for self-governance of every individual or other actors in society and only to intervene if absolutely necessary (Dean 2010: 121). In its ideal form the exercise of power in this way goes almost unnoticed, as it shapes the identities, the needs and desires of the governed and the knowledge of what is right and wrong.

3.1.3 The Different Meanings of Governmentality

Having said that, Foucault's lectures offer at least three different meanings of governmentality (Walters and Haahr 2005; Dean 2010: 24). In the first more general meaning, governmentality is a certain way of how one can think about governing. A specific governmentality highlights the different rationalities, technologies and power forms that are being used in the governance process, so governmentality: '(...) deals with how we think about governing, with the different rationalities or, as it has been sometimes phrased, 'mentalities of government'' (Dean 2010:

³ In Foucault's writing, he uses the term 'governmental management', which, despite some differences, sometimes is also equated with 'bio power' Kelly (2009: 60); Foucault (2006b: 161). However, for better comparability with the other power forms and in order to delineate my approach from the existing literature, I use the term 'governmental power' throughout this thesis.

24; Walters and Haahr 2005: 290). Secondly, Foucault describes governmentality as the ‘conduct of conduct’, which entails the government of others as well as the government of oneself and is often connected to neoliberal forms of power (Walters and Haahr 2005: 289; Methmann 2011: 4; Dean 2010: 17). The third meaning, which forms the centre of my theoretical approach, is a historically specific variant of the first (Foucault 2006b: 162–165; Walters and Haahr 2005: 292): ‘Here, ,governmentality‘ marks the emergence of a distinctively new form of thinking about exercising power in certain societies’ (Dean 2010: 28). In his lectures, Foucault identifies this new way of governing especially in Western societies since the 18th century. Instead of governing a territory with traditional security institutions such as the police or the army, the focus has shifted towards the governance of populations: ‘During this era of governmentality political rule is exercised through a complex triangle of sovereignty, discipline and governmental management, which has the population as its main target and apparatuses of security as its essential mechanism’ (Foucault 2006b: 161).

3.2 The Governmentalisation of Security

If ‘security’ is no longer considered a speech act taking place between given subjects – usually the state and ‘its’ citizens – but a practice which constructs subjects and objects at both ends of the speech act (the speaker and those spoken to), we open our theory to a consideration of the discursive and bodily practices involved in the formation of subjects
(Hansen 2000: 303).

As the above quote by Lene Hansen indicates, there are alternatives to the idea that securitisation processes consist of given subjects that utter speech acts independently from the overall discursive framing of the situation. This idea is underlined by scholars such as Peter Burgess, who, based on a Foucauldian reading of security, question whether the subject of security (e.g. securitising actors) can be thought of as existing prior to securitisation and to surrounding relations of power. Instead, he shows that the power of security does not only flow from these subjects but that it precedes the subjects themselves (Burgess 2011: 49).

In the remainder of this chapter, I discuss how the governmentality concept can help us to understand securitisation as a way of exercising political power. The starting point is the historically specific meaning of governmentality and the governmentalisation of the state. In the era of governmentality, sovereign power ceases to be the only or dominant way of ruling

societies and is accompanied by other power forms such as disciplinary and governmental power (Foucault 2006b: 163). According to Foucault, governmental power increasingly becomes dominant and the most important purpose of the government is not anymore to secure a territory with conventional security institutions such as the army, the police or intelligence services. Instead, it is to foster the wellbeing of the population using a triangle of three different power forms and various ‘apparatuses’ or ‘mechanisms’ of security (Dean 2010: 29; Foucault 2006b: 161; Elbe 2009: 62). These are increasingly based on a governmental economy of power and include statistical knowledge about the population and methods to discretely influence certain variables in the background (Foucault 2006b: 90–97; Dean 2010: 29). Consequently, the strict differentiation between the realm of ‘normal’ politics and the realm of ‘extraordinary’ security practices becomes blurred. On the one hand security becomes a technology of government, a way of rendering things governable and thus changing how populations can be governed (Oels 2011, 2013; Opitz 2008b: 2017). On the other hand, security practices and theoretical concepts themselves undergo a transformation and become less extraordinary and more multifaceted – e.g. the differentiation between by now numerous different concepts of security such as human security, environmental security, gender security or risk. It is exactly this double transformation that marks the connection between the governmentality approach and securitisation theory. According to Elbe, besides the governmentalisation of the state, we can also witness a governmentalisation of security that has its origins in the 1980s. That is, security does no longer only draw on a sovereign form of power but incorporates disciplinary and particularly governmental forms of power as well (Elbe 2009: 9, 64, 71, 78).

Just as it has been the case with the governmentalisation of the state, the origins of this transformation of security lie in changing societal features and connected political and scientific debates – e.g. the expanding discussions about new and non-traditional security threats and referent objects such as the environment or individuals – that made necessary new forms of government (Collier 2009). In this process, the importance of traditional security technologies such as the police, secret service or the army declines and they are combined with less direct and top-down forms of security based on the power triangle. Thus, coming from the other end of the continuum between extraordinary security practices and normal political rule, the governmentalisation of security as well contributes to the blending of (normal) politics and security. Security institutions and actors (though in an increasingly less sovereign form) are progressively legitimised to help in fostering the welfare of the population

outside the narrow military realm (Elbe 2009: 64). The field of environmental and especially climate politics illustrates this development and shows the double movement of a ‘securitisation’ of non-traditional issues and a ‘climatisation’ (Oels 2012a) of traditional concepts of security (Trombetta 2011b; Corry 2012; Floyd and Matthew 2013).

If we follow the premise of the governmentalisation of security, it seems misguided to exclusively focus on instances of securitisation along sovereign power and its direct, extraordinary and supposedly negative effects – as done by the CS (Opitz 2008b: 219, 220). Instead, to account for the transformation of security one has to open up the analytical approach and allow for different forms of securitisation that draw on other power forms as well. The process of securitising an issue in this sense is an instance of governing, a processes of rendering things governable through the lens of security and the application of different forms of power. As the term ‘governance’ in this reading implies, securitisation processes are not a priori considered something entirely extraordinary; rather they constitute a specific way of governing with not necessarily extraordinary effects. Nevertheless, this does not imply a similarity of normal governance and security. The basic premise of securitisation theory, to which designating something as an existential threat is different from a mere politicisation because it generates a sense of urgency, increases attention and eventually can narrow down the deliberative process, still holds. In a sense, security can act as a catalyst for the exercise of any form of political power and eventually can render the situation in a certain way and thus constitute a powerful ‘security truth’ (Burgess 2011: 39). However, based on a governmental reading, this process becomes much more multifaceted, with different conceptions of security and power involved and different possible consequences of securitisation processes.

3.2.1 The Art of Government by Managing the Population

The term ‘population’ is a central aspect of the governmentality approach (see Foucault 2006b: 103-116, 156-159, 504-510; Dean 2010: 113-115, 127). In contrast to a Machiavellian form of governance that focuses mainly on the territory, the main target of the governmentalised state and the respective security practices is to secure and increase the welfare of the population (Mckee 2009: 466). For Foucault, it replaces the family as core point of departure and target of governance and thus elevates governance practices to an entirely different level (Foucault 2006b: 157–158; Dean 2010: 127).

What does this mean in practice? According to Foucault's genealogical analysis of the term, the population itself as a meaningful concept did not exist prior to the governmentalisation of the state and basically can be seen as precondition for this transformation of political rule (Foucault 2006b: 70). What Foucault means with population is not only the plain number of inhabitants of a state territory. Instead, the term aims at all statistical operations that have become possible with the development of sophisticated social scientific knowledge together with the fact that state bureaucracies keep track of a sheer endless number of bio political characteristics of the population (Foucault 2006b: 74–75). Examples are mortality statistics about different diseases, the age and income structure of the population, birth rates, and the geographical distribution of these variables (Foucault 2006b: 156–157). Only using this specific knowledge, it has become possible to not only keep track of past and present developments but also to look into the future and to project the likely development of certain variables and risks within the population (Foucault 2006b: 396).

Understanding the concept in this manner enables one to govern the population not only by direct interventions using sovereign or disciplinary power but also by exercising less direct ways connected to governmental power. In this sense, the art of governing consists in the skilful manipulation of a broad range of variables at the level of the population. In practice, whenever a problem emerges, for instance an increase in criminality in bigger cities, the desirable response is not to intervene directly by sending more police (sovereign power) or trying to transform individual criminal behaviour through disciplinary practices such as increased observation of criminals or prison sentences (disciplinary power). In the era of governmentality, the preferred tactic would be to first consult statistics about criminal acts, risk groups and areas. In a next step, the costs of the present level of criminality would be calculated in relation to the projected cost of criminal prosecution. Finally, one would try to intervene indirectly at the level of the population to bring the criminal rate back to a tolerable level by, for example, increasing the spending for education in risk areas. Furthermore, this could entail an increased monitoring of certain risk groups to prevent similar problems in the future (Dean 2010: 119).

Hence, in the era of governmentality acting at the population level is the first choice and although all three power forms are being applied, the preference is on governmental power or at least on a governmentalised version of the other two. The same is true for contemporary security practices. Even though this political domain has conserved pure sovereign practices longer than other political fields and still continues to employ them, the population is

increasingly becoming one of the main targets of the exercise of power in its three variants and needs to be integrated into the analyses of securitisation processes.

3.2.2 The Power Triangle: Sovereign, Disciplinary and Governmental Power

Apart from the concept of the population, the ‘power triangle’ of sovereign, disciplinary and governmental power (Foucault 2006b: 76, 161) is central to the governmentality approach and also is a core aspect of my governmentality reading of securitisation.

The starting point of this threefold view on power lies in Foucault’s genealogy of the governance concept, in which he condenses these three forms of power that underscored the respective modes of governance during different historical periods. In the resulting typology, sovereign power is the oldest power form and is connected to the feudalistic territorial or ‘judicial state’ prior to the 16th century, which was defined by its territory and governed mainly through issuing laws and direct interventions of the sovereign (Foucault 2006b: 164) – i.e. similar to Machiavelli’s prince or Hobbes’ leviathan. Thereafter, disciplinary power became more important, which Foucault relates to what he calls the ‘administrative state’ that gradually arose from the 15th and 16th century on. In this era, the state territory lost in importance and political rule increasingly focused on individuals and disciplinary practices (Foucault 2006b: 19). Eventually, governmental power gained in importance, which Foucault ties to the emergence of the ‘governmental state’ in the 18th century. This new form of governance was connected to and defined by its relationship to the population and to ‘security mechanisms’ or ‘apparatuses of security’ (Foucault 2006b: 36; Dean 2010: 29). Hence, providing security for the population and contributing to its welfare and prosperity and not the control of a territory became the central focus of governance practices. Of course, this temporal sequence does not imply that these power forms were not present in the centuries before, but rather that it was in these epochs that they became eminently visible and more dominant (Foucault 2006b: 23).

In the following, I elaborate on the emergence and characteristics of each of the three power forms and their relation to contemporary security discourses in detail and then explain how I use them to construct three distinct climate security discourses. To facilitate comparisons between the three power forms as well as to make assertions about their normative implications I develop a two-dimensional scheme. The first, *performative*, dimension covers the main modes of actions of each power form. The emphasis is on how it empowers specific actors and political

sectors and how it is connected to specific conceptions of security. The second, *normative*, dimension focuses on specific dangers and opportunities tied to each power form and to security discourses that draw on this form of power. While of course normative claims depend on the normative criterion used for establishing this claim, I think it is possible to define some general characteristics or blueprints for each power form, which in their application in the empirical part naturally will be specified in more detail. I use the normative dimension as heuristic starting point for my analysis, while staying aware of the fact that the definitive normative judgement depends on the concrete situation and empirical analysis and only makes sense in an ex-post manner. Many post-structuralist scholars would probably take issue with this normative dimension because it is shaped as well by power relations, can exercise power, and eventually can be abused for problematic purposes. However, I find not engaging in an open normative discussion more problematic since even a seemingly neutral post-structural analysis or ‘problematization’ contains dozens of hidden normative assumptions. Thus, following the Welsh or Aberystwyth School in this respect, I argue that revealing the scholars own normative stance and integrating a normative dimension into the research design at least gives some hints of the, still mostly hidden, normative agenda, and provides the reader with a starting point for a normative discussion (Booth 1997; Wyn Jones 1999, 2005).

Sovereign Power: Defending the Realm by Invoking National Security

Performative Dimension

The first or ‘oldest’ power form, *sovereign power*, is the one in its effects most similar to mainstream conceptions of power, e. g. the power to enforce ones will over others (Weber 1976: 571) or what Stephen Lukes describes as one-dimensional view on power (Lukes 2005: 16, see the previous section). It is close to a Machiavellian or Hobbesian notion of power, meaning it mainly focuses at a certain territory and its core aim is to sustain the reign of the ‘prince’ or ‘leviathan’ (Foucault 2006b: 100; Opitz 2008b: 207–208). Thus, sovereign power is mostly exercised by the sovereign – often the state and its agencies such as the police or the military – in a highly visible and direct way over its territory, with its main target being the perpetuation of sovereignty itself or of a particular political order (Foucault 2003: 149). It has a binary and law like character defining what is permitted or forbidden, punishing those who deviate from the law (Dean 2010: 29; Foucault 2006b: 149). It constitutes a negative form of power that takes away things, as for instance taxes, labour, freedom or in extreme cases life itself (Foucault 2003: 240, 2006b: 75). A concrete example for this power form is the issuing and enforcement of laws

by the government and the punishment of those who do not comply with these laws – in its most extreme form by killing the convicted in the name of the sovereign. In general, the exercise of sovereign power is tied to hard-politics, direct interventions of the state such as issuing and enforcing laws, collecting taxes and it legitimises state actors to handle problems. In its extreme forms, this culminates in a focus on traditional security conceptions as well as defence and military topics that all directly aim at preserving the reign of the sovereign over the territory.

Sovereign Power and Conceptions of Security

Transferred to contemporary security debates and security discourses, this form of power can be linked to a state and military focused national security conception (Elbe 2009: 86). In other words, national security – or equivalent concepts such as territorial security, state security but also international security and order – are manifestation of sovereign power. Nonetheless, it is important to stress at that sovereign power in general is broader than the mostly defence focused national security conception. A sovereign power intervention does not necessarily have to entail a military element but can also be the issuing of a strict law, raising taxes or directly enforcing laws through the state executive. However, it is always a highly visible, top-down and direct form of evoking security and primarily aims at the state territory, which in political practice (especially in the realm of international relations) often intersects with national security. Moreover, in combination with the political effects of designating something as existential threat, invoking sovereign power in securitisation process can go beyond the law and can legitimise a temporary (or even permanent) state of exception where the sovereign decision replaces the written law (see Agamben 1998: 11, 2005; Schmitt 1963). Thus, while originally being much broader, it can be, for analytical purposes, useful to link it to national security, at least as a starting point and then to come to a more nuanced understanding in the empirical analysis. The effects of sovereign power in securitisation processes therefore resemble what the CS describes as effects of successful securitisation: more attention for the problem at stake and a more serious handling, though also possibly a bypassing and acceleration of normal and democratic political procedures.

Normative Dimension

On the positive side, the exercise of sovereign power in securitisation processes draws attention to issues that otherwise would probably not had been handled in such a serious manner, thereby elevating those issues into the realm of high-politics. This can be useful to draw attention to so

far overlooked problems and can, at least until it reaches a certain degree, have a politicising effect because it brings issues on the political agenda. Furthermore, an acceleration of typically slow and bureaucratic procedures can sometimes be an advantage. Both the attention generating and accelerating qualities of securitisation have been referred to as legitimisation for securitising non-military issues such as climate change or HIV/AIDS (Floyd 2013: 281–282; Ingram 2010; Elbe 2006).

However, sovereign power also entails several problematic features, such as granting extraordinary powers to the sovereign, possibly even culminating in a temporal state of exception and thereby suspending laws and democratic procedures. Moreover, it can narrow down the focus towards predominantly direct and short-term action such as police or military interventions. Thus, a political response in the wake of a sovereign based securitisation often neglects the root causes of the problem. It is a reactive form of governance that tries to cure the immediate symptoms thereby running the risk of making the underlying problematic much worse in the long run. Finally, a securitisation focusing on sovereign power tends to legitimise state, security and defence actors as primary agents and relocates the discussions into these circles, which often also brings with it an increase in secrecy. It thus concentrates the power to act within the sovereign and thereby narrows down the space for political discussions and excludes societal and non-governmental actors. Consequently, in its extreme forms it diminishes the opportunities for democratic control and public scrutiny. The following *table 3.2a* summarises the argument made in this paragraph:

Table 3.2a: Sovereign Power				
Performative Dimension			Normative Dimension	
Modes of Action	Actors and Sectors	Security Conceptions/ Keywords	Opportunities	Dangers
Direct, visible, negative, law, ban, attention raising, acceleration of processes <i>Target:</i> Mostly state territory	State, military, security, defence, and intelligence sector, hard-politics, foreign policy, state as most important actor and referent object	National security, territorial security, international order and security, classical securitisation	More attention, elevating issues to high politics, acceleration of procedures, definitive and direct state action	Panic politics, extraordinary measures, state of exception, short-cutting of (democratic) procedures, military action, short term measures, secrecy

(Partly based on Foucault 2006, Elbe 2009 and Dean 2010)

Disciplinary Power: Securing Individual Human Security

Performative Dimension

At its core, *disciplinary power* focuses on sophisticated surveillance technologies and control mechanisms aimed at the transformation of individual behaviour towards a certain predefined norm – a process also called ‘normation’ (Foucault 2006b: 89–90). The goal is to discipline, classify and control individual behaviour, therefore this power form is not exerted over territory but aims at the individual body and tries to optimise it (Foucault 1975: 143). An example would be military drill schemes that entail very detailed codes of conduct and even prescribe certain body movements e.g. when handling a rifle – all tailored to transform individual behaviour for serving a certain purpose and towards a predefined ideal typical norm. In short, discipline is a deductive approach that divides reality into the abnormal and normal based on an ideal typical or optimal model of what this ‘normal’ is (Foucault 2006b: 89). Furthermore, discipline is not a negative but productive way of exercising power that instead of taking things away tries to create and transform them according to the predefined norm. It is also very accurate, operates at the micro-level and tries to control every single part of the process (Foucault 2006b: 74). Accordingly, requires many resources and continuous attention of the one who exerts it. It necessitates a constant monitoring of the process and every single deviation from the norm has to be attended to immediately. Eventually, its goal is to optimise processes by assessing and understanding the function of every single element in the process and then arrange these elements into the optimal order (Foucault 2006b: 89). Finally, while in its original conception, disciplinary power was particularly connected to institutions like the military, prisons, or hospitals, Foucault insists that it should not be identified exclusively with these concepts (Foucault 1975: 215). Instead, it can empower a variety of actors ranging from the state to non-state actors such as classical NGOs, church organisations and think tanks.

Disciplinary Power and Conceptions of Security

Disciplinary power particularly materialises in new security concepts such as human or individual security (Elbe 2009: 113) or similar terms such as human vulnerability or food security. These conceptions too, look at individuals and try to enhance and empower these disadvantaged people towards a predefined ideal typical norm – the secure, free and thus emancipated individual that is able to fulfil its human potential (Booth 1991: 319). The original conception of human security that emerged in the political realm (Boutros-Ghali 1992; UNDP 1994), as well as similar academic concepts such as individual security and emancipation linked

to the Welsh or Aberystwyth School of CSS (Booth 1991, 2005a; Wyn Jones 2005), tried to set up a new and positive concept of security. Aiming at individuals and their problems and wellbeing these concepts primarily tried to come up with an alternative to the then dominant state centric national security conceptions. Thus, the goal was to empower individuals not states and to facilitate policies that benefited their wellbeing.

However, in the course of political and academic debates the concept of human security has undergone a discursive shift and increasingly is also employed to not only empower disadvantaged individuals but also to control their behaviour (Duffield 2005, 2007; Duffield and Waddell 2006; Oels and von Lucke 2015; McCormack 2010). Moreover, especially in a securitisation context it can be transformed and (miss)used to facilitate the interests of powerful state, military and particularly Northern actors (McCormack 2010). It can function as a justification for different kinds of interventions and as rationalisation of military and neo-colonial action (McCormack 2010: 36; Devetak 2007: 152; Eriksson 1999: 318). Hence, the originally well-intentioned concept can itself become perverted and thus normatively problematic (Floyd 2007a, 2007b).

Thus, despite the emancipating origins of the concept, in contemporary political and security debates, human security often entails a distinction between people of the Global North and those living in the Global South. Thus, the ideal typical norm usually is the well-fed, healthy, productive, democratic and wealthy citizen in advanced and highly developed Western societies. Based on this 'normal', the human security framework produces an opposing 'abnormal' that has to be disciplined, often by organisations from the Global North: '[...] the human security framework produces 'humans' requiring securing' and empowers 'international institutions and actors to individuate, group and act upon Southern populations.' (Duffield 2005: 2). In this example, we can observe the productive elements of disciplinary power that have a bearing on the governed as well as on the governing. Disciplinary power prescribes certain identities and instructions and hence empowers some actors to act (e.g. Western organisations) whereas it constitutes others as passive elements of normation and governance (e.g. endangered individuals in countries of the Global South).

As with sovereign power, in its original conception disciplinary power goes beyond this narrow focus on human security. Yet, when analysing securitisation processes it can be useful to narrow it down to this security conception to define an analytical starting point and to bear

in mind the specific power of security (i.e. threat constructions), which in their combination with disciplinary power can facilitate specific political actions. The application of such disciplinary power in securitisation processes does not necessarily lead to extreme and undemocratic measures by the state, but rather imposes certain identities and truth regimes onto the situation (Elbe 2009: 117; Dean 2010: 81). It fosters the implementation of various, rather long-term, measures to monitor and discipline individuals that do not resemble the predefined ideal norm. In comparison with national security, because of its rather 'soft' and favourable image, human security broadens the actor spectrum decisively and particularly legitimises human rights and development NGOs to act.

Due to the discursive shift of human security and the possibility of justifying political and military intervention of powerful actors, some authors claim that human security should rather be linked to bio and to sovereign power (Oels 2012a, 2013). Their point is that a human security perspective sets the ground for sovereign and bio political interventions by focusing on human life and defining the conditions for exceptionality (Larrinaga and Doucet 2008: 519). While this perspective is interesting, I think that it rather demonstrates the simultaneous existence of all three power forms and does not refute the idea that disciplinary power underlies the human security concept.

Normative Dimension

The positive effect of a disciplinary and human security centred securitisation is that the focus shifts from the sole emphasis on the security of states, towards the needs and insecurities of individuals. Thus, the attention is redirected towards the most vulnerable actors, possibly legitimising policies in their interest, for instance development aid or disaster relief measures. It is precisely because of these qualities that many scholars following CSS or the Welsh or Aberystwyth School have favoured individual or human security (Krause and Williams 1997; Wyn Jones 1999; Booth 2005b). Furthermore, due to its more positive framing, the application of disciplinary power in the shape of human security broadens the spectrum of the actors that engage in the securitisation process and that are constituted as legitimate within the process. This opens the political debate and avoids the tendency to secrecy that often comes along national security conceptions.

On the other hand, the main danger of a securitisation along disciplinary power lies in the described discursive shift and in taking away agency from the threatened people (often 'poor

individuals’) to define the situation and the means necessary to overcome the problems. Due to the focus on an artificial ideal typical norm, it entails a paternalistic element and can oppress local solutions that might have been much more effective in a specific context. A further problematic aspect of disciplinary power is the fact that it necessitates a constant and thorough surveillance of the governed individuals, always comparing their characteristics and behaviour with the ideal typical norm. Hence, it can constrain the freedom of the monitored individuals and suppress alternative solutions. Finally, the less direct way of applying disciplinary power and the related security practices, for instance by seemingly ‘good’ grassroots or non-governmental actors, makes this power form and its political effects less visible and thus hard to detect. The problem is that indirect governance through non-governmental organisations does not necessarily have to be desirable and raises questions about the sometimes missing or inadequate democratic legitimisation of these actors. The following *table 3.2b* summarises the above said.

Table 3.2b: Disciplinary Power				
Performative Dimension			Normative Dimension	
Modes of Action	Actors and Sectors	Security Conceptions/ Keywords	Opportunities	Dangers
Productive, indirect, normation, disciplinary, surveillance, individual referent object, broadened actor spectrum <i>Target: Mostly Individuals</i>	Micro-perspective, Individuals, non-state actors, development problems	Human security, individual security, food security, vulnerability	Focus on individuals, long-term oriented, empowerment, reduced secrecy, broad spectrum of actors	Surveillance, less visible – less easy to detect, identity and truth production, paternalistic political measures, neglect of local solutions

(Partly based on Foucault 2006, Elbe 2009 and Dean 2010)

Governmental Power: Governing Populations Through Risk-Management

Performative Dimension

The third and ‘youngest’ power form, *governmental power*, is closely tied to the governmentalisation of the state and specifically to the emergence of the population as referent object. Its main mode of operation is indirect governance through sophisticated risk management schemes to pre-empt problematic developments and hence to control the future. Similar to disciplinary power, governmental power is a productive form of power. But instead of targeting individuals it aims at the whole population – i.e. its focus lies more on the macro-

level – and uses the inductive concept of ‘normalisation’ (Foucault 2006b: 98). Normalisation tries to statistically generate a normal distribution of certain values from within the population and then focuses at bringing outliers down to this average (Foucault 2006b: 97–98). According to Foucault, this is more efficient than ‘normation’ because it uses the natural dynamics of the population instead of acting against them (Foucault 2006b: 74). Consequently, one of the most important instruments of governmental power is social-scientific knowledge that enables to measure and discreetly influence the population dynamics. This knowledge is used to relate different normal distributions within the population to one another to in the end foster the desired and keep the problematic ones at bay. If handled in the right manner ‘the phenomena themselves’ will eventually bring about their own curtailment, which allows to control them and to get rid of undesired developments (Foucault 2006b: 69, 92, 98, 102).

A further characteristic of governmental power is the focus on risk groups whose variables lie outside the normal values of the population (Dean 2010: 119). This allows it to use the most cost-efficient measures (Foucault 2006b: 498–499; Elbe 2009: 67) and additionally – in the spirit of ‘laissez-faire’ or ‘laissez-passer (Foucault 2006b: 69) – not to intervene too much in the natural dynamics of the population. In contrast to the older power forms, here the goal is not to regulate every aspect of life in detail – as this would soon overstretch the government’s resources – but to only intervene as much as necessary, which is a much more economical way of governance (Dean 2010: 121). A concrete example is the comparison between planned economies relying on state regulations with often problematic results (in terms of keeping the economy running), and the deregulated, decentralised and mostly self-regulating markets in capitalist systems that only need minor governmental interventions to function (Foucault 2006b: 69, 498; Elbe 2009: 68).

Moreover, governmental power focuses on the governance of the future, that is, it tries to influence developments in their early stages so that it does not have to intervene too directly (Foucault 2006b: 39). Thus, it operates with risk conceptions and tries to calculate the probability of certain events happening within certain parts of the population and then to ascertain their relative level of risk for the wellbeing of the overall population (Foucault 2006b: 94–95). The main goal is to prevent problems and risks from spiralling out of control, to always keep them at a tolerable level, but not to eradicate them completely (Foucault 2006b: 37–38). Foucault demonstrates this with a description of the handling of famines in the past. He shows how excessively strict governmental interventions into the natural market dynamics can

actually lead to worse famines than an indirect approach that gives the markets enough freedom to regulate themselves. In this manner, even though some people might die of hunger, the hunger itself will lead to increased production in the right places and times to prevent widespread and population wide famines (Foucault 2006b: 66–69). Connected to trying to prevent things from spiralling out of control, an additional characteristic of governmental power is its focus on circulation dynamics. The goal is to enable ‘good circulation’ and to keep ‘bad’ circulation at bay (Foucault 2006b: 37; Opitz 2008b: 213). An example would be the European Union trying to maximise the freedom of movement of its citizens but at the same time restricting immigrant circulation by strengthening its border controls (see Huysmans 2008; Oels 2009; Bigo 2008).

Finally, governmental power is not only exercised by the state (and also not only constituting the state as sole legitimate actor) but by a great variety of different actors, in the words of Jef Huysmans: ‘The ‘cold monster’ breaks down into a vast range of practices and private and public institutions that enact and develop strategies of government that arrange the conduct of freedom in modern societies’ (Huysmans 2008: 40).

Governmental Power and Conceptions of Security

Concerning contemporary security debates, governmental power can be associated with conceptions of risk (Elbe 2009: 132; see also Beck 2000; Aradau and van Munster 2007; Corry 2012; Daase and Kessler 2007). As the discussion in chapter two has shown, there are several different conceptions of risk, some of which are closer to disciplinary power. The distinction between an individual and a population wide perspective and between deductive normation and inductive normalisation concepts is a central distinguishing criterion in this regard.

Beyond that, scholars increasingly differentiate between different forms of risk and the kind of knowledge about them. Without going into that debate in any depth (see Daase and Kessler 2007; Aradau and van Munster 2008; Boyle and Haggerty 2012; Hameiri and Jones 2013; Hameiri 2008), there are at least two central categories of risks. The first one deals with ‘known unknowns’ and conceptualises uncertainty as eventually calculable risk that can be tamed through certain probabilistic risk management approaches (Daase and Kessler 2007: 423). The second one, like the first category also referring to Donald Rumsfeld’s famous quote on the verge of the Iraq war, focuses on the ‘unknown unknowns’ and thus conceptualises risks as incalculable and radically contingent, leading to concepts that look at everything possible

instead of the probable and at resilience and precautionary measures (Daase and Kessler 2007: 426–427). While this differentiation appears promising for theoretical purposes, I think the empirical distinction is less clear than the literature suggests, especially in terms of securitisation. For example, political practitioners will always strive to transform unknown unknowns into known unknowns. Beyond that, a conceptualisation of risks and uncertainty as incalculable necessitates a preparation and reaction towards them that resemble the one towards definitive threats. If the degree and kind of risk is not knowable than we must treat it as if it were definitive and prepare for the worst, which in the end is similar to a traditional securitisation based on a sovereign notion of power.

Thus, while both concepts in parts can be associated with governmental power, I lean towards the first concept that conceptualises risks as diffuse threats, which however, are still amenable to calculation and risk management. In practice, by using statistical methods and forecasts, risk concepts try to identify certain risk groups or risky activities, which in turn have to be levelled down to the average risk (Oels 2011: 18). Also, in the spirit of *laissez-faire*, the goal is never to eradicate the risk altogether or to directly tackle concrete problems but rather to intervene in such a way that the risk stays within a tolerable level (Corry 2012: 245). Furthermore, just as governmental power, risk schemes focus on long-term horizons and try to control the future by manipulating the right variables in the present. Thus, they attempt to prevent problems from dangerously spiralling out of control. These interventions are most of the time not directly targeted at single individuals, as their calculations are probabilistic and never so precise as to allow for definitive propositions at this specific level (Daase and Kessler 2007: 423). Instead, risk assessments function at a more macro, aggregate level so that the exercise of power through risk also can be considered more economical than trying to control every single element of the process. Finally, risk conceptions fosters long-term solutions, focusing on the causes of the risk rather than just on the symptoms (see Elbe 2009: 131–135).

Normative Dimension

The focus of governmental security discourses and risk conceptions on groups or areas particularly at risk can be considered positive. It enables appropriate policies to tackle possible risks in a cost-efficient and indirect way without interfering too much into the dynamics of the population – that is without directly prohibiting certain things or controlling behaviour. Moreover, it can detect and possibly contain problematic developments before they get out of control and hence contribute to tackling the root causes rather than only the symptoms. Finally,

its less direct and more long-term perspective might be better compatible with a gradual politicisation of an issue while avoiding short term panic politics.

However, while the cost-efficiency can be seen as positive (best allocation of available funds) or negative (only the absolutely necessary is done), the construction of risk groups can be quite problematic if it leads to a stigmatisation and marginalisation of the identified risk groups or areas. Thus, they can easily become a danger itself to the overall aim of fostering the welfare of the population, or as Elbe has put it: ‘To be ‘at risk‘ is effectively to be at odds with, or even a danger to, the welfare of the population (...).’ (Elbe 2009: 140). On the global level, certain risk groups could be singled out as a danger for the overall population i.e. for global peace and security. They could become the ‘bad’ circulation that has to be avoided to ensure the unrestricted and smooth functioning of the overall system. Moreover, as the aim is to intervene as little as possible and to only reduce the risk to a tolerable level for the overall population, the outlier parts of the population could eventually become disposable. Thus, a governmental intervention can very well mean that some groups or areas will be neglected, if the risk for the overall population is bearable. Finally, just as disciplinary power, governmental power is hard to detect, therefore its possibly negative effects can materialise unnoticed over a long time making it hard to resist or argue against it. The following *table 3.2c* summarises the features of governmental power:

Table 3.2c: Governmental Power				
Performative Dimension			Normative Dimension	
Modes of Action	Actors and Sectors	Security Conceptions/ Keywords	Opportunities	Dangers
Productive, indirect, normalisation, statistics, focus on population, laissez-faire, risk-management, future-orientated, cost-efficiency, circulation, broadened actor spectrum, long-term <i>Target:</i> Population, Risk groups/ areas	Macro-perspective, groups, future, insurance sector, economic solutions, broad actor spectrum	Risk, risk-management, riskisation, contingency planning, scenario planning, resilience, risk-groups, uncertainty, precautionary principle	Cost-efficiency, Focus on risk groups/areas, less invasive, long-term, prevention of problems, possibly tackling root causes	Stigmatisation, risk groups vs. population, disposability of certain groups once risk is tolerable for overall population, difficult to detect

(Partly based on Foucault 2006, Elbe 2009 and Dean 2010)

3.2.3 Linking Power Forms to Security Conceptions

In a nutshell, Foucault describes the three forms of power as: the law (sovereign power) forbids, discipline prescribes and governmental power answers to reality in such a way that this answer abolishes the reality it answered to (Foucault 2006b: 76). Consequently, the application of each of these three power forms encompasses very different modes of action, opportunities and dangers as well as empowers different actors. Having said that, although Foucault clearly distinguishes between different power forms and talks about ‘older’ and ‘younger’ ones, it is not the case that the latter have simply replaced the former (Foucault 2006b: 161). Rather, in the era of governmentality, all three power forms play a role and there is a constant struggle for dominance, in which ‘older’ power forms can re-emerge as most important form of political rule (see instance Larrinaga and Doucet 2008; Butler 2004). This is an important argument, since, as I have pointed out in the previous chapter, the literature on risk too often assumes that we now live in the ‘era of risk’ and that other more traditional forms of security or power cease to be important. Thus, I follow Foucault’s original ideas and assume that we can understand the general process of governmentalisation not as a straightforward decline of sovereign or disciplinary power, but as a readjustment of the system of correlation between the three power forms with governmental power gradually transforming the other two (Opitz 2008b: 216).

Beyond the intrinsic qualities of these three power forms, the previous section has discussed how they lie at the core of different logics or conceptions of security. Thus, while these forms of power in general go beyond national security, human security and risk or synonymous concepts, in a securitisation context, such an assignment constitutes a useful starting point for my analysis (see also discussion in *section 7.2.3*). Breaking the power forms down to these specific concepts of security functions as a theoretical bridge between the general governmentality approach and securitisation theory (see also Elbe 2009: 59, 86, 108, 131). On the one hand, it acknowledges the specificity of security or rather of political process that designate something as a threat, which differs from a mere politicisation of an issue. On the other hand, it opens the meaning and consequences of security beyond the extraordinary measures postulated by the CS. However, while I keep the mentioned security conceptions as a heuristic starting point to identify certain climate security discourses, the political effects are not necessarily confined to the traditional meaning of these security conceptions. The multiplicity of political consequences is closely connected to the idea of the changing nature of security itself. Security conceptions themselves constantly change, especially in the course of

securitisation processes (see *chapter 7*). It is not only possible to ‘securitise’ formerly non-security issues but these issues as well can transform security practices – e.g. a climatisation or medicalisation (Oels 2012a; Elbe 2011) – , which I would call the ‘bidirectional qualities’ of securitisation.

3.3 Developing Three Climate Security Discourses

The theoretical idea underlying this thesis is that combining the governmentality approach and the three power forms with securitisation theory enables me to identify three distinct ways of securitising an issue, i.e. three ‘climate security discourses’. Each discourse mainly draws on one of these different power forms, which in turn leads to very different problem definitions as well as proposed solutions and therefore different political effects of the securitisation. Yet, keeping in mind the changing nature of security and the interconnectedness of the three power forms, these distinct discourses are only ideal typical simplifications to guide the empirical analysis. In the political practice, they only rarely occur completely independently from one another (Foucault 2006b: 23). Nevertheless, although I expect to find all power forms in all my cases as well as several interlinkages between them, I also presume that there will be discernible differences concerning their relative importance in the climate security debate between the cases.

One could, of course, question the focus on security *discourses* through the lens of governmentality, which in the literature often has been linked to studying governmental practices, self-technologies, rationalities or dispositives (Dean 2010: 40, 42; Walters and Haahr 2005: 290; Aradau *et al.* 2014a). There are several arguments to counter that objection. To begin with, Foucault never developed the concept of governmentality as a coherent theory in itself with a concise empirical or methodological focus (Bröckling and Krasmann 2010: 32; Bröckling *et al.* 2012a: 15; Dean 2010: 13). Instead, a governmentality perspective was primarily a way to problematise a range of taken for granted assumptions concerning power and governance in the historical, sociological and political science research at that time (Dean 2010; van Dyk and Angermüller 2010: 9) and the term itself has various different meanings in Foucault’s writings (see *section 3.1*). Accordingly, it has since been adopted by a range of scholars in very diverse ways (Walters and Haahr 2005; Larner and Walters 2006; Bäckstrand and Lövbrand 2006, 2016) and recent works have explicitly emphasised the complementarity of discourse and governmentality studies (van Dyk and Angermüller 2010: 9; Bröckling and

Krasmann 2010: 39). There are indeed several communalities between governmentality and discursive approaches. They begin with calling into question the definite distinction between discourse as mainly textual and dispositive as encompassing additional spheres such as architecture, institutions or practices (Bröckling and Krasmann 2010: 24; Jäger and Meier 2009; Bührmann and Schneider 2008; Keller 2013). Beyond that, governmentality, as well as studies of discourse, try to understand the constitution of subjects and objects of governance and emphasise the productive as well as ‘truth’ generating qualities of power (Bröckling and Krasmann 2010: 24, 26, 29). Thus, while I focus on three ‘discourses of climate security’, a large part of the empirical analysis centres around the concrete political consequences of these discourses, which encompasses a detailed study of associated political practices, policies as well as subjects and objects of governance.

Two Dimensions of Climate Security Discourses

Coming back to the development of my analytical concept, I divide each climate security discourse into two dimensions to clarify the argument. While these two dimensions cannot be separated entirely in the political practice, they nevertheless help to structure the analytical lens and the empirical findings. The *operational dimension* focuses on how the respective discourse evokes climate change as a threat, which security concepts it uses and which referent objects it constructs as primarily threatened. In this endeavour, specific keywords that point to the different power forms and security conceptions (e.g. national or human security and risk) certainly play a role and function as a heuristic tool. However, their importance as standalone tool should not be overestimated and it is the overall argumentation and threat construction that stands in the centre of the analysis. The second dimension focuses on the political consequences of each specific discourse, thus on the *power effects*. This dimension entails the transformation of the overall political debate, the legitimisation of individual policies and the propagation of certain forms of governance. It also focuses on which actors are empowered to tackle the problems. Due to the bidirectional qualities of securitisation, all these effects do not necessarily appear in the climate field exclusively but can materialise in other policy fields such as the defence and security, the foreign policy or the development sector.

3.3.1 Conceptualising and Studying Discourses

The distinction between the operational dimension and the political or power effects of each discourse immediately raises the question if and exactly where we can draw the boundaries between discourse and its practical political effects and influence on specific policies (Wæver 2002; Hansen 2006; Kurki 2008; Wullweber 2010). Concerning this question, following Diez and others (Diez 1999, 2001: 13; Diez *et al.* 2011; Diez *et al.* 2016), I argue that these two cannot be separated entirely but are co-constitutive (Kurki 2008; Milliken 1999). Similar to norms (Wiener 2007, 2008), discourses possess a dual-quality as they constitute political actions and policies as well as are themselves constructed and perpetuated by these. Thus, security discourses can legitimise policies and practices (i.e. have certain quasi-causal effects, Yee 1996: 97) but at the same time these practices and policies can strengthen specific discourses and thus further the securitisation of an issue (Salter 2011: 118). Nevertheless, individual policies or speech acts do not alone constitute a discourse. They are only one of many different layers that in the end come together in forming the discourse. Moreover, policies, political speech acts and practices only become meaningful through their discursive representation. Thus, while being in constant transformation, discourses nevertheless are relatively stable structures of meaning that do not change so easily overnight (Diez 1999: 607) and (most of the time) not due to individual policy documents or interventions of singular actors.

Discourses are broader structures of meaning that while not always clearly visible, underlie and influence all political developments. In a metaphorical sense, discourses are similar to underwater ocean currents. These are always there influencing the general direction of water flows but only at certain points in time break the surface in the form of visible swirls or waves. The same is true for actors that participate in the political debate, articulate certain discursive positions or adopt specific policies that correspond to these discourses. Of course, and to remain in the picture, these waves at the surface can be pushed to a certain extent in different directions by the winds at the surface and then have a feedback effect on the general current, but a single wind gust is not able to steer the whole current in an entirely different direction. To complicate matters even more, I as a researcher stand on my shaky observational sailing boat, which is also affected by the currents and waves, hence making it difficult to see more than a fraction of what is happening on the ocean.

Nonetheless, it is possible to grasp the overall direction of dominant discourses. Transferred to my research interests, I assume that the three broader discourses that I construct based on Foucault's three power forms indeed are instrumental in legitimising individual policies and political actions. In addition, considering the above-discussed caveats, I do not hold individual policies, practices or discursive articulations alone to be capable of steering the discourse in an entirely different direction. The concrete question whether I treat one individual discursive articulation as part of the discourse or as following from this discourse or being legitimised by it depends from case to case. Of course, a useful indication can be the temporal order, i.e. where did a specific articulation appear first. Another suitable strategy is to differentiate between articulations directed at a broader audience (that also resonate with this audience) and those that only constitute technical or procedural descriptions of minor issues and hence are not able to generate broad attention.

Beyond these aspects, the question of how specific climate security discourses become dominant in the first place remains. To approach this question, I analyse a broad timespan in each of my empirical cases to cover the historical and cultural preconditions that have contributed to the rise of specific discourses. Moreover, I also discuss the institutional setup as well as the status of the broader governmentalisation of security in each empirical case.

3.3.2 Understanding Discursive Effects

While I claim that specific climate security discourses are instrumental in constituting climate change as distinct political issue and legitimising political practices and policies, I do not base this on a traditional positivist understanding of causality but rather on the concept of 'causality as resonance' (Connolly 2005: 870). Discourses do not cause certain effects in the sense that they determine specific actions but rather create a field of possibility in which specific practices or policies become more likely and feasible than others. Based on this understanding, I conceptualise three different though internally connected pathways of influence of climate security discourses (see also Milliken 1999; Jackson 2007).

Firstly, they influence the broader debate on climate change, that is they can gradually alter how people (e.g. politicians, activists, the general public) speak and think about climate change. Thus, they are 'productive' (Milliken 1999: 229) in the sense that they can transform the meaning from a, for example, primarily environmental or economic towards a security

framing, thereby setting climate change on the agenda in the first place and politicising it to a certain extent. They constitute new truths about the issue and thus lay the ground for a different handling of climate change involving different legitimate actors. At the same time, they empower specific actors and forms of knowledge to play key roles in political debates. Secondly, climate security discourses contribute to legitimising and adopting new policies or political practices that otherwise would not have seemed necessary or useful (Milliken 1999: 240). For instance, they could contribute to policies advising the military to prepare for climate change, to act in countries that are constructed as threatened but also legitimise new institutional procedures to deal with the issue. Thirdly, connecting to the above argument about climatisation or medicalisation, the continuous representation of climate change as a threat can also have even more far-reaching implications on governance processes in the policy fields that are involved in climate security debates (mostly environmental/climate change, defence/security, foreign, development and civil protection policy). Thus, it can gradually alter how these fields function in general (that is even when it is not climate change that is the problem), which actors are involved, which strategies and practices seem legitimate and how the actors understand security as a concept (see also Duncanson 2009 who makes a similar argument concerning masculinities). It is particularly this last pathway of influence that reconnects my research to the wider governmentalisation of security, that is the continuous transformation of security as a concept itself (see Trombetta 2011b: 600; Elbe 2009: 60).

In the following, I describe each of my three climate security discourses in detail and elaborate on the unique ways, in which they construct climate change as security issue.

3.3.3 Sovereign Power and Climate Change

The sovereign power discourse securitises climate change in a direct and highly visible way, often using ‘national security’ conceptions and its equivalents or similar concepts such as ‘regional security’, ‘territorial security’ or ‘military security’ (see the keyword⁴ list in *able 3.3a*). It renders climate change governable as a traditional security issue with a focus on sovereign actions of the state and military/defence actors. Although in its general conceptualisation, sovereign power is broader, and the focus is not exclusively on state defence

⁴ As already briefly explained, while these keywords have some relevance as heuristic tool, it is the overall argumentation that is more important for the identification of each power form, which can point to a specific power form without explicitly using these words.

matters or the military, in a securitisation context, it is justified to understand it in a narrower fashion. Thus, the sovereign discourse is similar to what others have called ‘neo-Malthusian’ (Hartmann 2010) or ‘environmental conflict’ discourse (Detraz and Betsill 2009) but also goes beyond it especially concerning the political consequences.

Operational Dimension

The sovereign power discourse focuses on security threats for states and their territory, which can also pertain to the international system of states itself. Because climate security arguments connected to national security have often been brought forward by actors from industrialised countries that are less vulnerable to the direct effects of climate change, the emphasis of the sovereign discourse is mostly on second-order socio-economic effects of climate change. However, this does not entirely preclude the construction of the first-order physical effects of climate change, such as extreme weather or sea level rise as threats to national security, as has happened for example in the case of the small island states.

Nevertheless, one of the core arguments within the sovereign discourse is about climate change – in combination with population growth and degrading resources – leading to violent conflict and therefore threatening the territorial integrity, stability and thus national security of states. Whereas extreme climate change could also contribute to such problems in relatively stable countries of the Global North (especially concerning geopolitical tensions in the Arctic), for the time being these violent conflicts are primarily projected to break out in the Global South. However, this does not prevent actors from the Global North to construct a threat to the national security of industrialised states or the international order for instance due to increased political instability, the growth of terrorism or the need for military interventions. A common example for this causal chain is the prediction of water and food scarcity in Africa or Asia, which could lead to violent conflicts and undermine already instable states even further, eventually leading to the spread of failed states and the destabilisation of whole regions. Beyond that, the sovereign discourse constructs large-scale migration, the growth of terrorism, and an increase in fragile as well as failed states as possible consequences of climate change.

Power Effects

A securitisation of climate change drawing mainly on the sovereign discourse increases the attention for the issue to a considerable extent, elevating it into high and traditional security

politics. Thus, it is no longer only the environmental ministries or equivalent agencies that exclusively handle climate change, but increasingly the foreign and defence ministries and authorities get involved. Until a certain degree of intensity, this could be beneficial in terms of effective climate policies. It could (quicker) legitimise ‘normal’ sovereign solutions to the climate threat such as binding emission cuts, the legal ban of GHG emitting technologies, a CO₂ tax or the increased governance through executive orders and regulations by government agencies. However, in its more extreme form it could also go beyond this legislative realm and facilitate extra-legal decisions of the sovereign similar to what the CS has described as effects of securitisation. Examples are the suspension of laws, the acceleration or even bypassing of democratic procedures or the involvement of the military. This could entail military or political interventions to destroy GHG emitting industries or the states that harbour them (Trombetta 2008: 599; Hartmann 2010).

Furthermore, the sovereign climate security discourse constructs climate change as a problem of traditional national security and thus has a tendency to point to solutions in the military and defence sector. This could mean the preparation of military bases and critical infrastructure towards climate change effects or the expansion of border security measures to keep out climate migrants. It could also mean to increase military planning activities for geopolitical conflicts fuelled by climate change or simply for the altered mission scenarios around the world. In this vein, increased state efforts to secure its territory against climate threats could also reinforce political boundaries between nation states and fuel nationalistic tendencies and othering dynamics. Furthermore, while binding top-down induced emission cuts would certainly address the root causes of climate change and fall within the mitigation dimension of climate abatement measures, the immediacy and scope as well as political weight of threats to the national security of states often legitimise short-term solutions to tackle the immediate security threat. Thus, the sovereign discourse often facilitates solutions that aim at the symptoms only (the immediate national security threats) and often fall within the adaptation category of climate measures (military intervention, border security). While these solutions do not have to entail a military component, military interventions in countries that are in danger of being destabilised or overwhelmed by climate change can be legitimised in such a discourse.

Moreover, a sovereign power based securitisation narrows down the actor spectrum and focuses on the state and its agencies (and here particularly the security, defence and intelligence sector), as the legitimate actors to tackle the problem. It thus empowers particularly these actors

and at the same time excludes non-state and civilian actors such as environmental or human rights NGOs from the debate. This narrowing down of the actor spectrum is reinforced by the tendency to secrecy that often comes with evoking national security. The following *table 3.3a* summarises the features of the sovereign climate discourse.

Table 3.3a: Sovereign Climate Discourse		
Security Conceptions and Keywords	Operational Dimension	Discursive Power Effects
National security, regional security, territorial security, international security, international order, military security, climate conflict, resource security, resource conflicts, water wars, energy security	<p>Climate change is securitised in a direct, highly visible way, socio-economic effects of climate change leading to conflicts, violence and large-scale migration and therefore threatening the national security of the state</p> <p><i>Target:</i> Mostly state territory, international order of states, specific regions</p>	<p>Transformation of the Debate and of Governance Practices Climate change as high politics, acceleration of procedures, decisive, effective and radical measures (possibly bypassing democratic procedures). Focus on short-term and adaptation measures that tackle the immediate symptoms. Focus on binding targets and direct interventions of the government, tendency to secrecy. Most important actors and referent objects are states and their governments and particularly the security, defence, and intelligence sector.</p> <p>Exemplary Policies Binding emission reduction targets, CO2 taxes, ban of GHG producing industries and technologies, direct political and military interventions to coerce climate laggards or to defend against secondary socio-economic dangers, military planning, prepare for geopolitical and regional tensions, secure military bases and critical infrastructure against adverse climate effects, increase border security against climate migrants</p>

3.3.4 Disciplinary Power and Climate Change

The disciplinary discourse constructs an entirely different picture of climate change as a threat. Within this discourse, the focus is on seemingly positive and ‘soft’ human security conceptions and similar concepts such as individual security, food security, environmental security and human vulnerability (see keywords in *table 3.3b*) (see also Detraz and Betsill 2009). In the disciplinary discourse, climate change is constituted as a problem to be tackled not only by the traditional security actors and practices but also by the development sector and by non-state actors.

Operational Dimension

Thus, looking at the *operational dimension*, securitisation takes place in a less alert, less extraordinary and less authoritative way. Instead of focusing on threats for the state, the emphasis is on individuals and their vulnerabilities or threatened human security. Accordingly, the threats are not primarily the second-order socioeconomic effects of climate change (e.g. violent conflicts) but rather the direct first-order physical effects on the daily life of people, such as extreme weather events, the spread of diseases and scarcer resources. Whereas the people deemed directly threatened by climate change increasingly are also located in countries of the Global North, the focus nevertheless remains on poor people in the Global South that lack the adequate resources to adapt to the changing environment. In general, the focus on the vulnerability of individuals and not states might also reinforce a global or shared humanity perspective on the climate threat and hence could avoid the nationalistic or othering tendencies that often come with the sovereign discourse.

Power Effects

Concerning the *power effects*, the focus of the disciplinary discourse is primarily on solutions to tackle the problems of individuals and to transform their behaviour into the desired direction. Concrete examples are setting up mitigation targets, the propagation of the clean development mechanism as well as drawing up ideal scenarios for energy use, GHG emissions and climate friendly behaviour. Beyond that, the disciplinary discourse can also legitimise adaptation measures that directly serve the human security of individuals and prepare these people to cope with the threats of climate change. On the one hand, this entails the empowerment of poor people through measures that improve their living conditions or the encouragement and support of climate friendly behaviour. Thus, it partly fulfils the emancipatory hopes of the proponents of human security. On the other hand, however, based on the logic of 'normation', the disciplinary discourse constructs a juxtaposition between the powerful Global North and victimised people in the Global South, which perpetuates problematic identities (Elbe 2009: 117). It also increases the need for surveillance, monitoring and control of these threatened and seemingly helpless individuals. To properly discipline them, their climate related behaviour such as GHG emissions but also their general ways of living and their choice of dwelling areas etc. have to be constantly kept under control of outside (Western) actors with supposedly superior knowledge. The aim is to transform these individuals and their circumstances towards the ideal typical norm of the healthy, affluent and climate resilient citizen.

While this ideal type in part mirrors a Western citizen, in one crucial way it does not, which is the per capita production of GHGs. Here, the aim is not a normation towards a Western lifestyle, but the prevention of an increase in emissions, and hence possibly also the denying or at least curtailing of economic growth and the dissemination of (climate-damaging) technology to make life more comfortable. Thus, while the disciplinary discourse could legitimise measures that benefit poor individuals in the Global South, it could also curtail their freedom, remove agency and push them towards actions that are not in their immediate interest. Conceivable policies entail direct interventions as part of development aid schemes, which strive to condition the behaviour of local people towards the ideal norm. Examples are the propagation of climate preparedness measures or climate education campaigns. The goal is to heighten the awareness of the affected individuals for the dangers of climate change and for the global benefits of climate friendly behaviour but also to increase their coping capacity and to decrease their ‘outcome vulnerability’ – that is their direct vulnerability to adverse effects such as sea-level rise (O'Brien *et al.* 2007: 75) – towards climate change effects. Beyond that, the disciplinary discourse particularly empowers non-state actors such as environmental, development, and human rights NGOs to act. However, due to the changing nature of the concept of human security, which includes an ever-closer relationship between development concepts and traditional security measures, constructing climate change as a threat to human security can also foster a closer integration of military and civilian operations. The following *table 3.3b* summarises the features of the disciplinary climate discourse.

Table 3.3b: Disciplinary Climate Discourse		
Security Conceptions and Keywords	Operational Dimension	Discursive Power Effects
Human security, individual security, food security, environmental security, vulnerability, coping capacity	<p>Climate change is securitised indirectly using human security conceptions and the like. A micro-perspective on individuals and small groups prevails. Focus on direct physical effects (everyday implications) of climate change for poor individuals.</p> <p><i>Target:</i> Mostly individuals, global community of individuals, humankind</p>	<p>Transformation of the Debate and of Governance Practices Refocusing the climate security debate on the direct physical effects of climate change for human security, possibly leading to support and empowerment schemes for individuals. Yet, also increased juxtaposition of North vs. South and surveillance and control of threatened individuals, ‘normation’ processes – developing vulnerable humans towards ideal norm of a climate resilient citizen, focus on outcome vulnerability, possibly denying poor individuals technology that endangers the global climate. Broadening of actors participating in governance processes, empowering non-state actors.</p> <p>Exemplary Policies Prescribing behavioural and technological norms, monitoring emissions and behaviour, voluntary emission reduction targets, climate education, adaptation measures (reducing outcome vulnerability), energy efficiency norms, clean development mechanism, CO2 taxes, mainstreaming climate change and climate security in development aid schemes, integrating development aid and military action, spread of ‘networked security concepts’.</p>

3.3.5 Governmental Power and Climate Change

A governmental power based securitisation constructs climate change as a long-term problem that could gradually increase a range of risks (see *table 3.3c*) for certain groups and areas. It renders climate change governable as statistical problem drawing on various instruments such as risk-assessment and -management schemes and accepting a general degree of contingency and uncertainty. In the literature, traces of this discourse can be found in the discussions about risk (Beck 2000; Aradau and van Munster 2007), which also have been linked to the securitisation of climate change (Corry 2012; Diez *et al.* 2016; Oels 2011; Rothe 2011b).

Operational Dimension

At its core, a governmental securitisation is less direct and does not point to immediate threats to clearly defined referent objects but relies on sophisticated statistical models to calculate

certain risk groups and areas that climate change could affect in the future. Examples are geographical regions such as coastal and arid areas, small islands or socio-economic groups such as poor people in developing states. In contrast to disciplinary power, however, the main target is not to rescue these risk groups, at least not in any case and at all costs. Instead, the governmental discourse aims primarily at the welfare of the overall population, which means that the wellbeing of those risk groups could be constructed as obsolete as long as the overall risk for the population is bearable. Drawing on the concept of ‘normalisation’, the focus is on bringing the risk of the outliers down to a tolerable level, so that the welfare and functioning of the overall population is not disturbed too much. Thus, the risk construction always has a relative character.

Due to the global dimension of climate change, often humankind or all countries constitute the population. However, depending on the perspective of the one articulating this discourse, the circle can also be drawn in a much narrower fashion and for instance only contain countries or people of the Global North. Thus, under certain circumstances, constructing climate change as a risk can reinforce and erect boundaries between specific groups or states. While according to prominent climate scenarios, most industrialised countries only run moderate climate risks, many countries of the Global South, due to their geographical location and economic underdevelopment, fall within the high-risk groups and thus deviate from the overall population. Moreover, the governmental discourse also constructs climate change as a problem of circulation. This means that it aims at fostering the desired circulation (e.g. international business trips, the shipping of goods, economic growth), while avoiding the undesired, which could be excessive GHG emissions as well as people migrating due to problems caused by climate change. The challenge in relation to climate change is to prevent problematic circulation dynamics that cannot easily be kept from getting out of control by the careful manipulation of other natural processes (Elbe 2009: 73–74). Examples are the interconnections between economic growth and GHGs or possible ‘tipping points’ and self-reinforcing events in relation to climate change such as the offsetting of additional CO₂ by the meltdown of permafrost areas, the accelerating meltdown of the Greenland ice shelf, or the possibility of pandemic outbreaks of disease.

Power Effects

Looking at the *power effects*, a governmental securitisation of climate change fosters a view into the future, which is supposed to be controlled by preventive measures and by manipulating

the right variables within the population. To this end, climate surveillance and control measures are tailored to be as cost-efficient as possible and thus especially focus on certain risk groups. The aim is to assess the vulnerability of the population and then to control or decrease (normalise) the risk of specific elements using certain risk management schemes and the like. Instead of monitoring the whole world and each individual concerning climate risks, the focus is on groups and regions that are, according to climate models, especially at risk. Within the governmental power discourse, the focus is less on direct interventions but rather on interfering indirectly by for instance trying to decrease the ‘contextual vulnerability’ of high risk groups by improving the general economic and political circumstances in those areas (O'Brien *et al.* 2007: 76) and thereby preventing problems from materializing in the first place. Thus, emission trading schemes, market instruments and voluntary behavioural change to indirectly control GHG emissions and limit them within an acceptable range play an important role.

A further important characteristic is the propagation of insurance schemes that are supposed to control the future in the present by hedging against undesirable future events thus containing the overall risk for the population. Concrete examples are weather and climate insurance schemes as well as disaster relief funds. To carry out these rather indirect pathways of governance, non-state actors such as NGOs, think tanks, corporations and insurance firms play a decisive role. Nevertheless, risk management strategies could also be used in the defence and security sector, thus the governmental discourse could also push this sector to increasingly rely on probabilistic scenarios that try to control possibly problematic future climate events.

Apart from the normatively favourable effects of such a governmental power based discourse, e.g. a focus on long-term effects and the fact that high-risk groups get more attention, it also entails the danger of stigmatising these risk groups, for instance when they become a possible danger vis-à-vis the welfare of the overall population. Moreover, because of its long-term orientation and the absence of concrete threats, this discourse does not generate the same attention as the sovereign or even the disciplinary based securitisation would do. Since the overall risk could also be brought down to tolerable levels by increasing the resilience of risk groups or by propagating climate insurance schemes for them, fundamental changes in industrialised countries such as widespread mitigation schemes might get out of the view. Therefore, at the end of the day, such a governmental securitisation might be less influential in its direct political effects at least if the goal is to legitimise decisive emission reductions linked to mandatory CO₂ limits (as most climate activists would prefer). However, on a more

fundamental, yet possibly less noticed level, this discourse can be much more far-reaching as it corresponds to the broader governmentalisation of the state and thus constitutes an entirely different form of governance that touches upon almost all spheres of life. Finally, the governmental discourse also contributes to increased networks between civilian and security actors to cope with climate and development risks within holistic risk management approaches. The following *table 3.3c* summarises the features of the governmental climate discourse.

Table 3.3c: Governmental Climate Discourse		
Security Conceptions and Keywords	Operational Dimension	Discursive Power Effects
Risk, risk-management, riskisation, scenario planning, resilience, risk-groups, risk-assessment, uncertainty, contingency, contingency-planning, precautionary principle, early warning systems/signals	Climate change is securitised indirectly, using risk conceptions and focusing on the macro-level. Statistical construction of risk groups, areas and practices, focus not on direct effects/threats of climate change but on probabilities of these effects for risk groups vis-à-vis the population, identified by risk assessment schemes and vulnerability assessments, acceptance of a general degree of uncertainty. Focus on circulation dynamics and future scenarios. <i>Target:</i> Population, Risk groups/ areas, diffuse, unspecified	Transformation of the Debate and of Governance Practices Increased surveillance of risk groups, areas and activities, ‘normalisation’ processes, controlling circulation, acting on the future – long-term measures aimed at root causes, bringing down the risks to a tolerable level, stigmatization of risk groups, focus on precautionary and resilience measures, reducing the vulnerability of certain risk groups i.e. critical vulnerabilities through adaptation measures, focus on contextual vulnerability, focus on cost-efficient measures that do not interfere too much, rather acting at the level of the population, insurance solutions, empowering a broad spectrum of non-state actors Exemplary Policies Emission trading schemes, market instruments, voluntary emission cuts, insurance schemes, risk management approaches (disaster risk atlases, early warning systems), vulnerability assessments, creation of climate risk groups and areas and development of appropriate policies to prepare/ensure these risk groups, resilience measures (reducing contextual vulnerability)

3.4 Methodology and Operationalisation

There is no consensus in the literature on how to study processes of securitisation – or analyse problems in the field of CSS in general (Aradau *et al.* 2014b: 2, 4) – and how to use Foucault’s thoughts on governmentality in such an endeavour. Yet, there is a tendency to use qualitative and discourse or content analysis focused methodologies, which are best equipped to discover dominant discursive representations and their political consequences (Balzacq 2011c; Oels

2013; Aradau *et al.* 2014b: 8). In the following, I briefly discuss how to operationalise the above-described governmentality-security approach in order to answer my research questions. This section outlines my methodological choices, several key concepts and terms, the case selection, the empirical material and methods and the timeframe of the analysis.

3.4.1 Definition of Key Concepts and Scope of the Empirical Analysis

Securitisation vs. Politicisation and Degrees of Success

To distinguish securitisation from politicisation I adopt the first part of the general conception of securitisation by the CS. That is, security threats are not objectively given but socially constructed by designating something as a serious threat to a referent object. However, I do not follow the CS concerning the second part of their definition about the consequences of (successful) securitisation moves. The core theoretical claims derived from the GA are that in the era of governmentalised security practices we will witness various distinct ways of securitising a topic, which in turn have different political consequences that are not necessarily exceptional. Hence, in my approach, it is not the legitimised or already adopted *exceptional or extraordinary* measures that define a successful securitisation. Instead, I follow a counterfactual argumentation, amongst others introduced by Maria Trombetta (2011b), which takes policies that otherwise would probably not have been adopted or seemed legitimate and the transformation of the meaning of the securitised issue (or other affected policy sectors) as indicators for successful securitisation. Connecting to that, I argue, that there is no clear-cut threshold between successful or failed securitisations. Rather securitisation processes should be seen as continuum allowing for a broad spectrum between weakly securitised and highly securitised topics that cannot be defined a priori but has to be explored in each empirical case (see also Diez *et al.* 2016: 9-10, 19). In this context, it is important to note that different climate security discourses and their power effects are never deterministic. Rather, they constitute a structural environment in which agency and resistance is possible to a certain extent. This is why it is of vital importance to take a very detailed look at the actual effects in terms of changed political perceptions and policies and not just look at the broader picture, as has been a tendency in existing governmentality studies (Angermüller 2010).

Actors and Audiences

Securitisations are not only performed by single elite speech acts uttered by securitising actors and accepted by definite audiences, but they are embedded within a broader context and specific

security discourses (Balzacq 2005; Salter 2011). Accordingly, my analysis of the securitisation of climate change in different countries will cover a broad timespan and will include an analysis of the cultural and institutional setup in which the securitisation discourse is embedded, and which makes the specific securitisation possible in the first place. By relaxing the criteria to distinguish between failed and successful securitisations I will also abandon the idea of a fixed audience that has to accept the securitisation to be successful, which has been much debated in the literature (Balzacq 2011c; Léonard and Kaunert 2011; Roe 2008; Karafoulidis 2012; Stritzel 2007). Through the process of securitising a topic in a very specific way and by focusing on certain discourses, the actors that speak security, the referent objects, as well as the relevant audiences are constituted at the same time (Hansen 2000: 303).

Having said that, there are of course always actors that stand out particularly in specific securitisation processes and who wield more influence than others. Methodologically it can make sense to start the analysis by looking at texts produced by these actors in order to access the dominant discourses that are reproduced and reinforced by these texts. According to findings from the secondary literature, NGOs, think tanks and scientific organisations have played a key role in constructing climate change as security issue (see also Sending and Neumann 2006; Oels and von Lucke 2015; Diez *et al.* 2016; Brzoska 2009). They have relied on the attention generating and agenda setting qualities of designating something as a security threat (Elbe 2006, 2009; Floyd 2007b, 2013) and hence the possibility to pressure politicians to act on issues they would otherwise neglect. Thus, while my focus is on reconstructing broader discourses, I will nevertheless have a closer look at which role specific actors have played in the debate.

Level of Analysis and Case Selection

Empirically, I do not look at debates at the global level, but at three individual country cases, namely: the United States, Germany and Mexico. The aim is to identify which securitisation discourses (or combinations of these) were dominant in each country and to inquire how they have led to specific political consequences. The focus is on understanding the multitude of securitisations and the interlinkages with varying domestic contexts and hence to foster a contextual understanding of security (see also Ciuta 2009). Moreover, this comparative setting closes a gap in securitisation and governmentality studies that so far have focused predominately on the global level, isolated case studies and exemplary data. I expect the political consequences to be much more concrete within national environments than on the

global level, therefore also allowing me to overcome the above-described emphasis of governmentality studies on the broad programmatic level to a certain extent.

I selected these specific country cases based on several interlinked considerations. Starting out from my overall research question about how to understand different forms of securitisation, the challenge was to find cases that are similar enough to be comparable, but also different enough to allow for diverse forms of the securitisation of climate change to become dominant. Hence, I chose the United States and Germany, which are both highly industrialised, democratic countries that display roughly the same level of overall development and share many cultural similarities (UNDP 2015). At the same time, both countries differ considerably when it comes to other cultural and political variables and especially concerning security policy (Gerhards 2000; Böckenförde and Gareis 2014) and also have shown quite different approaches to climate change. Beyond that, I also wanted to address the Western or Northern bias in securitisation studies (Boas 2014; Bilgin 2010; von Lucke 2016) and the scepticism in governmentality studies about the usefulness of this approach in non-Western societies (Joseph 2010a, 2010b). Thus, I included Mexico as a third case to gain insights into how a different level of development and cultural background could play a role in securitisation processes. Despite its differences, due to longstanding close relations to Western countries, membership in the OECD since 1994 and a considerable economic growth since the 1990s (Bertelsmann Stiftung 2012; Dussel Peters and Maihold 2007; Akerberg 2011), Mexico is similar enough to allow for a meaningful comparison. Apart from these factors, Mexico constitutes a promising case because it is expected to be directly affected by a variety of different climate effects (Ibarrarán *et al.* 2008; Brodziak *et al.* 2011; José Cárdenas 2010) and has already put forward several progressive policies to address its perceived vulnerability.

Timeframe of Analysis

My more detailed analysis of climate security debates in each country covers the period between the late 1980s and 2015. The reason for this rather broad timeframe is that I want to explore the influence of the broader historical context on the climate security debate but also to capture key transformations of each of the discourses over time. I begin with the late 1980s because it was at that time that climate change became more important on the political level i.e. it ceased to be predominantly discussed by climate experts or in an academic context. Indicators are the establishment of the IPCC (1988), the adoption of UNFCCC (1992) but also several more influential domestic policies on climate regulation in the US, Germany and to a lesser extent

also Mexico (Pielke Jr 2000a, 2000b; Schreurs 2002; Park 2000; Jänicke 2011; Weidner and Mez 2008; Mumme and Lybecker 2002; Dussel Peters and Maihold 2007).

In relation to the climate security debate, the secondary literature has given some indications that there were at least two roughly distinguishable phases between the 1990s and the mid-2010s (Floyd 2010, 2012; Oels 2011, 2012a). In the first phase, that peaked around the mid-1990s, climate security argumentations were part of a broader debate on ‘environmental security’ or ‘environmental conflict’ (Homer-Dixon 1994a, 1999; Myers 1995; Kaplan 1994). The second phase gained momentum in the mid-2000s (with a peak between 2006 and 2011) and focused almost exclusively on the perceived security implications of climate change. While my analysis covers both, the emphasis will be on the second phase. One reason is that the more recent episode focused more exclusively on climate change and in general was more successful in triggering tangible political responses. Other reasons are of practical nature as availability of empirical material as well as access to organisations and individuals involved in the debates were more readily available for the more recent period.

3.4.2 Empirical Data and Methods

To analyse the climate security debates and to reconstruct the political consequences I used different sources of data and methods of analysis. At this point it is important to mention that some of the empirical data used in this thesis was generated in a research project (ClimaSec) led by Thomas Diez, which had been funded by the German Science Foundation (DFG, Grand number: DI 1688/1-1). For the German case study, I partly draw on research (interview transcripts, discourse analysis of key reports) of my colleague Zehra Wellmann, who had been responsible for the German case. Beyond that, I am grateful for the work of the many student assistants who helped collecting and structuring the empirical data for the ClimaSec project in general.

Collecting, structuring and analysing the empirical data for this thesis consisted of several interconnected steps. Firstly, I set out to identify key reports in each country that were central in the respective climate security debates and engaged in the above-described climate security discourses. I started with a review of the secondary literature, which already had identified several reports as particularly relevant concerning the securitisation of climate change (see for instance Oels 2012a; Detraz and Betsill 2009; Brauch 2009; Brzoska 2009; Hartmann

2010). Simultaneously I conducted internet searches with Google and Google Scholar using keywords such as ‘climate change’ and ‘global warming’ in combination with ‘security’, ‘threat’, ‘risk’, ‘human security’, and ‘national security’ as well and their equivalents in German and Spanish⁵, to identify politically influential climate security articulations. Additionally, I relied on cross-references between these reports, as well as on expert interviews in each country and on the analysis of parliamentary debates to uncover further important reports.

While, as expected, many of the most influential reports come from non-governmental actors, depending on the country, other sources produced significant material, too. In the United States, articulations of individual politicians were more central to the debates in the early years of the environmental and climate security debate during the 1990s. In the 2000s when the debate began to revolve more exclusively around climate change, reports from security policy oriented think tanks became more influential. In contrast, in Germany reports of environmental NGOs, international organisations, human rights groups, church organisation and semi-governmental research institutions were more influential throughout the whole study period. In Mexico, it were mostly individual politicians and foreign organisations (security think tanks and environmental NGOs) that dominated the climate security debate.

In a second step, I reconstructed which discourses prevailed in each country and how their specific framing of climate security changed over time. For that purpose, I conducted a discourse analysis on the most influential reports, policy documents and parliamentary debates. The aim was not predominantly a quantitative assessment of the occurrence of certain keywords but rather the identification of key argumentative structures that represent the three discourses. Thus, I did not use a quantitative analysis software but went through the texts manually. In this process, although the keywords (specified in the previous section) did play a role as an analytic starting point, the focus was on the specific threat constructions and power effects that lie at the core of the three discourses.

While the initial emphasis to identify the discourses was on the operational dimension, the power effects and recommendations that were tied to a certain threat construction also played a role in linking articulations to the three discourses. This resonates with the dual quality of discourses due to which a clear-cut separation of discourse and its effects is impossible. To structure the findings in this step, the core results of the analysis (dominant security discourses,

⁵ If not already available in English, I have translated all German and Spanish quotes used in this thesis myself.

threats, referent objects, actors, recommendations and report specific findings) were documented in semi-standardised tables. To specify which discourse prevailed in a document, I relied on the frequency, the internal coherence and intensity as well as the position of the argument within the document. For instance, I considered an argument particularly important when it appeared in the introduction (or in the often included ‘summary for policymakers’) and in the conclusion. In contrast, arguments that only showed up in more detailed technical sections were considered less central. In addition to frequency, I took the usage of dramatic language as a measure for the intensity of the discourse. Naturally, the analysed documents did only seldom focus on one of the three discourses exclusively but mostly contained articulations of all three and tended to link the discourses to each other. Nonetheless, in most cases it was possible to identify one dominant discourse or at least a specific combination of several discourses.

This discourse analysis already gave me a strong idea as to which climate security discourses were dominant in each country, which were the most important actors and which political consequences were enabled. However, to back up these findings and to get a better understanding about how certain discourses and articulations made their way into the political debate but also to understand the role of different actors, in a third step I conducted interviews with the most relevant NGO representatives and governmental officials in each country. The interview partners were selected based on my preceding research and on a snowball system after doing the first interviews in the country. The interviews were conducted between April and June 2014 in the US and Mexico by myself and between April and September 2014 in Germany in collaboration with my colleague in the ClimaSec research project Zehra Wellmann. I adjusted the semi-standardised questionnaire individually based on the interview partner and the overall direction of the conversation. Each interview took about 30 to 90 minutes. As it was not my intention to use these interviews for the formal discourse analysis, I did not record the interview. Besides, recording the conversations would most certainly have prevented interview partners from disclosing information beyond the official position of their organisation. This is also why most of the interviews took place under the condition of anonymity. I compiled the results of each interview in semi-standardised form in the immediate aftermath.

To get a better grasp of the effects of the specific security discourses that were dominant in each country in the defined timeframe and hence to understand how they actually helped to implement concrete policies or transform governance practices in specific policy fields, in a fourth step I traced back the political process. To this end, I analysed parliamentary debates

(based on the same scheme as the reports) to assess how the specific climate security discourses found their way into the political debate and which measures ended up in concrete policies and practices or were key in legitimising these. In addition, I also analysed key policy documents in central policy fields (e.g. climate and environmental strategies, security and military strategies, foreign policy documents, development aid programmes as well as disaster response and civil protection schemes).

Finally, the concluding *chapter 7* of this thesis constitutes a fifth step, where I partly draw on the concept of first and second order critique of discourses (Jackson 2007) to critically discuss the empirical findings and to relate them to broader theoretical debates about securitisation and its normative implications.

I do not necessarily conducted the steps in the above-described order but often jumped from one to the other or combined findings. Moreover, it was not always possible to determine a clear-cut distinction between discourse and discursive effects or policies. Especially the first mode of influence, the transformation of the debate, contains a circular notion since certain argumentations can be seen as a representation of a discourse while at the same time reinforcing or reconfiguring the same discourse. This is also true for the influence of different actors or documents. For instance, on the one hand parliamentary debates on climate security or key policy documents can be seen as an effect of the broader discourse. On the other hand, the debates and policies can reinforce the discourse itself and very often they do both at the same time. A good example is the 2010 Quadrennial Defence Review in the United States, which certainly had been legitimised by an influential sovereign climate security discourse in the preceding years but at the same time further reinforced this discourse. In some instances, this is not a big problem, for example, when the temporal order of the events is unambiguous, but often the interlinkages are much more complicated. Thus, it is not always entirely clear where certain discursive articulations have appeared for the first time and which of the many articulations have been more influential i.e. have received more attention. Eventually, the only solution to this problem is to deliver a deep description and plausible story and to lay open analytic process that led to certain assessments.

Structure of the Empirical Chapters

The empirical chapters are structured as follows: I discuss each country case in a separate chapter starting with the US, followed by Germany and then Mexico. After a short introduction,

I start with a brief discussion of the origins of the climate security debate. Thereafter, I elaborate in more detail on the emergence, impact and transformation of the specific climate security discourses between the late 1980s and 2015. I explore each of the three discourses – in the order of their importance in the respective country – and elaborate on their development over time in three separate sections. While this separation oversimplifies the climate security debate, in which the discourses exist alongside each other without always having clear-cut boundaries, it nevertheless helps to structure the findings in a first step. The aim is to assess which discourses have become dominant and whether there have been important transformations of and linkages between these discourses over the study period. Beyond that, this section also discusses the role of the most important actors that have articulated these discourses or have been empowered to speak and act within the discourse. In the next section, I look at the concrete power effects of this specific securitisation of climate change. Thus, here I put the separated discourses back together to discuss how the specific mixture of sovereign, disciplinary and governmental elements has legitimised and influenced concrete policies and has contributed to transforming governance practices. To narrow down the empirical material, I mainly look at the environmental and climate, security and defence, foreign, development, and disaster management as well as civil protection sector. Finally, the last section of each empirical chapter looks at the historical, institutional and cultural preconditions that made the unique securitisation of climate change possible in the first place.

4. The United States: Climate Change as a Threat to US National Security

4.1 Introduction

National security leaders now recognize that global climate change is a matter of national security and may even be a defining security challenge of the 21st century
(Rogers and Gullede 2010: 7).

As the above quote from a report of the think tank Center for a New American Security (CNAS) exemplifies, the representation of climate change has undergone a decisive transformation since the issue first began to be more important in the political debates in the US in the late 1980s. At first only being one amongst many other environmental problems and discussed mostly in scientific and expert communities, the issue soon rose to become the most important environmental concern and various actors began to connect it to security conceptions. Eventually, this has culminated in the construction of climate change as an important and urgent national security issue that necessitates far-reaching changes in the planning of the US defence sector. The aim of the following chapter is to trace back this development over the last 25 years (1989-2015) and to show how climate change has been articulated as a security issue within the three different climate security discourses and how this has legitimised very specific policy responses.

The United States is an interesting case for various reasons. It is by far the biggest contributor of historic i.e. cumulative CO₂ emissions, as it has released about 27 percent of the global emissions counting from 1850 until 2011 (Ge *et al.* 2014). Beyond that, even though China has taken the leading role in current annual emissions since 2006 (Donner and Faltin 2007: 4; New York Times 2007), the US is still the second biggest contemporary emitter (about 13.9 per cent of global emissions in 2012, Dröge 2016: 11) including one of the highest per capita emissions of about 20 tons per year (World Bank 2013; Dröge 2016: 17). This makes it paramount to include the country in any effort to halt global climate change. However, it is not only its role as contributor to climate change but also its active engagement in climate science and in the international climate negotiations that make the US an important case concerning climate change. This thesis includes the United States as an example of an industrialised country that is heavily engaged in the international negotiations and in the last 25 years has undergone

decisive transformations concerning its domestic and international climate policies. While it was a vanguard in the early stages of the international negotiations, this position shifted during the end of the 1990s towards a strong laggard position, which only recently was mediated somewhat under the second term of Barack Obama's Presidency. The remainder of this chapter will show that the securitisation of climate change has had a considerable influence on how climate change has been perceived in political debates in the US and which political practices and solutions have been legitimised.

For the empirical analysis of this case, I looked at over 50 core publications of relevant climate change actors among think tanks, in civil society and government institutions. Furthermore, I analysed 270 parliamentary debates on climate change that contain securitising articulations and conducted 20 semi-structured and informal interviews with think tanks, NGOs and state representatives in the US.

4.1.1 The Origins of the Climate and Security Debate in the US

Long before climate change overshadowed all other environmental issues and the United States became one of the principal laggards in the international negotiations, the US was one of the most progressive countries concerning the problematisation of environmental issues and concrete policies in this sector (Falkner 2005: 585; Vig and Kraft 1984: 8–9; Kraft 2013: 111). In the late 1960s, several environmental organisations like the Sierra Club and the World Resources Institute as well as emerging scientific fields such as ecology contributed to a lively debate within the country that soon also spilled over to the political level (Park 2000: 77; Pielke Jr 2000a: 14–17). Consequently, the US Congress adopted some of the for that time most progressive policies in the environmental sector such as the Clean Air Act of 1963 that regulated possibly harmful airborne substances and would later become an important foundation to control GHGs based on executive orders. Only a few years later, in 1970, the Environmental Protection Agency (EPA) was founded, which became a role model for the environmental ministries in other countries (Harris 2001: 5) and would later also play a role in regulating domestic GHG emissions. The US was also highly involved in building up the international environmental agenda. It exerted considerable influence during several milestones of this agenda such as the 1972 UN Conference in Stockholm, the adoption of the moratorium on commercial whaling in 1982, or the development of the Montreal Protocol to cope with the destruction of the ozone layer in the late 1980s (Falkner 2005: 590; Harrison 2000: 89).

It was also during the 1960s that a few scientific expert communities began to problematise environmental problems as security threats; at the beginning often in connection to the atmospheric repercussions of nuclear weapons testing and later also linked to the ‘nuclear winter hypothesis’ (Dalby 2009: 37–39). In the 1970s, the interlinkages with security concerns became more pronounced and ‘environmental security’ became an increasingly important concern on the political level. Although the discussion at this time was still broad and revolved around issues such as resource scarcity, overpopulation (Ehrlich 1968) and the limits to growth (Meadows and Meadows 1972), climate change – at that time mostly termed ‘global warming’ – was already one of the concerns (Dalby 2009: 14; Brown 1977: 7). Thus, these discussions set the ground for the neo-Malthusian argumentation that later would become one of the most prominent argumentations in US climate security debates. Based on these discussions and disturbing projections of the US National Academy of Sciences about climate change (National Academy of Sciences 1975, 1977), at the end of the 1970s, the first voices appeared that explicitly depicted environmental problems and climate change as threats to ‘national security’ (Brown 1977; see also Floyd 2010: 67). Hence, they were the very first precursors of the sovereign climate security discourse (in the following ‘sovereign discourse’) that later would become the defining articulation of climate security in the United States.

While the inclusion of climate change into this early environmental security debate certainly was not the only reason for the growing significance of the issue, it nevertheless falls into the same time when climate change in general began to be more important in scientific and political discussion in the US. Scientists had already discussed climate change as one of the more important problems in the 1950s (Park 2000: 79), but it was not until the 1970s that political actors picked up the issue on a broader basis and adopted first tangible policies on the matter. In 1978, the National Program on Climate Change was established as one of the earliest concrete policies in this sector (Pielke Jr 2000a: 12). In the 1980s, climate change gained more relevance on the domestic political level and several actors in Congress, particularly the Democrats Albert ‘Al’ Gore and Timothy Wirth and the Republican John Chafee, brought the issue onto the agenda (Pielke Jr 2000a: 16; Park 2000: 80; Bryner: 112). The increasing interest in climate matters eventually had further concrete policy implications such as the 1987 Global Climate Change Protection Act (US Congress 1988) and the creation of the Committee on Earth and Environmental Sciences in 1990. One of the most influential decisions was the creation of the US Global Change Program, which goes back to a Presidential Initiative of 1989 and the

Congressional Global Change Research Act of 1990 (USGCRP 2015; Pielke Jr 2000b: 134–136).

Paralleling the rising interest in climate change in general, at the end of the 1980s and early 1990s, security articulations became even more common in Congressional debates on climate change. A small but determined number of Members of Congress around the already mentioned Gore, Wirth and Chaffee extensively pointed to climate threats, often to justify the creation of an international climate regime but also to further develop domestic policies. Besides this debate at the political level, climate change increasingly became an important issue in the US-American public not least because 1988 had been one of the hottest summers in US history and NASA scientist James Hansen had publicly declared that they had detected a serious greenhouse effect (Leiserowitz 2005: 1435; Park 2000: 80; Grundmann and Scott 2014: 222). Thus, when the international negotiations about a global climate regime, including the creation of the IPCC (1988) and the UNFCCC (1992), gained momentum in the late 1980s, climate change already was on the domestic agenda and the US was highly engaged in the beginnings of the global regime (Donner and Falin 2007: 5; Harris 2000b: 16).

4.2 Constructing Climate Change as a Security Threat: Analysing the Discourse

Building on this historical context, this section now takes a closer look at the discourses that shaped the US climate security debate between 1989 and 2015. The aim is to understand to what extent the specific discursive constellation has transformed the broader climate debate and thus has rendered climate change governable as a specific security issue.

4.2.1 The Sovereign Discourse: Climatizing the Defence Sector

In the US, representing climate change as a threat to national security has been a recurring element since the beginnings of this debate in the 1970s and in general has been the dominant form of securitisation. However, throughout the detailed period of investigation of this study (1989-2015), the relative importance as well as the specific focus of the sovereign discourse varied, and it was not until the mid-2000s that the discourse became the almost unrivalled representation of climate security, particularly driven by security policy oriented think tanks and actors from the defence sector.

Early Traces of the Sovereign Discourse

Arguments connecting the environment to security conceptions had been around for some time in the academic debate during the 1980s and early 1990s (Homer-Dixon 1991; Myers 1989; Mathews 1989; Kaplan 1994). However, only the end of the Cold War and thus the fact that US security establishment was left without clear adversary (Dalby 2002: 16–17; Allenby 2001: 45; Dabelko *et al.* 1995: 4; Sperling 2010: 174, 201) made room for ‘new discourses of danger’ that were able to fill this gap (Doran 2000: 59; Harris 2002: 150–151; Floyd 2010: 65; Campbell 1992: 57). In the early days of the US environmental security debate – which included climate change but also other environmental problems such as ozone layer depletion, land degradation and pollution – in the late 1980s, climate security articulations in general appeared specifically in Congressional debates, think tank reports were less important at this stage. While at this time other framings played a role as well, the sovereign discourse became an important part of the ongoing securitisation process. It was particularly strong in the 101st Congress (1989-1990) at a time when the international climate negotiations gained momentum and climate change in general became more important in US debates (US Senate 1989a: S5252; US House of Representatives 1990: H7684). One of the leading proponents in this debate was Gore who repeatedly highlighted the potential of climate change and ozone depletion – which often were discussed together at that time – to threaten US national security as well as the international order:

However, the greenhouse effect and stratospheric ozone depletion fit the profile of national security issues of global significance. The phenomena certainly will in time produce effects big enough to threaten international order, even at the level of war and peace (US Senate 1989a: S5252ff).

At that time, although the proponents primarily saw US national security as threatened, the international dimension as well as the need for international solutions was more central to the argumentation than in the later debates in the 2000s. Moreover, the advocates of this early debate did not primarily use the reference to national security to justify defence planning or increased spending in this sector. Instead – and in contrast to later articulations that primarily aimed at defence policy (Interview 2014q) –, their principal aim was to increase the attention for environmental issues and to reroute funding towards these issues, as this quote from Democratic Senator Claiborne Pell exemplifies:

It is time that we recognize that the threat to our national security posed by environmental degradation is just as great in consequence, if not in immediacy, as global war. In the United States, we currently spend \$296.5 billion for national defense and \$5.6 billion at the Federal level, on environmental protection. While it is not realistic to expect these numbers to be reversed, they can be brought into better balance. We must understand that both are expenditures to preserve our national security (US Senate 1990b: S7410).

Besides Gore, other leading figures in these early climate security debates were Joe Lieberman and John Kerry (US Senate 1989a: S5252, 1992a: S6275, 1992b: S7511) who later would regularly reappear as sponsors of climate (security) bills. Yet, after this short peak period at the end of the 1980s, the sovereign discourse – as well as the environmental and climate security debate in general – lost in importance and their articulation decreased considerably in the debates of the 102nd (1991-1992) and 103rd (1993-1994) Congress.

It was not until the Clinton/Gore administration had taken over in 1993 and when climate change (Harris 2001: 11, 2000c: 38–43; Falkner 2005: 592; Vig 2013: 91) as well as environmental security in general became more important (Allenby 2000: 10; Matthew 2013: 346) that the sovereign discourse reappeared on a broader scale. Once again, the academic debate played an important role. Works such as Robert Kaplan's 'The Coming Anarchy' were well received in the highest political circles (Sherbinin 1995: 31) and in 1994, Gore even invited Thomas Homer-Dixon to Washington D.C. to brief him on environmental and climate security (Floyd 2010: 75). Subsequently, members of the Clinton administration linked the environment and climate change (often in combination to population growth) to national security at various occasions, mostly with the aim to improve environmental policy (Simmons 1995: 2; Sherbinin 1995: 29–30). At the same time, members of the 104th (1995-1996) and 106th (1997-1998) Congress again articulated the sovereign discourse. In many Congressional debates, the direct connection to defence planning played a more important role than in the articulations of the Clinton administration. For instance, climate change was discussed in relation to the melting poles and the effects on the US submarine strategy (US House of Representatives 1995: H9946). Besides Congress, in the mid-1990s the first think tank reports began to pick up the sovereign discourse, however, they mostly summarised the political debate and did not come up with their own argumentation (Wilson Center 1995).

The heated debates about the Kyoto protocol in the late 1990s led to a further though short-lived recurrence of the sovereign discourse. A few Members of Congress presented signing the protocol as serving the US national security:

Indeed, the Kyoto Protocol will improve the national security of the United States by reducing the risk of catastrophic climate change, which would create upheaval and unrest throughout the world, including the potential for millions of environmental refugees (US House of Representatives 1998a: H3577).

Moreover, they argued Kyoto would push energy efficiency measures, which in turn would reduce the US dependency on oil imports (US House of Representatives 1998a: H3577). Yet, in line with the decreasing general interest in climate issues at the end of the 1990s, the sovereign discourse increasingly lost in relevance and almost vanished during George W. Bush's first term in office (2001-2005).

The Sovereign Transformation of the US Climate Security Debate

The first precursor of the comeback of the sovereign discourse in the US was the publication of a Department of Defense (DOD) report on the national security consequences of abrupt changes in 2003 (Schwartz and Randall 2003). Although being published under the Bush administration, which mostly rejected climate security argumentations, this so-called 'Pentagon-Report' had been coined by the longstanding defence advisor of the DOD, Andrew Marshall, who was renowned for his unorthodox thinking. Upon having heard of new scientific findings about abrupt climatic events in the past (National Research Council 2002), Marshall commissioned the report without the administration's approval who allegedly even postponed its publication for a couple of months (Fincham 2014; Townsend and Harris 2004). The core argument of the report is that 'although uncertain and quite possibly small' the consequences of climate change 'should be elevated beyond a scientific debate to a U.S. national security concern' (Schwartz and Randall 2003: 3). The report thus exemplified the beginning of a far-reaching transformation of climate change from a mainly scientific and environmental concern – that might have some side effects on national security –, to a real and immediate defence issue that has to be taken seriously by the appropriate institutions in this political sector.

The immediate resonance of the DOD report was moderate, among other things because its very drastic scenarios were seen as too speculative and implausible (Campbell *et al.* 2007: 19; Interview 2014p) but also because of its publication during the reign of the climate sceptical

Bush administration. However, it prepared the ground for the success of this line of argumentation in the years to follow because it had reintroduced a specific sovereign argumentation, which enabled and empowered actors from the traditional security and defence sector to participate in the debate. The proponents of this discourse genuinely believed that climate change constituted a tangible national security problem and that US defence policy had to be adjusted accordingly (Interview 2014p, 2014i, 2014k). In addition, however, they also wanted to improve climate policy and used this angle in a tactical manner to put pressure on the Bush administration (Albright *et al.* 2006: 7). The aim was to overcome the political standstill and the polarisation between liberals and conservatives concerning climate change at that time.

It was particularly from 2007 on that the sovereign discourse clearly began to dominate the US debate. Under the lead of Bill Clinton's former Deputy Under Secretary of Defense for Installations and Environment, Sherri Goodman, the semi-governmental think tank CNA had assembled a military advisory board of high ranking retired military officials (Interview 2014p, 2014k). In 2007 they published a report on the national security implications of climate change (CNA 2007) and thereby initiated a whole series of think tank reports that increasingly became to dominate the climate security debate in the US. Articulations of the sovereign discourse appeared in all of the 28 analysed central think tank reports and are the dominant argumentation in most of them. Besides CNA, the most influential reports and discursive interventions came from security policy focused think tanks such as the Center for Strategic & International Studies (CSIS), the Center for a New American Security (CNAS), the Council on Foreign Relations (CFR), the American Security Project (ASP), the Center for American Progress (CAP), the Center for Climate Change Energy and Security (C2ES), and the Center for Climate and Security (CCS).

Besides articulating the same defence oriented sovereign discourse and hence approximating a form of 'discourse coalition' (Hajer 1997), these think tanks were linked together through various personal connections. For instance, important individuals such as Kurt Campbell, Sherri Goodman and John Kerry – who later became Secretary of State under President Obama (Davenport 2014a) – founded or worked at several of these think tanks and often personally knew each other (Interview 2014j). Beyond that, from 2010 on, the Center for Climate Change and Security (CCS), established itself as an important convenor between all actors involved in the sovereign security focused climate debate and organised periodic meetings between all relevant actors (Interview 2014g). Finally, a few influential foundations

seeing a window of opportunity to increase the attention for climate change through this specific framing, played an important role in financing many of the think tank projects on climate security. Examples are the Energy Foundation, the Rockefeller Foundation and The Skoll Global Threats Fund (Interview 2014g, 2014j, 2014p).

Constructing Climate Change as Threat to US National Security

These reports clearly problematised climate change as a ‘serious threat to the national security of the United States’ (CNA 2007: 6; Vagg 2012: 1) and hence constructed it as a direct threat to the well-being and even survival of the sovereign. This often included a direct focus on possible military threats arising from climate change and the respective consequences to be taken in the US defence strategies (CNA 2007: 37). Concerning the specific threat construction, the focus was mostly on the second-order socio-economic and political effects of climate change. Climate change would ‘exacerbate regional and local tensions in ‘hot-zones’ around the world’ (Foley and Holland 2012c: 11) and hence increase the demands for US civilian but also military interventions (Rogers and Gullede 2010: 16). A recurring element, originally coined by the 2007 CNA report, was the formulation of climate change as a ‘threat multiplier’ (CNA 2007: 32) that destabilises states and regions and contributes to more fragile and failed states around the world but especially in Africa (CNA 2007: 13, 20; Rogers and Gullede 2010: 16). Combined with the already mentioned ‘neo-Malthusian’ argumentation, this led to the conclusion that climate change would act as an ‘accelerant for instability’ (Foley and Holland 2012c: 12) and contribute to violent conflicts, resource wars – especially over water (Campbell *et al.* 2007: 16) – and terrorism around the globe (CNA 2007: 13). At the end of the day, even nuclear war was considered as an indirect consequence of climate change (Campbell *et al.* 2007: 78). Within this sovereign representation, climate change progressively ceased to be an environmental problem and instead became a fairly traditional security issue with severe consequences for the security of nations and global peace and stability (Campbell *et al.* 2007: 5). Consequently, reports feared that it would facilitate confrontational geopolitics and eventually worsen the neorealist ‘security dilemma’. In this vein, alliances might crumble and it would become increasingly difficult for states to ‘look beyond their own salvation’ (Campbell *et al.* 2007: 77). One report even compared a world hit by severe climate change with the Cold War and feared a new ‘heat war’ (Burke and Parthermore 2008: 5).

While the prevailing sovereign discourse constructed developing countries as being hit first and hardest by the security implications of climate change, it drew a direct connection the

national security of industrialised countries such as the US (CNA 2007: 32) and eventually predicted a destabilisation of the entire global security architecture. A central mechanism for the spread of the security effects of climate change across the globe was the prediction of millions of climate refugees potentially causing border conflicts or struggles over scarce resources: 'Some migrations cross international borders. Environmental degradation can fuel migrations in less developed countries, and these migrations can lead to international political conflict' (CNA 2007: 18). Due to increased global instability and the further weakening of instability hotspots around the world this could eventually directly affect US national security interests (Werz and Manlove 2009: 1–3; Campbell *et al.* 2007: 8). In this dire future, according to some reports resembling the post-apocalyptic world of the 'Mad Max' movies (Campbell *et al.* 2007: 9), the demands for the US military would increase considerably (Rogers and Gullede 2010: 16). Due to its global reach, humanitarian interventions and disaster aid as well as robust stability and peacekeeping missions would become more common and more dangerous (McGrady *et al.* 2010: 3). Climate change would lead to an increase in 'complex emergencies' (CNA and Oxfam 2011: 1), meaning situations in which economic, political, humanitarian and security problems arise simultaneously, thus posing new challenges for US interventions. In this vein, many reports presented the violent conflicts in the Darfur region and in Somalia as contemporary examples of a world ravaged by unchecked climate change (C2ES 2009: 2; CNA 2007: 15; Campbell *et al.* 2007: 5).

Eventually, the US military could be forced to intervene more often (militarily and humanitarian) to keep the problems from spiralling out of control and to secure domestic energy demand (Schwartz and Randall 2003: 14). Hence, this argumentation saw direct consequences for '(...) the way the Department of Defense (DOD) does business' (Carmen *et al.* 2010: 1) and strongly advised the appropriate US institutions to incorporate climate change into their defence planning: 'The U.S. military and other segments of the U.S. national security community have begun to recognize climate change as a threat multiplier that must be considered in long-term security planning' (C2ES 2009: 2). Beyond more missions abroad, the sovereign discourse also constructed the US military and its physical infrastructure as threatened by climate change (Foley and Holland 2012b: 47), for instance through sea level rise (Foley 2012: 1), extreme weather and heat waves (Carmen *et al.* 2010: 1; Foley 2012; McGrady *et al.* 2010).

Sovereign Recommendations

To tackle the presented threats all reports called for decisive mitigation measures including laws for improved energy and fuel efficiency and a greening of the US economy and the US military (CNA 2007: 45; CNA Military Advisory Board 2014: 24; Carmen *et al.* 2010: 1). Moreover, they recommended multilateral cooperation, US leadership in the international negotiations and more ambitious and robust commitments to GHG cuts (CNA 2007: 23; Campbell *et al.* 2007: 19). However, in contrast to earlier articulations, the specific national security framing was not primarily supposed to increase attention and funding for an intrinsically environmental problem and for tackling its root causes. Instead, climate change was constructed as a defence issue that had to be tackled directly and immediately by appropriate measures in this sector that rather fall into the adaptation category:

Because the links between climate change and national security are worthy of concern in their own right, and because some significant climate change is inevitable, strategies that go beyond long-run efforts to rein in greenhouse gas emissions are required (Busby 2007: 2).

Thus, most reports demanded increased security and military planning and a preparation of the military for climate change (CNA 2007: 16). Consequently, they often directly addressed the DOD (Rogers and Gullede 2010: 9), the intelligence sector (CNA 2007: 23) and the Armed Forces (Carmen *et al.* 2010). In more detail, most reports recommended to integrate climate change into the overarching planning schemes of the security and defence sector such as the National Security Strategies (NSS), the National Defense Strategies, the Military Strategies, the Quadrennial Defense Reviews (QDR), and the National Intelligence Estimates (CNA 2007: 46; Parthermore and Rogers 2010) and called for far reaching institutional reforms (CNA 2007: 20). This included preparing military bases and equipment for climate change but also improving training exercises and scenario planning to prepare for more and different missions concerning natural disaster relief as well as stability operations (CNA 2007: 16; McGrady *et al.* 2010: 5; Campbell *et al.* 2007: 108; Werz and Conley 2012: 2). Beyond that, reports recommend to prepare critical infrastructure throughout the US for the impacts of climate change (CNA 2007: 37, 48). Moreover, to tackle mass-migration some reports suggest to strengthen border security in the US (Campbell *et al.* 2007: 59).

To facilitate these measures, a common demand within this discourse was the need for more detailed and ‘actionable’ (Parthermore and Rogers 2010: 9; Rogers and Gullede 2010:

41) social-scientific data concerning the security implications of climate change and for a better cooperation between climate science and defence actors (Parthermore and Rogers 2010: 37; Carmen *et al.* 2010: 6). Thus, on the one hand, the securitisation of climate change facilitated what others have called a ‘climatisation’ (Oels 2012a) of the security sector. On the other hand, this has also consequences for climate and social scientific knowledge production, which is expected to deliver appropriate security data. This contributed to the creation of new security concepts at the intersections of traditional military and new or civilian understandings of the term such as ‘networked security’ and ‘sustainable security’ (Rogers and Gullede 2010: 8; Werz and Conley 2012: 33–34).

The Sovereign Discourse in Parliamentary Debates

The US Congress soon began to pick up the sovereign argumentation as well and it clearly became the dominant discourse between 2007 and 2012. The tenor of the debates resembled the think tank reports and climate change increasingly was represented as a serious driver of conflict around the world (US Senate 2010: S10998), which would eventually directly affect the national security of the United States (US Senate 2008a: S4868), as this quote from Republican Senator John Warner exemplifies:

These serious implications of climate change will have security consequences for the United States. For example, there will be an increased potential for failed nations and growth of global terrorism. Another serious implication of climate change is the mass migrations of people that are likely to occur. [...]. Climate change will add stress to our weapons system, threaten U.S. bases throughout the world, and have a direct effect on military readiness (US Senate 2008a: S4885).

At various occasions, the debates mentioned or even directly quoted the think tank reports or documents from the defence and intelligence sector. In particular, they regularly referred to the 2003 DOD study (US Senate 2007b: S4990; US House of Representatives 2009b: H8481), to the 2007 CNA report (US Senate 2008a: S4868), to the 2007 CSIS/CNAS report (US Senate 2008b: S4990) and to assessments of US intelligence organisations (US Senate 2010: S10998). Consequently, many Members of Congress adopted the exact think tank phrasing. For instance, climate change as a ‘threat multiplier’ (US Senate 2008b: S4989; CNA 2007: 1), the notion that ‘we are now in an age of consequences regarding the foreign policy and national security implications of global climate change’ (US Senate 2008b: S4990; Campbell *et al.* 2007) and the connection of climate change to ‘the spread of terrorism and failed states’ (US Senate 2008a:

S4885; CNA 2007: 1). Moreover, they often pointed to the Darfur crisis as an example of the security implications of climate change in the future (US Senate 2007b: S13502). Beyond the adoption of certain arguments, Members of Congress directly acknowledged the discursive transformation of climate change from an environmental towards a defence issue, as this quote from Republican Senator Elizabeth Dole exemplifies: ‘I understand this bill is viewed by most as an environmental bill—which it is—but it is also essential to our national security. [...]’ (US Senate 2008b: S4989; US House of Representatives 2009b: H8481). Accordingly, they also openly stressed that the connection between climate change and national security is not drawn from long-known environmentalists but from actors in the defence sector itself, which considerably increased the weight of the argument (Interview 2014i, 2014q), as this quote from Democratic Senator Barbara Boxer exemplifies:

This is all from retired admirals and generals. This is not from BARBARA BOXER. This isn’t from Al Gore. This isn’t from MARIA CANTWELL. This isn’t from Senator WARNER. It isn’t from Senator LIEBERMAN. This is from our own retired admirals and generals [...] (US Senate 2007b: S13502).

Broader Transformations of the Political Debate on Climate Change

The construction of climate change as national security issue also resonated in the broader political debate outside Congress. Thus, the leadership of the DOD as well as members of the Obama administration began to refer to climate change as serious threat to the national security (Interview 2014r). One of the most influential articulations came in 2013 from Navy Admiral Samuel L. Locklear (chief of the US Pacific forces), who described climate change as the ‘biggest long-term security threat in the Pacific region’ (Bender 2013). Whereas Hillary Clinton as Secretary of State (2009 to 2013) only occasionally drew the connection, her successor John Kerry (2013-2017) (Davenport 2014a, 2014b) and both Secretaries of Defense, Leon Panetta (2011-2013) (Munoz 2012) and Chuck Hagel (2013-2015) (Davenport 2014c; Bendery 2014), were quite outspoken on the national security implications of climate change. Eventually, in May 2015, the White House compiled a report that summarised all mentions of climate change as national security issue in other federal reports (The White House 2015b).

The prevalence of the sovereign discourse also transformed the political landscape regarding who was accepted as legitimate actor to speak climate security. While the above-mentioned think tanks have been a driving force themselves in advancing this discourse, they also increasingly were empowered by this specific framing. The focus on national security and

on the military and defence sector revalued their expertise in security policy and at the same time almost closed down the debate for actors coming from a more environmentalist background such as Greenpeace, WWF, climate scientists or Gore (see also Grundmann and Scott 2014: 227). These actors would have liked to use climate security argumentations (and in the case of Gore did so for some time) but eventually realised that they could not compete with the security think tanks, at least not concerning the dominant sovereign discourse (Interview 2014m). On top of that, the liberal image of environmental groups and their linkages to climate science would have hurt the whole argumentation, which was supposed to overcome differences between conservatives and liberals concerning climate change (Interview 2014m, 2014g, 2014l, 2014i).

In general, Republicans were much less likely to believe in scientific argumentations concerning climate change (McCright and Dunlap 2011), which was reinforced by liberal bogey man Gore arguing extensively with climate science in the past (Gibbs and Lyall 2007). Thus, a further important role of the sovereign discourse and the discursive coalition of think tanks was to provide 'cover' for politicians that publicly spoke on climate change. Because of the progressively dominant representation of climate change as threat to national security, it became much easier for politicians to talk about the issue without referring to traditional climate science and without being accused of as liberal environmentalists (Interview 2014p). The political weight of national security and the favourable reputation of actors from the security sector and the US military (Gallup 2014; US Senate 2007b: S13502; Interview 2014q), contributed to move the climate debate, at least partly, away from the polarised partisan issue it used to be in the first half of the 2000s.

4.2.2 The Disciplinary Discourse: Recoding Human Security

The disciplinary discourse constitutes the second most important framing in the US debate between 1989 and 2015. As standalone discourse, it was particularly influential in the early 1990s, early 2000s and from 2010 on. Apart from these more archetypical articulations, the disciplinary discourse increasingly has been connected to the sovereign discourse and has been recoded to in the end underscore the sovereign argumentation.

Early Traces of the Disciplinary Discourse

In the late 1980s, the disciplinary discourse above all appeared in Congressional debates. At that time, members of Congress often highlighted the serious threats of climate change for the human well-being to legitimise US leadership in the negotiations about the UNFCCC:

Potential climate change presents such a serious threat to human well-being throughout the world, that the United States should undertake urgent action to support and encourage negotiations necessary to bring about a framework convention for international cooperation on limiting the emission of greenhouse gases [...] (US Senate 1990c).

However, after this short-lived peak around 1990, the discourse lost in importance in the 103rd and 104th Congress between 1993 and 1996. While the Clinton/Gore administration occasionally pointed to it to legitimise their environmental agenda, it was not until 1997 that it became more influential again, especially in the wake of the debates around the Kyoto protocol (US Senate 1997a: S10872). While the human security of people around the world kept playing a role (US Senate 2001b: S8895), Members of Congress also began to focus on the direct implications for US citizens (US House of Representatives 1998b: H6224): ‘Global warming is not just a global challenge; it is also a very local one, impacting lives of Americans in critical and potentially disastrous ways.’ (US Senate 2003b: S13485). During the early 2000s, some proponents of the earlier environmental security debates reappeared and actively participated in the construction of climate change as threat to human security, amongst others Lieberman (US Senate 2001b: S8895, 2003b: S13485) and Kerry (US Senate 2001a: S2301). Beyond these two, particularly former vice-president and presidential candidate Gore kept articulating the disciplinary discourse and was able to reach a broad audience within and outside the US (Grundmann and Scott 2014: 229; Guber and Bosso 2013: 54). He highlighted how climate change threatened the livelihoods of millions of people around the world but also linked this argumentation to the sovereign discourse by mentioning the possibility of conflicts and by urging the entire global civilisation to mobilise against climate change as it would have in times of war (Gore 2007).

The Disciplinary Discourse in Think Tank Reports

Whereas the focus was on the sovereign discourse, think tank reports also contained numerous references to the disciplinary discourse. Thus, most reports discussed the literature and political debates on the transformation of security concepts and acknowledged that: ‘Security cannot be

defined in purely military terms. Instead, governments must prepare for threats to the security of people, not just states' (Foley and Holland 2012b: 2). In this vein, they constructed threats to the human security of people in developing countries (Werz and Manlove 2009: 5) and especially in Africa (Stern and Antholis 2007: 176; Werz and Conley 2012: 3) arguing that they would be hit 'first and also most deeply' (Campbell *et al.* 2007: 7, 56, 72) and therefore were in need of help from industrialised countries. Concerning the concrete threats, the think tank reports especially emphasised the physical effects of climate change on the daily lives of individuals. Examples were land degradation, water scarcity, the spread of diseases, an increase in bush fires (McGrady *et al.* 2010: 20; CNA and Oxfam 2011: 5) but also the increase in natural disasters such as severe storms, floods or droughts, which would threaten millions of people around the world (CNA 2007: 6).

The Ambiguity of Human Security and its Links to the Sovereign Discourse

On the one hand, the articulation of the disciplinary discourse refocused the attention on the problems for individuals and away from solely militaristic or statist understandings. It legitimised support for people directly affected by its negative consequences of climate change (Campbell *et al.* 2007: 106). However, resting on the concept of normation inherent to disciplinary power, this specific construction of climate threats also created a dichotomy between an ideal norm and deviations from it. Thus, while industrialised countries (and their inhabitants) such as the US were constructed as sufficiently prepared and 'able to cope with such change' (CNA 2007: 16), poor and underdeveloped nations and people were framed as 'greatly challenged' (CNA 2007: 16) and believed to have 'less stamina to deal with climate change' (Campbell *et al.* 2007: 7). In this argumentation, it is not climate change itself that determines the level of the threat to human security, but the insufficient coping capacity of affected populations:

Poverty and underdevelopment are key factors in South Asia's vulnerability to climate change because they reduce people's capacity to cope with large-scale disasters as well as adapt for future disruptions (Foley and Holland 2012b: 7).

Consequently, to reduce this deviation from the norm of the climate resilient citizen, reports first and foremost pointed to external interventions coming from industrialised countries, thereby reinforcing existing dependencies of developing countries on external help: 'Many of the affected areas have large, vulnerable populations requiring international assistance to cope

with or escape the effects of sea level rise.’ (Campbell *et al.* 2007: 42). Closely connected, to identify people that deviate from the norm and to transform their behaviour, the disciplinary argumentation legitimised the increased surveillance of the people and groups in problematic countries. Thus, many reports urged to establish ‘early warning systems’ (Werz and Conley 2012: 18) and ‘monitoring activities’ in affected countries (CNA 2007: 23).

Moreover, although not always spelled out directly, this line of argumentation increased the pressure on developing countries to mitigate and adapt to climate change themselves. It hence added to existing demands to behave in a specific manner perceived favourable by industrialised countries such as democratisation or economic liberalisation. In line with the productive and less direct nature of disciplinary power, the demands for climate abatement in developing countries always were connected to calls for increased support of industrialised countries (CNA and Oxfam 2011: 15; Werz and Conley 2012: 22). However, together with several remarks on the rapidly increasing GHG contributions of developing countries (Campbell *et al.* 2007: 84, 97), it also deflected the attention away from the responsibility of industrialised countries to first of all mitigate themselves to tackle the root causes of climate change.

Especially in the US debate, pointing towards the human security implications of climate change in the Global South often was directly connected to the interest of industrialised countries. Accordingly, many reports connected the increased vulnerability of poor people towards the direct physical effects of climate change with a threat for industrialised countries and their national security (CNA and Oxfam 2011: 18; see also Methmann and Oels forthcoming; Oels 2011), as this quote from the 2007 CNA report exemplifies:

While the developed world will be far better equipped to deal with the effects of climate change, some of the poorest regions may be affected most. This gap can potentially provide an avenue for extremist ideologies and create the conditions for terrorism (CNA 2007: 13).

Thus, while human security argumentations did not disappear with the rise of the sovereign discourse from 2007 on, they were increasingly recoded to eventually strengthen the dominant sovereign argumentation and to legitimise sovereign military interventions: ‘[...] if climate change expands the scale or scope of such disasters, the need for military response may

increase' (McGrady *et al.* 2010: 9). Due to its global reach and specific gear, the US military was seen as especially well equipped to respond to such disasters:

Because US military forces are most likely to be committed to respond to extreme weather events where local response capacity has been damaged or overwhelmed, an increase in category 4/5 hurricanes could significantly increase the total number of events for which a military response might be appropriate (McGrady *et al.* 2010: 18).

Ultimately, think tanks reports often framed threats to human security as the first element of a chain reaction, which overburdened local governments (Rogers and Gullidge 2010: 15) and eventually led to threats to the US national security and required a response from the US military:

A health emergency involving large numbers of casualties and deaths from disease can quickly expand into a major regional or global security challenge that may require military support, ranging from distribution of vaccines to full-scale stability operations (CNA 2007: 15).

While this specific disciplinary argumentation entailed demands for adaptation and development measures to help local populations to cope with the effects of climate change (Busby 2007: 15; CNA and Oxfam 2011: 3), it also went beyond that. With reference to the responsibility to protect, it also legitimised military interventions in states such as Sudan that were deemed unable to protect their citizens (see also McCormack 2010; Hartmann 2010: 241) and which hence could become the nucleus of large scale instability and threats to the global order or the national security of industrialised countries (CNA 2007: 15). Thus, although starting out from the other end of the continuum, the disciplinary discourse as well advanced concepts such as 'networked security' or 'sustainable security' (Werz and Manlove 2009: 5) helped to facilitate a merging of climate, development and disaster response measures with military and security centred approaches (Werz and Conley 2012: 5–34; CNA 2007: 45; CNA and Oxfam 2011: 3; Carmen *et al.* 2010: 12; Werz and Manlove 2009: 5; McGrady *et al.* 2010: 3).

Parliamentary Articulations

Echoing the think tank reports, after 2007 articulations of the disciplinary discourse in the US Congress often combined human and national security. The physical effects of climate change were constructed as a threat to the human security of people around the world (US Senate 2008f:

S5341), which eventually could have geopolitical repercussions for US national security (US Senate 2008a: S4885): ‘A very large percentage of the poor people in the world live at or below sea level. The effect that rising tides will have in disrupting their lives, we should understand will have a very significant geopolitical implication’ (US House of Representatives 2014: H5346). In addition to looking at poor people in distant places, Congressional debates also constructed the human security of US citizens as threatened by climate change (US House of Representatives 2014: H5346). This refocusing towards the US populations became more common in the aftermath of hurricane Katrina in 2005 and particularly pronounced after 2010 (US House of Representatives 2014: H5346, 2011: H2351).

One important trigger for this discursive change was that politicians and media reports had begun to link extreme weather in the United States such as the 2012 ‘superstorm’ Sandy to climate change (Brulle *et al.* 2012; Bloomberg 2013; US House of Representatives 2013: H1895). Beyond that, the proponents of the climate security debate also saw a tactical advantage in highlighting the direct security implications of climate change for US citizens because the US American public was increasingly losing interest in problems that only affected distant peoples or futures (Leiserowitz 2005: 1437; Interview 2014q; CNA Military Advisory Board 2014; Melillo *et al.* 2014). As a consequence of this shift, demands for improved disaster management capabilities of the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) increased (Werz and Conley 2012: 9; CNA 2007: 7; Foley and Holland 2012b).

4.2.3 The Governmental Discourse: Introducing Risk Management and ‘Black Swans’

Overall, the governmental discourse at first sight seems to be the least common. While it was fairly widespread in the debates in the 1990s and early 2000s, it lost in importance as standalone discourse when the sovereign discourse gained traction from the mid-2000s on. Nevertheless, it often complimented the other two discourses and infused them with probabilistic risk conceptions. Especially during the 2010s, risk and insurance based argumentations that were linked to human and national security conceptions became more common again.

Early Traces of the Governmental Discourse

In the 1990s, traces of the governmental discourse appeared on a regular basis, often in connection to the planet as a whole, the environment and to human security. The key

argumentation was that climate change slowly but constantly increases the risks for adverse agricultural changes and humanitarian disasters around the world and in the US itself. One important reason for the reliance on more diffuse and long-term risk conceptions at that time was that the magnitude and specific temporal impact of climate change were still a matter of debate, at least in the political discussion (US Senate 1990a: S4345). Thus, Members of Congress frequently constructed climate change as a long-term risk that in the future could bring the earth's ecosystem out of balance and increase the risk for various negative impacts, yet without linking the problem to definitive referent objects. In connection to this argumentation, they regularly highlighted the benefits of investing in mitigation now to avoid higher costs in the future: 'The OTA estimates that a 35-percent reduction in emissions could save us \$20 billion per year or could cost us up to \$150 billion per year' (US Senate 1991a: S1756). While the focus of the debates in the early and mid-1990s was on the international level (US Senate 1991a: S1756), it increasingly shifted towards a US centred perspective at the end of the decade (US Senate 1999: S18461). The governmental discourse also appeared quite frequently during the first Bush administration throughout the early and mid-2000s. In accordance with governmental power, Members of Congress often pointed to scientific debates and findings of the IPCC and the National Academy of Sciences to highlight the potential risks of climate change (US Senate 2001a: S2301; US House of Representatives 2005: H4291).

The Governmental Discourse in Think Tank Reports: Uncertainty and Black Swans

When the think tank driven sovereign discourse gained momentum from 2007 on, the governmental discourse and more cautions and long-term threat constructions lost in importance. Instead of relying on scientific risk assessments that often construct climate change as a serious though long-term risk without identifying specific threats and referent objects (see for example IPCC 2007a: 8), traditional security actors and knowledge became the main reference point of climate security argumentations. However, like the disciplinary discourse, governmental argumentations did not disappear entirely. Thus, most think tank reports did contain governmental articulations and often connected them to the other two discourses to highlight the uncertainty of all climate predictions and the associated risks of socio-political consequences. One report quite openly stressed that the uncertainty of climate risks makes it difficult to sell it as a serious threat:

It seems true, if inconvenient, that X millions of acres of seashore, Y hundreds of millions of climate refugees, and Z billions of malaria mosquitoes will result if we don't act. [...]. Those wide ranges, coupled with the long delay time, the intangible nature of the risks, and the complexity, make this global threat a hard sell (Rogers and Gullede 2010: 21).

Interestingly, think tank reports particularly mentioned probabilistic, future-oriented risk conceptions in connection to military planning because they believed that the security community and the military were most competent concerning long-term risk management and anticipating unknown and dangerous futures (McGrady *et al.* 2010: 23; CNA and Oxfam 2011: 13; CNA Military Advisory Board 2014: 1):

The security community is also accustomed to long-term planning and preparing for a range of uncertain outcomes. These attributes are essential for managing the risks of climate change, but are lacking in most other policy communities' (C2ES 2009: 2).

In contrast, many proponents of the climate security debate believed that political actors were too caught up in short election cycles to really plan ahead for future climate risks (Interview 2014v). Thus, most think tank reports linked a risk-focused argumentation to the dominant sovereign discourse that privileges defence actors and solutions. Climate change was thus constructed as a 'black swan event' (CNA and Oxfam 2011: 13), meaning a risk with a 'low probability' to materialise, though with possibly 'high consequences' (CNA 2007: 41).

A further central diagnosis of the risk based thinking in the think tank reports was that complex threats such as climate change cannot be adequately tackled by extrapolating from the past in a linear fashion: 'In a world where the past is no longer prologue, decision makers need new methods and analytical support to accommodate uncertainty about how climate changes could affect the future security environment' (Rogers and Gullede 2010: 20). Thus, the discourse shifted from a focus on largely calculable or traditional risks, towards new, even more uncertain and non-linear forms of risk. The aim became to be able to cope with upcoming climate effects and to anticipate these uncertain, yet dangerous future events in the present by relying on probabilistic risk assessments and resilience schemes (CNA 2007: 46; McGrady *et al.* 2010: 77; Campbell *et al.* 2007: 6; CNA Military Advisory Board 2014: 9). Ultimately, many reports saw the need for a transformation of traditional security thinking to cope with these new and uncertain threats: 'The multi-faceted nature of 21st Century security threats requires a 'fresh take on security,' which allows the U.S. to be better prepared for contingencies related to climate change' (Foley and Holland 2012a: 7). Consequently, the recommendations

to tackle climate risks focused on concepts such as ‘contingency planning’ (McGrady *et al.* 2010: 77), ‘risk-assessment’ (Campbell *et al.* 2007: 36), ‘vulnerability-assessments’ (McGrady *et al.* 2010: 38–39), ‘scenario-planning’ (Campbell *et al.* 2007: 36), and ‘resilience building’ (Rogers and Gullede 2010: 3; Busby 2007: 14–15; Foley and Holland 2012b: 6–8). The increasing focus on climate change effects on the US homeland and parts of its population also led to calls to integrate climate risks into the National Infrastructure Protection Plan and the Strategic National Risk Assessment (CNA Military Advisory Board 2014: 21).

Based on the logic of normalisation and in the context of probabilistic and complex threat calculations, the referent objects and adequate behaviour in the face of climate-induced risks are not fixed a priori. Thus, many reports focused on statistically identifying certain risk groups – e.g. poor people, women and children (CNA Military Advisory Board 2014: 27; CNA and Oxfam 2011: 7) – and areas – e.g. developing countries, already fragile or failed states, areas near the sea, arid-areas (Busby 2007: 8; Werz and Manlove 2009: 4; McGrady *et al.* 2010: 36) – that are particularly endangered by first and second order climatic effects in contrast to the general population (Busby 2007: 17):

Rather than assessing a range of estimates as proof of disagreement that can be used to justify inaction, military leaders view such evidence through the lens of varying degrees of risk the estimates could represent. As military leaders, we evaluate the probability and possible consequences of events in determining overall risk (CNA Military Advisory Board 2014: 9).

Within this argumentation, climate change was constructed as a problem of circulation with the aim to ensure good circulation, e.g. global trade, the acquisition of natural resources, business travel (CNA 2007: 20; CNA Military Advisory Board 2014: 4) and prevent the bad one, e.g. excessive GHG emissions, the spread of instability and climate refugees (Werz and Conley 2012: 6–7; Werz and Manlove 2009; Busby 2007: 18). Furthermore, report recommended to closely monitor and contain the risk before its gets out of control, reaches tipping points and self-reinforcing dynamics (CNA 2007: 15; Campbell *et al.* 2007: 6). The recurring connection of climate change to the spread of dangerous viruses and the ‘risk of pandemic explosions of disease’ exemplify this point (Campbell *et al.* 2007: 77; see also Elbe 2011). Eventually, the objective of governmental power is to bring the average risk of climate change down to a tolerable level by intervening as indirectly as possible in the natural dynamics of the population. In this vein, reports suggested measures such as birth control and ‘demographic management’

or gradual changes in patterns of consumption (Campbell *et al.* 2007: 78). The objective of these governmental articulations was not to stop climate change entirely by prohibiting all GHG emissions but to keep the risk at a tolerable level – at least for the developed world – by preemptively influencing core underlying variables or by tackling some of its worst security implications (Foley and Holland 2012a: 8). The latter strategy was epitomised in ‘no-regrets’ policies that prioritise actions ‘that it [the US] would not regret having pursued even if the consequences of climate change prove less severe than feared.’ (Busby 2007: 11). In most cases these policies were not aimed at mitigation but focused on military preparedness, adaptation, resilience building and disaster aid measures (Busby 2007: 11).

Attempting to calculate the complex future threats and ways to anticipate them, many reports highlighted the need for social-scientific knowledge and closer cooperation between science and military actors (Rogers and Gullede 2010: 9). Furthermore, as already pointed out in relation to the sovereign discourse, they called for more fine-grained ‘actionable data’ concerning the future climate risks (Rogers and Gullede 2010: 14; Parthermore and Rogers 2010: 9; Burke and Parthermore 2008: 7). Climate predictions and social scientific knowledge alone were not enough but had to be ‘translated’ (Rogers and Gullede 2010: 8) to the security community and to actors in government to become useful – a task, for which many reports saw the think tanks best equipped (Rogers and Gullede 2010).

Parliamentary Articulations: Broad Risks and Economic Considerations

In Congressional debates from 2007 on the linkages to the sovereign discourse and defence actors were not as pronounced as in the think tank reports but did appear occasionally. For instance, the above-mentioned quote of CNA co-author General Gordon R. Sullivan about acting without having 100 percent certainty found its way into a Senate debate (US Senate 2008d: S5191) and Democratic Senator Cory Booker pointed to the fact that military leaders were familiar with dealing with uncertain risks:

You see, Admiral Locklear focuses on risk management and preparedness for our Nation. He does not have time for philosophy. He does not have time for politics. He is focusing on a concrete risk analysis when it comes to the safety, security, and preparedness of our Nation (US Senate 2014a: S1427).

In general, the focus of the articulations of the governmental discourse in the Congressional debates was broader than in the think tank reports. They constructed climate change as a

problem that would gradually increase the risk for all kinds of referent objects ranging from humans all over the world and increasingly also in the US (US House of Representatives 2014: H5346), the environment (US Senate 2013: S2825), and the entire planet (US Senate 2012a). Thus, there was no fixed referent object and no definite timespan, but climate change was represented as a system-wide problem that would gradually affect the entire ecosystem of the earth and all human activities.

A further argumentation pointed to the fact that even the ‘hard calculating’ insurance industry considers climate change as serious risk and incorporates it into their risk assessment schemes:

But it is not just scientists around the world, not just government agencies in the United States; you have a business whose life and death, whose profit margin depends upon understanding this issue and that is the insurance industry. If the insurance industry ends up paying out a whole lot of money when there are disasters, they are going to lose money (US Senate 2011a: S8501).

In relation to this discussion, the economic risks of doing too little now to mitigate climate change played an increasingly important role in Congressional debates. Proponents of this argumentation feared exorbitant economic costs due to increased insurance premiums (US Senate 2014a: S1450) and thus emphasised that climate risks would become one of the major economic risks for the US in the future (US House of Representatives 2013: H1893).

4.3 Political Impact

Climate security discourses had a considerable impact on the US climate debate. Overall, while the sovereign discourse clearly dominated, especially from 2006 onwards, the other two discourses played an important role as well and the intensity and specific characteristics of all three discourses varied considerably between 1989 and 2015. Apart from rendering climate change governable in a certain way, the prevailing discursive constellation in the US has also had a specific impact on the legitimatisation and the content of concrete policies and governance practices throughout the period of analysis.

Having said that, climate security discourses were never the only driving force behind climate policy in the US and other influences also played an important role. Firstly, the increasing partisan divide between Democrats and Republicans on climate change, and hence

shifting majorities in Congress, as well as the often stark difference between federal, state or local interest also contributed to the adoption or failure of key policies. Secondly, influential climate sceptics, often backed up and financed by influential business actors, also had a considerable influence on climate policy. Nonetheless, this does not mean that climate security discourses were inconsequential. Rather, they often played a key role in overcoming these constraints and eventually did have a considerable impact on policies and political practices.

In the following, I discuss the concrete political consequences on US environmental and climate, defence/security, development policy, and disaster management in greater detail.

4.3.1 Environmental and Climate Policy

Raising Attention and Contributing to International Policy

While not permanently taking the centre stage, abating climate change and legitimising appropriate international and domestic policies has always been an important part of the climate security debate in the US. In the late 1980s and early 1990s, connecting climate change and security in general helped to put climate change onto the political agenda. In 1989, mostly engaging in the disciplinary discourse, Republican Senator John Chafee (US Senate 1989b: S13293) tried to gather support for his eventually failed Stratospheric Ozone and Climate Protection Act, which aim was to ‘reduce the atmospheric concentration of these greenhouse gases’ (US Senate 1989b: S13293). In 1990, the House of Representatives passed the House Concurrent Resolution 248 sponsored by Representative Benjamin Gilman (US House of Representatives 1990). The resolution contained traces of the sovereign discourse when it stated that environmental degradation will lead to ‘increasing political instability, and will constitute a major threat to national security and global peace’ (US House of Representatives 1990: H7684). However, it also met the disciplinary discourse by pointing to problems such as food shortages and the displacement of populations and it generally was directed at increasing the attention for environmental problems and solutions in this sector (US House of Representatives 1990: H7684).

The first successful legislation was the establishment of the US Global Change Research Program in 1990 (US Government 1990). Although climate security argumentations were not the only driver, several Members of Congress pointed to the threats posed by climate change to argue in favour of the bill. For instance Representative Christopher H. Smith, who highlighted

that the ‘devastating effects which a rise of only a few degrees of temperature could have on our planet, demand that we take steps now to prevent such manmade changes on our global environment’ (US House of Representatives 1989: E3575). As the name of the programme implies, the global dimension of climate change as well as finding global solutions was important at that time: ‘However, unilateral actions taken by the United States cannot solve the problems of global climate change.’ (US House of Representatives 1989: E3575). Thus, the advocated solutions mostly focused on mitigation measures to tackle the root causes of climate change and on international cooperation (US House of Representatives 1989: E3575). This specific framing of the problem also contributed to put pressure on Republican President Ronald Reagan (1981-1989), who had never been a dedicated environmentalist (Vig 2013: 88–90), to acknowledge environmental degradation and climate change as important problems and to engage in the international debate (Harris 2002: 150, 2001: 5). Subsequently, under the slightly more environment-friendly (Pielke Jr 2000a: 21) Presidency of George H.W. Bush (1989–1993), the US actively participated in the negotiations about the UNFCCC at the 1992 UN Conference on Environment and Development. However, due to increased pressure from the business community and Congress the US did not push for binding reduction targets, which eventually led to the voluntary nature of the UNFCCC (Harris 2001: 8, 2000b: 17; Vig 2013: 91).

When Bill Clinton and his environmentalist Vice President Gore took office in 1993, environmental issues and climate security articulations received more attention. However, because the Republicans had gained a majority in Congress in 1994, this did not translate into domestic action on climate change in the mid-1990s (McCright and Dunlap 2011: 158; Kraft 2013: 112). Nevertheless, the specific global focus of most securitising articulations at that time helped to sustain the dedication to the international negotiations. Thus, the US acknowledged the first findings of the IPCC, published a Climate Action Plan that foresaw significant though voluntary emission reductions in 1993 (Brunner and Klein 1999) and in 1994 the then US Permanent Representative to the United Nations Madeleine K. Albright emphasised that: ‘We believe that America should be the world’s environmental leader, not foot-dragger’ (Albright 1995: 53). After ratifying the UNFCCC in 1996 at COP 3 in Kyoto, Undersecretary for Global Affairs Timothy Wirth pushed the United States’ commitment to binding GHG regulations. Together with various securitising articulations – amongst others from Bill Clinton himself – who made clear that ‘Many previous threats could be met within our own borders, but global warming requires an international solution. [...]’ (US Senate 1997b: S11019), this eventually

paved the way for the initial acceptance of the Kyoto protocol in 1998. However, Kyoto was rejected in Congress, mostly due to increased resistance in the Republican controlled Senate, the general reluctance to commit to binding international regimes and to fears of losing ground economically vis-à-vis emerging states that would not be bound by the protocol (Harris 2000b: 17, 2002: 153; Müller 2003: 10; Kraft 2013: 112).

The Polarisation of Climate Change: Failed Federal Policies and Progressive State Action

Around the turn of the millennium, outright climate sceptical positions, for instance advocated by Senator James Inhofe (Harris 2001: 20; US Senate 2003b: S13489) or by a well-organised non-governmental and business lobby (Falkner 2005: 590; Leiserowitz 2005: 1435; McCright and Dunlap 2011: 158)⁶ became more common and with the election of George W. Bush as President (2001-2009) gained a powerful ally (Grundmann and Scott 2014: 222; Barnett 2004). At the same time, climate security articulations, especially those linked to the sovereign discourse, declined. Key reasons were the terror attacks on September 11th 2001 and the following ‘war on terror’, which led to the emergence of another dominant discourse of danger that left little room for climate change, especially concerning the sovereign discourse (Floyd 2010: 122). Thus, particularly in Bush’s first term in office, the problematic atmosphere for progressive legislation consolidated (Harris 2002: 153; Vig 2013: 94; Fletcher 2009: 806) and US climate policy of that time consisted mostly of non-binding and technical solutions (Donner and Faltin 2007: 5; Yamin and Depledge 2004: 45–48; Eckersley 2007: 315–319).

Despite this difficult political environment, attempts for concrete climate policies based on climate security discourses did not disappear entirely. In 2003 (and again in 2005 and 2007 as Climate Stewardship and Innovation Act) the Democrat Joe Lieberman and the Republican John McCain introduced the Climate Stewardship Act. It was supposed to strengthen the research on abrupt climatic changes – a threat that became particularly prominent in the wake of the 2003 Pentagon study –, to reduce US emissions and to introduce a cap and trade system. In various debates on the act they constructed climate change as threat to the ‘environment’, the ‘economy’ and to ‘public health’ (US Senate 2003b: S13485). However, eventually none of these attempts was able to gain a majority in Congress.

⁶ Important climate sceptic actors were think tanks such as the George C. Marshall Institute, the Competitive Enterprise Institute, the Heritage Foundation, or the Cato Institute (Rosenberg *et al.* 2010: 312). But also wealthy business actors such as Koch Industries (Greenpeace USA 2011) and public figures such as novelist Michael Crichton (Wilson 2005).

Despite the absence of successful climate legislation on the federal level, several US states began to adopt fairly progressive laws concerning climate regulation (Donner and Faltin 2007: 11–14; Mildner and Richert 2010: 30–32; C2ES 2012). The climate security framing was not the only driver for this development as other factors such as more environmental-friendly governments at the state level (for instance Governor Arnold Schwarzenegger in California) also played an important role (Donner and Faltin 2007: 14–15). However, mostly relying on the disciplinary discourse, Congressional debates had begun to highlight the domestic security implications of climate change from the early 2000s on. For example, Members of Congress frequently pointed to the health risks of climate change within the United States and often combined this argumentation with references to air pollution (US Senate 2003a: S3348). Moreover, Democratic Senators Dianne Feinstein and Barbara Boxer from California at several occasions emphasised the security implications of climate change (US Senate 2003c: S13575, S13599). Subsequently, California became one of the most progressive states concerning climate regulation. In 2006, it adopted the Global Warming Solutions Act aimed at reducing GHG emissions through various regulations and market mechanisms and in 2012 a cap and trade system (C2ES 2006, 2014).

During his second term in office (2005–2009), George W. Bush became slightly more open towards climate policies (Fletcher 2009: 805; Donner and Faltin 2007: 15; Mildner and Richert 2010: 31) *inter alia* due to a changed attitude in the business community (Guber and Bosso 2013: 55) and international pressure (Scherwitz 2014). For instance, Bush now acknowledged some human interference with the global climate (Clarke 2005), reached some non-binding international agreements (Fletcher 2009: 805; Donner and Faltin 2007: 15; Mildner and Richert 2010: 31) and in 2008 even committed the US to cut its emissions to 20 per cent below 1990 levels by 2025 (Bush 2008). However, the domestic political debate on climate change at that time still was heavily polarised between Democrats and Republicans (McCright and Dunlap 2011: 158–159; Guber and Bosso 2013: 62–64). Moreover, some aspects of the climate security discourses of the 1990s, especially representing climate change as a serious though temporally and spatially distant risk did not work anymore (Leiserowitz 2005: 1438–1440). Thus, the disciplinary and governmental discourses were not able to effectively bridge the political divide, because both discourses kept constructing climate change as an environmental or development issue and long-term risk, which did not resonate well in conservative circles. As a result, it was not until the year 2007 and the re-emergence of the sovereign discourse that the climate security argumentation became more important again and

contributed to overcoming the political polarisation as well as to the legitimisation of several concrete policies.

Bridging Political Divides but Failing to Adopt Climate Legislation

With the growing influence of the sovereign discourse, the common denominator ‘national security’ raised attention and enabled a whole range of debates and attempts to adopt concrete policies on climate change in Congress. Furthermore, the Republicans had lost their majority in Congress in 2006, which further facilitated debates and legislation attempts on climate change. Thus, the number of climate legislation attempts rose from 106 in 2005/06 (109th Congress) to an all-time high of 235 in the 110th Congress (2007-08) (C2ES 2008). While not all of these attempts can be linked to climate security argumentations, many of the key pieces of legislation and proponents of these bills (mostly introduced by Democrats or moderate Republicans) drew a connection to security threats, often articulating the sovereign discourse (US Senate 2008b: S4990).

In 2007 Democrat Bernard Sanders introduced the Global Warming Pollution Reduction Act pointing out that ‘global warming poses a significant threat to the national security and economy of the United States, public health and welfare, and the global environment’ (US Senate 2007a: S309IS). Shortly afterwards, Joseph Lieberman and John Warner introduced their Lieberman-Warner Climate Security Act (2008) that was supposed to install a cap and trade system. The corresponding Congressional debates highlighted the national security consequences of climate change and referred to the 2003 Pentagon report (US Senate 2008c: S5017, 2008e: S5197). Only a year later the American Clean Energy and Security Act (also referred to as Waxman-Markey Bill), highlighted the benefits of clean energy sources for mitigating climate change and argued for energy independence, which eventually would enhance US national security (US House of Representatives 2009b: H8477).

These bills, which were often of a bipartisan nature, demonstrate how the construction of climate change as national security issue was able to bring the issue onto the agenda (see Richert 2009: 7; Brzoska 2012a: 172) and how it at least partially bridged the divide between Democrats and Republicans (see Fletcher 2009: 807). However, despite this development and the much more favourable political environment after the election of Barack Obama as President in 2009 (US Department of State 2009; Mildner and Richert 2010), none of these attempts was able to generate sufficient political support to pass both chambers of Congress. A

key reason was the still strong opposition in both parties against any measures that could negatively affect the US economy, which to a considerable extent stems from the fact that Members of Congress primarily are representatives of their home states (Interview 2014s; Mildner and Richert 2010: 26; Guber and Bosso 2013: 69).

Other factors that prevented more progressive climate policy were the rise of the overly anti-climate Tea Party movement and the economic crisis of 2008. Finally, the failed 2009 climate summit in Copenhagen made it even more difficult to gather support for progressive national climate policies. After the Democrats had lost their Congressional majority in the midterm elections of 2010 (Mildner *et al.* 2012: 3; Leggett and Lattanzio 2009) and the US saw a renewed oil and gas boom (IEA 2012: 2), Congressional action on climate change stagnated and the interest in the public declined (Pew Research Center 2012: 1). As a consequence, Obama increasingly began to govern through technical regulations issued by the EPA and the Department of Transportation (DOT) (Mildner and Richert 2010: 21) – a thoroughly sovereign for of governance – and in 2015 announced his Clean Power Plan that aimed to reduce US emissions by 32 per cent from 2005 levels by 2030 (The White House). Beyond that, the US struck a bilateral agreement with China in 2014 (Taylor and Branigan 2014) and helped to negotiate the 2015 Paris Agreement, until in June 2017 President Trump announced the withdrawal of the US.

In conclusion, although invigorating the debate, climate security articulations were not able to substantively contribute to concrete climate policies on the federal level or to significantly alter the international position of the US. Besides the already mentioned reasons, the most important inhibiting factor was that most attempts for federal climate legislation aimed at the environmental sector and tried to install measures that would mitigate climate change, for instance cap and trade system and the like. This did not fit well with the specific sovereign discourse at that time that highlighted the immediate and direct consequences of climate change for US national security and aimed at legitimising institutional responses in the defence sector. Thus, many people perceived the existing policy proposals as political tricks that only used the national security label to hide their environmental agenda (Interview 2014p, 2014i; US Senate 2009: S10148; US House of Representatives 2009a: H5555). Consequently, the main impact of the securitisation from 2007 on was not on climate policy but on security and defence policy.

4.3.2 Defence and Security Policy

The Early Days: Climate Change and Environmental Conflict

A first indication for an impact of the sovereign discourse in the defence sector was Ronald Reagan's acknowledgement that environmental degradation and resource scarcity could constitute important security problems for the US (Harris 2002: 150). Moreover, under his successor George W. Bush, climate change for the first time was mentioned in the National Security Strategy (NSS) in 1991 (The White House 1991: 2). Under the Clinton-Gore administration, climate change became an even more important issue in the NSS, which now acknowledged it as an 'environmental risk[s] serious enough to jeopardize international stability' (The White House 1994: 15; Harris 2002: 151; Below 2007: 709). The Clinton administration turned rhetoric into action so that the sovereign discourse began to firmly alter governmental practices and policy. The administration increased the funding for research into the socio-economic dimensions of climate change, which includes the national security implications (Floyd 2010: 78–79), and created a Global Environmental Affairs Directorate at the National Security Council (Simmons 1995: 2). Additionally, they appointed several people to important positions in the government who were sympathetic to the idea that environmental problems constituted important security threats. Most importantly, Sherri Goodman as Deputy Undersecretary of Defense for Environmental Security and Timothy Wirth at the State Department (Harris 2001: 151; Interview 2014q; Matthew 2013: 353).

In the meantime, environmental and climate security argumentations also led to the establishment of several programmes at the intersections between the environment and security (Floyd 2010: 102). In line with the most common variant of the sovereign discourse at that time, the focus was not primarily on preparing the actors in the defence sector for the effects of climate change or other environmental impacts, but rather on using assets from this sector for environmental monitoring purposes. For example, the Strategic Environmental Research and Development Program (SERDP), which first had been adopted in 1990, was further extended in 1994. It allowed the use of military and intelligence capabilities, for instance satellite imagery, to monitor the environment (US Senate 1990d: S12406; The White House 1994; DOD 2015a). Moreover, soon after its election, the Clinton-Gore administration had established the US Department of Defense's (DOD) Office of the Deputy Under Secretary of Defense – Environmental Security (ODUSD-ES). The tasks of this office was to oversee the DOD's environmental impact and to facilitate the cooperation with the EPA (EPA 1994; US Senate

1991b). Lastly, constructing climate change as national security issue did have some more immediate implications for the planning of the defence sector. Thus, the US Central Command (CENTCOM) under General Anthony Zinni, who later would become the lead author of an influential think tank report on climate security, began to consider questions of environmental security and to cooperate with the ODUSD-ES. Additionally, the administration established a Task Force on State Failure to assess whether environmental changes posed a threat to instable states (Matthew 2013: 355–356).

Towards the end of the 1990s and especially under newly elected President Bush, the sovereign discourse and hence the impact on defence and security policy declined. Bush even defunded or dismantled several measures of the Clinton administration concerning the linkages between the environment and security (Harris 2002: 153; Matthew 2013: 356). For instance, he renamed the ODUSD-Environmental Security to ODUSD-Installations and Environment, which led to the farewell of several influential actors in this sector, above all Sherri Goodman. Moreover, the National Security Strategies (2002 and 2006) under his Presidency no longer drew a direct connection between the environment, climate change and security (The White House 2002, 2006).

The 'Climatisation' of the Defence and Security Sector

This picture changed entirely with the re-emergence of the sovereign discourse particularly from 2007 on, which had far-reaching consequences especially in the defence and security sector. The reasons for this outcome can be found in the discursive logic of pointing to national security threats and in the specific opportunity structures and believes of the political audience in the US. Thus, most reports that have articulated the sovereign discourse include strong pleas to approach the root causes of climate change by mitigating GHGs: 'The overwhelming message is that early steps to limit or mitigate climate change are essential because longer-term efforts to adapt or anticipate may not be possible.' (Campbell *et al.* 2007: 105). However, intended or not, highlighting the national security threats of climate change focuses the attention on short-term solutions to defend against these threats and precisely not on long-term mitigation measures – especially in a country with the largest military in the world.

A further reason for the impact of the sovereign discourse particularly on the defence and security sector and its problems to legitimate climate policy was that the bridging of the political divide was only partial. Many former conservative sceptics now accepted that the

climate was changing and that this could have severe implications for the national security of the United States (Interview 2014p). However, many still doubted that anthropogenic emissions played an important part in this development and rather believed – or chose to believe – in natural factors, hence they kept opposing mitigation measures that from this point of view would be useless and could allegedly slowdown economic growth. Instead, they favoured adaptation or ‘no regrets’ measures such as integrating climate change into military planning, which would enable the US to cope with the inevitable effects of climate change and in case that the problem was less severe nevertheless strengthened the US military (Interview 2014p; Busby 2007: 11).

Finally, many of the mentioned think tanks that predominantly drew on the sovereign discourse, first of all aimed at transforming security policy and only in second place wanted to influence climate policy (Interview 2014q). Moreover, they were very sceptical about merely using a national security or military framing for getting climate legislation through Congress as this could easily be dismissed as ‘political branding’ with little substance (Interview 2014i, 2014q). As one interview partner put it ‘standing beside a soldier does not make an environmental bill security relevant’ (Interview 2014p). Accordingly, it does not come as a surprise that the prevailing sovereign discourse had an impact on defence and security policy.

In terms of concrete consequences, from 2007 on, Congress quickly began to adopt the national security framing and to discuss respective legislation. In this vein, many arguments and recommendations from the think tank reports that targeted the defence sector (Campbell *et al.* 2007: 20; CNA 2007: 46; Parthermore and Rogers 2010) directly ended up in the debates. Members of Congress argued that ‘severe weather manifestations of climate change have a direct impact on our armed services and national security’ (US House of Representatives 2012: H2451). They hence particularly considered the implications for the defence sector and the US military and urged these actors to integrate the national security threats of climate change into their planning (US Senate 2008a: S4885, 2009). For instance, Republican Senator John Warner stated that ‘[...] there are also direct impacts on U.S. military systems, infrastructure and operations. Climate change will add stress to our weapons system, threaten U.S. bases throughout the world, and have a direct effect on military readiness’ (US Senate 2008a: S4885). The primary aim of these articulations was not anymore to address the root causes of climate change by mitigation measures, but to directly address the security implications of climate change, as this quote from Democratic Senator Whitehouse summarises:

I rise to discuss the importance of assessing and planning for and mitigating the national security effects of climate change. Our changing climate is not simply a green issue invented by environmentalists and conservationists; climate change threatens our strategic interests, our military readiness, and our domestic security in many ways (US Senate 2012b: S7017).

In 2007, as first concrete attempt for legislation in this direction, the Global Climate Change Security Oversight Act, called on the DOD to assess its own preparedness towards climate change effects and to increase the research on the military consequences of the issue. Moreover, it required ‘the Director of National Intelligence to submit to Congress a National Intelligence Estimate on the anticipated geopolitical effects of global climate change and the implications of such effects on U.S. national security.’ (Govtrack 2007). Although the bill died in Senate, it set the stage for the adoption of the National Defense Authorization Act of 2008. This obligated the DOD to integrate climate change into the next NSS and National Defense Strategy as well as into the Quadrennial Defense Review, the most important and influential publicly available planning document of the DOD and the Armed Forces (US Congress 2008: 122).

Accordingly, the National Defense and Military Strategy of 2008 and 2011 included climate change (DOD 2008: 5) and considered the possibility that it could weaken the ability of already instable regions to withstand natural disasters (DOD 2011a: 2). The QDR 2010 contained a whole paragraph on climate change and, using formulations put forward by many of the think tank reports, constructed it as an ‘accelerant of instability or conflict’ and as a serious geopolitical threat that will profoundly change ‘the operating environment, roles, and missions that we undertake.’ (DOD 2010: 84). As a consequence, the report advised the DOD to take the effects of climate change into account concerning its ‘operating environment, missions, and facilities.’ (DOD 2010: xv), thus promoting the ‘climatisation’ (Oels 2012a) of the defence sector. The QDR 2014 as well included many passages on climate change and predicted that the issue would have direct consequences for the DOD’s activities: ‘The impacts of climate change may increase the frequency, scale, and complexity of future missions, including defense support to civil authorities, while at the same time undermining the capacity of our domestic installations to support training activities’ (DOD 2014b: 8). Furthermore, the NSS 2010 and 2015 again included climate change as ‘key global challenge’ (The White House 2010: 47) and ‘urgent and growing threat to our national security’ (The White House 2015a: 12).

Besides these rather broad strategy documents, climate change also increasingly appeared in various more concrete planning schemes of the DOD. Thus, the DOD's Defense Science Board Task Force discussed climate change in a report of 2011 and emphasised the central role of the DOD concerning the issue (DOD 2011b: xv). In 2012 (DOD 2012) and 2014 the DOD developed even more detailed Climate Adaptation Roadmaps (in 2010 and 2014), which depicted the issue as a 'threat multiplier' (a phrase coined by the 2007 CNA report) and 'immediate risk to national security' (DOD 2014a: 1). Finally, the DOD integrated climate change into its Science, Infrastructure, Research, Development & Acquisition Plan as well as into its Strategic Sustainability Performance Plan 2014 (DOD 2014c). In 2014, the United States' Central Command (USCENTCOM) too incorporated climate change into one of its regional risk assessments (DOD 2014d). Responding to a Congressional request (US Senate 2014b), in 2015 the DOD published a report on the National Security Implications of Climate-Related Risks and a Changing Climate. The report assessed which climate-related security risks the DOD sees for each combatant command and how they plan to tackle them. The conclusion of the report underlines the far-reaching transformation of the climate security debate from a long-term risk towards an immediate security threat: 'The Department of Defense sees climate change as a present security threat, not strictly a long-term risk' (DOD 2015b: 14). Subsequently, the US combatant commands adopted a range of concrete measures to deal with the security threats posed by climate. Examples are: training activities, the improvement of infrastructure, vulnerability assessments, the planning of humanitarian disaster relief operations and the close cooperation in this respect with partners (civilian and military) all around the globe, as well as the consideration of geopolitical changes especially in the Arctic (DOD 2015b: 6-7).

Moreover, following the recommendations of many think tank reports (Werz and Manlove 2009: 4-5) and as a result of the integration of human security conceptions into the dominant sovereign discourse, the DOD increasingly began to cooperate with civilian and development actors such as the DHS, USAID but also with academics (Hartmann 2010; DOD 2010: 87). The securitisation of climate change hence transformed the appropriate practices in this field to a considerable extent. In fact, under catchphrases such as 'Great Green Fleet' (US Navy 2010: 6, 2016) the DOD and the armed forces have already implemented some of these measures and until 2010 had already spend \$2.7 billion on energy efficiency (Gilbert 2012: 6-7). Beyond these efforts in the sector of energy efficiency, the increased cooperation with civilian actors also applied to disaster response and humanitarian missions. According to

several Congressional debates the ‘Department of Defense recognizes that it has a role to play in supporting humanitarian assistance and disaster relief missions’ (US Senate 2014a: S1469). Thus, it promoted ‘whole-of government’ or ‘whole-of-community’ approaches that included very different types of actors to tackle today’s complex security threats and in particularly climate change (DOD 2010: 70, 2014b: 22, 2012: 6; Interview 2014r). One concrete example is the close cooperation of the African Command (USAFRICOM) with development organisations such as USAID (DOD 2015b: 9; see also Hartmann 2010). All of these measures exemplify the far-reaching impact of the ‘climatisation’ and of the governmentalisation of security. This has not only led to an integration of climate issues but also helped to transform governance practices in the US defence sector in general.

Amongst the individual branches of the US armed forces, the Navy was most active on climate change (Interview 2014o). Important reasons were that changes in the weather and climate of its global areas of operations had always been an important part of the Navy’s planning and that in cases of natural disasters it often was one of the first actors that were able to deliver humanitarian aid. Moreover, the Navy had realised that its coastal bases – particularly Norfolk, Virginia – would soon seriously be affected by sea level rise, a problem that was also debated in Congress (US House of Representatives 2014: H5348). Furthermore, the Navy itself had been one of the actors that had contributed data to the research on climate change, e.g. when its submarines helped to measure the thickness of the arctic ice shelves (US Navy 2009; Interview 2014o, 2014s; US Navy 2010: 5). Interestingly, David Titley, who later became a member of the second Military Advisory Board (MAB) of the CNA and an outspoken proponent of the sovereign discourse, had been involved in the Navy’s research on the adverse effects of climate change (Interview 2014o). Consequently, the Navy was one of the first branches of the armed forces that established a Task Force on Climate Change in 2009 (US Navy 2009), a Task Force on Energy in the same year, and in 2010 published a Climate Roadmap that acknowledged that ‘Climate change is a national security challenge with strategic implications for the Navy’ (US Navy 2010: 3). An important side-effect – that also applies to the other branches of the armed forces – is that in order to spend money on climate change, the Navy had to classify it as a threat to national security (Interview 2014o). Thus, the success of the sovereign discourse was also partly owed to these institutional and financial constraints.

The Intelligence Sector

Finally, the construction of climate change as national security issue also had repercussions for the intelligence sector. While the Intelligence Authorization Act for the Fiscal Year 2008 that had tried to order the intelligence agencies to consider the national security and geopolitical implications of climate change eventually failed, it nevertheless opened the doors for important changes in how the intelligence sector understood climate change. Thus, in 2008 the House Permanent Select Committee on Intelligence and the House Select Committee on Energy Independence and Global Warming published a National Intelligence Assessment on the National Security Implications of Climate Change (Fingar 2008). Additionally, climate change was mentioned in the 2009 Annual Threat Assessments for the Senate Select Committee on Intelligence (Blair 2009). Despite some heated debates in Senate that doubted the usefulness of spending intelligence resources on climate change (US Senate 2009: S10148-S10149), in 2009 the CIA founded a Center for Climate Change and National Security (CIA 2009). Even though it discontinued to exist as independent office from 2012 on, the CIA continued to monitor the security implications of climate change in several regional departments (Broder 2012; Interview 2014q).

4.3.3 Development Policy

Due to the incorporation of the disciplinary discourse into the overarching sovereign argumentation and the construction of endangered Southern populations as major threat, the climate security debates since 2007 also impacted on the development sector. Thus, USAid has acknowledged the security dimension of climate change in several of its reports. The central USAid Climate Change and Development Strategy 2012-2016, for instance, mentioned climate change in relation to food security (USAid 2012: vi), but also directly linked the disciplinary to the sovereign discourse when it adopted the think tank phrasing of climate change as ‘threat multiplier’ (USAid 2012: 4) and stated that:

If not well managed, climate change may exacerbate water scarcity and increase conflicts among water users; in some cases it could trigger displacement and contribute to national and regional resource governance tensions, threatening U.S. national security objectives in key regions of the world (USAid 2012: 3).

The proposed solution ranged from supporting developing countries with mitigation and adaptation measures, to measures enhancing their resilience, or plans to stabilise regions that could be particularly affected by climate effects in the future. It is difficult to assess whether this has generated additional funding. Yet, the close interlinkages between the disciplinary and sovereign discourse have certainly legitimised a closer cooperation between civilian agencies and the military sector (see also Hartmann 2010; Gilbert 2012) epitomised in concepts such as ‘new security threats’, ‘networked security’ and ‘sustainable security’ (Rogers and Gullede 2010: 8; Werz and Conley 2012: 33–34).

The USAid Climate Change Strategy 2012-2016 mentioned key documents and findings of the defence sector such as the NSS, the QDR, and the National Intelligence Estimates to argue for the need to tackle climate change. Referring to the Executive Order 13514 and the Interagency Task Force on Adaptation (The White House 2013) it furthermore proposed a close cooperation of all US branches of government to approach climate change (USAid 2012: 7–8). Directly referring to the implications of climate change for national security it also has advised its Office of Conflict Management and Mitigation to research ‘how specific climate factors contribute to the risk of conflict and affect the resilience of social structures and institutions’ (USAid 2012: 16). It furthermore recognised the close interlinkages between US defence and development policy in relation to climate change:

The current U.S. National Security Strategy recognizes that development is a core pillar, together with defense and diplomacy, of national security policy. It is therefore imperative to ensure a strong development voice in the debates and dialogues that shape that policy (USAid 2012: 20).

A 2008 published report of CSIS on Integrating 21st Century Development and Security Assistance summarised these developments and found a ‘growing involvement of the U.S. Department of Defense as a direct provider of ‘nontraditional’ security assistance’ and that the ‘Pentagon’s role as a direct provider of foreign assistance has surged’ (CSIS 2008: v, vi). Finally, another concrete example of this kind of cooperation is the Denton Program, which is jointly administered by USAID, the Department of State, the Defense Security Cooperation Agency (DSCA) and DOD. The programme allows certain aid organisations to use the DODs transport capabilities and is mentioned in the 2015 DOD report and by USAid as an important cornerstone in the plans to cope with the security threats of climate change (DOD 2015b: 6; USAid 2016).

4.3.4 Disaster Management and Insurance Solutions

The political debate about human security threats of climate change and connections to domestic disaster management schemes particularly gained traction in the 2010s (US House of Representatives 2013: H1895). Several Congressional debates urged the institutions in the US disaster management sector (e.g. FEMA, the Army Corps of Engineers and the DHS) to consider climate change in their planning (US Senate 2011b: S8711). Subsequently, FEMA included climate change into various disaster management plans (FEMA 2012) and the DHS mentioned climate issues in its National Infrastructure Protection Plans (DHS 2013; see also Brzoska 2012a: 174–175). Moreover, articulations pointing to the governmental discourse, increasingly led to a focus on the insurance sector to cope with the possible damage of climate change in the United States (US Senate 2014a: S1422). In line with the concept of normalisation and governmental tendencies to stabilise risks at a tolerable level, risk management and insurance solutions increasingly played a more central role in coping with climate change. Similar to what happened in the wake of the integration of climate change into defence policy, this development shifted the attention away from tackling the root causes of climate change through mitigation measures, towards accepting a high degree of climate change and focusing on insuring against the worst impact or increasing resilience to withstand the future shocks.

While many actors in the US seemed to accept a quite high level of risk, some also cautioned that eventually the insurance system could be overwhelmed by too extreme climatic changes: ‘In other words: the increasing intensity of many natural disasters means increasing risk of catastrophic loss—and one day, we may reach the point where the insurance industry will be unable to cover our losses.’ (US Senate 2014a: S1472). Hence, it was feared that climate change could spiral out of control, exceeding the bearable level of risk for the US and its economy. Thus, economic argumentations that compared the costs of present mitigation versus the cost of adaptation, insurance and resilience in the future have become more prominent again towards the middle of the 2010s.

4.4 Tracing the Preconditions for Specific Discourses

This section sheds light on the historical, cultural and institutional preconditions that enabled the specific securitisation of climate change and its political consequences in the US. Exploring the context provides insights into the questions why certain discourses (and specific variants of

them) have emerged in the first place at a given point in time as well as why they resonated so well in the US political debate. The contextual preconditions in the US mostly fall into two separate though closely related categories. Firstly, I elaborate on broader underlying characteristics that serve as a relatively stable context in the US case and that have not changed much over the period of investigation. Secondly, I discuss less stable factors that have contributed to the changes over time in the discursive representation of climate change.

US National Security Culture

A first relatively stable precondition concerns the specific history and political culture of the US when it comes to questions of security, defence and foreign policy. According to large parts of the public and political actors, the US stood on the right side of history in many of its wars (the struggle for independence from Great Britain, WWI and II, the Cold War, the first Iraq War etc.). Together with its origins as a nation of settlers who escaped problematic political circumstances in Europe, this has fuelled a discourse of exceptionalism according to which the US is constructed as a ‘shining city upon the hill’, as the indispensable nation and ‘chosen country’ that ensures order and peace around the world (Kutz 2011; Koschut 2011: 31). Based on this narrative, many people have an overly positive opinion of the defence sector, the military and about questions of national security. Talking about issues of national security, about the self-interest of the US and the direct projection of its political and military power to advance its righteous goals is a normal political position and does not spark much resistance (Sperling 2010: 174; Dalby 1990).

This stands in stark contrast to for example Germany, where such questions are much more delicate because of its troubled history of abusing political and military power in the past (Wagner 2008; Kirchner and Sperling 2010; Harnisch and Wolf 2010). Moreover, questions of national security have been a central factor in the construction of the US identity in general (Bialasiewicz *et al.* 2007; Campbell 1992). Lacking a homogenous people and long-reaching common ancestry, patriotism and political unity especially in times of crisis have been a recurring element in the US (Kutz 2011: 43). Thus, ‘rallying around the flag’ and supporting the troops against a dangerous ‘other’ have always played an important role in constituting US identity and to distinguish the domestic from the outside (Campbell 1992: 3; Sperling 2010: 174). They represent a crucial cornerstone that holds together the country as a nation, but which has to be renewed constantly (Campbell 1992: 13) often with reference to broad ‘discourses of danger’ (Campbell 1992: 57), such as the Cold War, islamist terrorism or even, at least to a

certain extent, environmental security and climate change (Floyd 2010: 65). Consequently, the sovereign discourse has resonated well in the country and the invocation of climate change as threat to national security has been a powerful tool to overcome ideological and partisan differences and to increase attention for the issue.

The Role of the Military

Closely connected, actors in the defence and security sector, such as think tanks focusing on security policy, but especially the armed forces themselves have a remarkably favourable reputation in the US today (Gallup 2014; Sperling 2010: 173). Many perceive the military as positive, pragmatic and neutral actor that stands above the political turf wars in Washington DC or as the sole voice of reason that only problematises the issues that really matter, or in this case, defines 'real threats'. Consequently, the opinion of the military or retired military personnel carries a huge weight and thus was a crucial component in generating attention for the sovereign climate security discourse from 2007 on. Moreover, even though it is supposed to be neutral, the military and the defence sector take a much more active role in political debates than in other countries (Rid 2011: 113). While active military officials have to be careful not to take sides in partisan debates, they do participate in political debates if they think something could represent a national security threat or directly affect the military (Interview 2014j). Beyond that, retired military personnel are less restraint to express their opinion and even in retirement their voice carries a lot of weight (Rid 2011: 114), as illustrated by the impact of the two MAB-CNA reports and other discursive interventions of former military officials.

Aside from questions of reputation and political influence, the US military – as largest military in the world (Sperling 2010: 172, 197) – plays a much more active role on the domestic and global level compared to other countries (Rid 2011: 107). As the world's most powerful military with hundreds of bases and naval units around the globe (D'Efilippo and Ball 2013), the US armed forces perceive themselves as one the most important forces for global order and beyond that are often the first actors that are able to react in situations of crisis (Interview 2014t; Sperling 2010: 172, 197). Be it humanitarian aid after extreme weather events, such as in the case of the tsunami in the Indian Ocean in 2004 or the cyclone Nargis in Myanmar in 2008 (Interview 2014t), or robust interventions in countries destabilised by the predicted 'resource wars' to come. Thus, it is a widely shared belief amongst US politician and the general public that the military can play an important role in resolving crises all around the globe (Rid 2011: 112). Accordingly, the US military is well aware that they will have to deal with the effects of

climate change in one way or another and therefore have a pronounced self-interest to plan ahead for these situations (Interview 2014r, 2014o; US Navy 2009). Moreover, the military – for instance the Army Corps of Engineers (2015) and the National Guard – plays a vital role in the domestic disaster response and reconstruction efforts. One fairly recent example is the National Guard’s involvement in the aftermath of hurricane Katrina in 2005 with the deployment of over 50,000 troops (US National Guard 2015), even though it also attracted criticism as excessive militarisation and victimisation of affected citizens and thus exemplified the problems securitising natural disasters (Tierney *et al.* 2006; Giroux 2006; Masquelier 2006). Thus, it is understandable that the armed forces play a much more active role in the US climate security debates than in other countries and that hence the sovereign discourse and especially the focus on security and defence policy found such a resonance in the country.

The Institutional Setup

Another stable precondition is the specific institutional setup of the US political system. On the one hand, the presidential system gives the President as commander in chief a considerable degree of freedom in foreign and defence policy (Oldopp 2014: 59). This reinforces sovereign power tendencies and certainly contributes to the political value of designating something as issue of national security (Interview 2014o). On the other hand, lacking an automatic parliamentary majority, the President and his political party have much less direct influence when it comes to domestic politics and to ratifying binding international commitments. Thus, getting climate legislation through Congress can be a tiresome task (Oldopp 2014: 62). Even a majority of the own party does not guarantee success due to the fact that members of Congress first of all must answer to their local constituency, which weakens party discipline considerably (Braml 2011: 123). This situation can give incentive to govern issues through executive orders and regulations – as has happened under Obama in relation to the Clean Air Act and EPA regulations –, but also to approach them by integrating them into the planning processes of the governmental agencies over which one wields some control such as the DOD and the intelligence agencies. Beyond that, the armed forces themselves had an incentive to construct climate change as a threat to US national security to be able to integrate the issue into their planning and to spend money on it (Interview 2014o).

A further peculiarity is the *de facto* two party system that follows from the majority vote electoral law (Gellner and Kleiber 2012: 142). This often leaves less room for political compromises and contributes to the polarisation of certain issues such as climate change

(Gellner and Kleiber 2012: 171). It certainly contributed to the widespread polarisation between Republicans and Democrats concerning climate change, especially from the mid-1990s on (McCright and Dunlap 2011: 156; Grundmann and Scott 2014: 233). This was further fuelled by the Clinton/Gore administration's aggressive campaigning for environmental regulation, which rendered environmental and climate issues as distinctly liberal (Falkner 2005; McCright and Dunlap 2011; Interview 2014t). Thus, appealing to the unifying qualities of national security was one of the few options to overcome the seemingly unbridgeable divide between the two camps concerning climate change.

Perceptions of Nature

The last fairly stable precondition of the US is also connected to its specific historical experience, namely its origins as a nation of settlers and explorers who in their drive west had to fight for their survival in an untamed and inhospitable environment (Merchant 2007; Steinberg 2013). In contrast to the crowded European countries and especially to Germany, the US always was and still is a very sparsely populated country in which nature often can be dangerous and intimidating rather than something that is scarce and has to be protected (Ulbert 1997: 22). Although there have been conservation movements in the opposite direction and the US once was leading concerning environmental regulation, this specific experience still is engrained in the collective memory and has given pure environmentalist discourses that want to save and preserve nature as such a hard time (Isenberg 2017; Turner 2009). Nature, hence, is primarily conceptualised as something that has to be tamed and made useful for the benefit of humans and their economic development (Ulbert 1997: 22–23). These cultural factors explain to a certain extent why discourses (and actors pursuing them) that frame climate change primarily as environmental issue were not able to generate widespread support in the country.

Foreign Policy Between Interventionism and Isolationism

Besides these relatively stable characteristics, there are several contextual factors that have changed over the study period and to a certain extent help to understand the changes in the dominant climate security discourses. A first factor concerns the US-American tradition to oscillate between phases of isolationism and interventionism concerning its foreign policy and overall dedication to international regimes (Cox and Stokes 2012; Roskin 1974; Koschut 2011: 33). This also applies to its climate policies and the commitment to the international negotiation process (Harris 2000a, 2001, 2009). While the US was highly involved during the founding

days of the IPCC and UNFCCC, the concern for the international dimension of climate change and international solutions decreased considerably towards the end of the 1990s. The specific focus and argumentation of Congressional debates underlines this observation. Thus, the US climate security debate in the 2000s was much more focused on the US itself and less influenced by international or intergovernmental actors than in other countries. Towards the end of the second Obama administration, this changed again to a certain extent and made possible several bilateral arrangements on climate change with China and the approval of the Paris Agreement in 2015. The election of Donald Trump in 2016 and the subsequent announcement to drop out of the Paris Agreement in 2017 as well as to delete climate change from the NSS (Borger 2017) again point into the opposite direction.

The Value of Different Forms of Knowledge and the Role of Think Tanks

During the beginning of the study period in the 1990s, politicians regularly referred to scientific findings (e.g. from the National Academy of Sciences, later the IPCC or the NOAA) on climate change to justify their securitising articulations in Congressional debates. This contributed to the prevalence of more cautious risk-based discourses at that time. Hence climate change was often depicted as an important though still distant environmental problem (see Oels 2011: 21–22). Some actors such as Gore kept pursuing this line of argumentation during the 2000s, however, they increasingly had problems to convince the relevant audiences. The reason was that lobbyists sceptical of climate change and several Republican politicians had successfully linked scientific findings to liberal, left-wing and environmentalist positions (Eshelman 2014). Thus, many conservatives perceived an argumentation based on scientific findings not as apolitical and neutral expert information, but as clearly aligned with a specific political position. This anti-scientific sentiment grew even stronger in the 2000s with the formation of the tea party movement. Ultimately, it culminated in the ‘post factual’ or ‘post truth’ age of the 2016 Presidential election and the subsequent behaviour of the Trump administration (Pazzanese 2016), which in the end led to the abandonment of the Paris Agreement in June 2017. In connection with the tradition of the US-American media for ‘balanced’ reporting – which often culminates in giving mainstream positions and fairly obscure climate sceptical theories an equal amount of coverage – this considerably devalued scientific findings in the political debate (Eshelman 2014).

At the same time, and partly as a result of this development, think tanks specialised in security policy and associated forms of knowledge – and thus engaging in the more popular

national security discourse – began to fill the gap. They replaced the findings of climate science or at least got into the mediator position and ‘translated’ these findings into a more appealing political language. This development laid the ground for the success of the sovereign discourse from the mid-2000s on. It also helps to understand the For one thing, these organisations and their arguments were too close to climate science and actors such as Gore and hence increasingly perceived as partisan actors from the liberal, left-wing spectrum. Apart from that, lacking any background or credibility in security and defence policy they could not provide the at that time ‘correct’ kind of knowledge. Consequently, they could not have participated in the climate security debate without hurting the argumentative strategy that tried to overcome the polarisation by securitising climate change as threat to the national security of the US (Interview 2014m, 2014g).

Finally, the success of the sovereign discourse in the 2000s was closely linked to the specific role of the mentioned think tanks in the US political system, which clearly distinguishes this case from my other two country cases (McGann 2007; Braml 2011: 117). Due to the high value of questions of national security, but also less strictly organised political parties, these security policy focused think tanks are very well networked to political circles and exert a considerable degree of influence (Abelson 2006, 2010; Interview 2014u). This applies especially to more or less non-partisan think tanks such as CNA, CSIS, the Council on Foreign Relations, CCS, the Wilson Centre and the Brookings Foundation, which are citable for government agencies. It even more so relates to those that have a security clearance thus carry our classified work for the government, for instance CNA or RAND (Interview 2014u). Politicians currently not working in the government often stay a few years in one of these think tanks to stay connected and to later take on a position in government again after the next elections (Interview 2014u, 2014h; Braml 2011: 117). Moreover, these think tanks often carry out the development of certain policies for politicians who – as isolated political entrepreneurs – do not have the time to dig into a topic in this depth (Braml 2011: 123). At the same time, they can provide cover for politicians that come out with a new policy by organising media coverage and support for the proposal (Interview 2014g; Braml 2011: 123). This very active and important role of political think tanks, especially concerning security and defence policy, is not as common in Germany and Mexico (see Gellner 1995).

4.5 Conclusion: United States

Compared to other regions of the world, the process of securitising the environment and climate change started relatively early in the US. Thus, questions of security already played a role at the very beginning of the political debate on climate change in the late 1980s and early 90s and contributed to put climate change on the political agenda in the first place. At that time, the US debate was rather broad, included several environmental threats beyond climate change, and relied on all three climate security discourses.

This first phase was influential in numerous ways: It raised the attention for environmental destruction and climate change in general and helped to establish these issues as key themes in the political debate. It thus changed the political meaning of climate change away from an exclusively environmental concern mainly debated by small groups of experts towards a pressing political issue that concerned the whole of society and many sectors of government. It thus firmly established the idea in the US political debate that the environment was a legitimate security threat, which eventually made it much easier to revive the climate security debate in the mid-2000s. At the same time, the environmental and climate security debate also had an impact on how people understood security in general. It helped to open up traditional state centred conceptions of security, introduced new referent objects, practices and new modes of response, hence exemplifying what others have labelled as the ‘climatisation of the security field’ (Oels 2012a) and which I would call the ‘bidirectional qualities’ of securitisation.

The securitisation of climate change also had concrete implications for policymaking. Due to the global focus of the climate security debate at that time, it helped to keep the US involved in the international negotiations on climate change i.e. the UNFCCC and first COPs. Moreover, it facilitated the funding and implementation of a number of research programmes on climate change, helped to adopt policies at the intersections between security and environmental policy and led to the inclusion of climate threats into US National Security Strategies. However, despite this initial success, it eventually fell short of legitimising far-reaching policies – not least due to growing opposition towards any form of climate legislation from Congressional Republicans in the mid-1990s – and increasing lost its appeal towards the end of the 1990s.

While the late 1990s and early 2000s hence saw much less securitising articulations, the debate reappeared in the mid-2000s. This second phase of securitisation – which peaked in 2007 – almost exclusively focused on climate change as the main danger. In stark contrast to earlier debates, the sovereign discourse now clearly became dominant. Environmental or economic understandings of climate change as well as the formerly more influential disciplinary discourse were increasingly side-lined or transformed to make way for the construction of climate change as one of the main threats to US national security. This gradually delegitimised actors without experience in national security policy such as scientists and environmental NGOs. At the same time, it established a range of security policy focused think tanks and military institutions as the main proponents of the climate security debate.

In terms of political consequences, it again raised the attention for climate change considerably, especially as an issue of ‘high or hard politics’ and convinced more conservative audiences of the severity of the problem. This helped to bridge the political divide between Democrats and Republicans, which eventually led to increasing attempts for – often bipartisan – federal climate legislation. However, not least to the dominant narrow understanding of national security that prevailed at that time, the impact on federal climate policy and on the behaviour of the US in the international climate negotiations was measured. Instead, the now dominant construction of climate change as immediate national security threat helped to further ‘climatise’ the security and defence sector by influencing a range of key security and defence policies and associated best practices such as the NSS, the QDR, and National Defence as well as Military Strategies.

The combination of the sovereign with the disciplinary discourse also contributed to a rearrangement of US development programmes and increased networking efforts between civilian and military actors concerning their responses to climate-induced disasters. A gradual revitalisation of the disciplinary discourse and an amplified focus on threats to US citizens from 2010 onwards also helped to increase efforts for domestic disaster management thereby constituting the DHS and FEMA as important actors in the climate debate. While never becoming particularly influential as a standalone discourse, the governmental discourse gradually rose in importance in direct connection to the other two discourses. Thus, sophisticated risk management strategies, insurance solutions and attempts to govern possible future developments increasingly made their way into military and civilian strategies to cope with climate risks.

In conclusion, the securitisation of climate change in the US stretched out over a long period and in the 2000s underwent a crucial discursive transformation that led to the almost undisputed prevalence of the sovereign discourse. Ultimately, it was highly successful in terms of redefining what climate change meant as a matter of political debate and had a considerable impact on the security and defence sector. Whereas this specific form of securitisation was able to raise attention for climate change and to move forward the domestic debate to a certain extent, it also had several problematic side-effects and failed to considerably legitimise progressive long-term climate solutions. Hence, the US case demonstrates the power securitisations anchored in the sovereign discourse and traditional conceptions of security still can have when it comes to raising attention, setting the agenda and transforming political practices. Moreover, it provides some insights concerning the bidirectional qualities of securitisation, in this case illustrated by the extensive climatisation of the security and defence sector. At the same time, it also exemplifies the limits of the sovereign discourse and narrow national security conceptions when it comes to influencing climate policy. Beyond that, the US case underscores Foucault's claim concerning the close interconnections between the three forms of power and particularly elucidates how a dominant discourse can incorporate and transform other representations.

5. Germany: Climate Change, Human Security and Southern Populations

5.1 Introduction

Rising global temperatures will jeopardize the bases of many people's livelihoods, especially in the developing regions, increase vulnerability to poverty and social deprivation, and thus put human security at risk (WBGU 2008: 1).

The above quote stands at the beginning of one of the most influential reports on climate change and security published by the German Advisory Council on Global Change (WBGU) at the peak of the global climate security debates in the year 2007. The quote pointedly summarises the dominant discourse in Germany that has primarily constructed climate change as a threat to the human security of poor individuals in developing countries. Beyond this focus on human security, governmental risk conceptions were also quite common. Traditional and state focused national security conceptions in line with the sovereign discourse were not entirely absent in the German debate. However, they were never able to gain the same influence as in the US and most importantly, due to the specific discursive environment in Germany, did not lead to a large-scale integration of climate change into the planning of traditional security actors. Instead, the prevailing disciplinary and governmental discourses led to a focus on measures to mitigate GHG emissions and to support developing countries to adapt to the security implications of climate change.

Concerning the empirical material⁷, this chapter is based on a discourse analysis of over 60 relevant parliamentary debates on climate change and 35 key publications from research institutions, NGOs and think tanks that have drawn connections between climate change and security. Moreover, it includes findings from 25 semi-structured interviews with government officials, scientists, and experts from NGOs and think tanks.

⁷ This chapter builds partly on the empirical research conducted by my colleague Zehra Wellmann in the DFG funded ClimaSec project on the securitisation of climate change.

5.1.1 Germany's Climate Policy: A Global Forerunner?

Why include Germany as a case? Despite its rather small geographical expanse, due to its large population of over 80 million and its highly industrialised economy (5th biggest economy worldwide, OECD 2012: 8), Germany is one of the larger contributors to global GHG emissions and in 2016 ranked 6th concerning its current total emissions (Global Carbon Atlas 2016). On average it emitted about 800 metric tons of carbon dioxide equivalent (tCO₂) per year between 1990 and 2012 (about 2.4 per cent of global emissions) and had per capita emissions of roughly 9 kt per year (World Bank 2016; Clark 2011). While the per capita rate is slightly below the average of highly industrialised countries, it is higher than the EU average and well above the global average of 4.5 (World Bank 2011; Jänicke 2011: 130). Germany is also one of the biggest all time contributors to global GHG emissions and with 81,194.5 t or 6.9 per cent ranks 4th (rank 6 when broken down to per capita data) concerning its cumulative emissions between 1850 and 2007 (Clark 2011).

However, in contrast to other industrialised countries and particularly compared to the US, Germany has also been a vanguard for progressive domestic and international climate policies for most of the time in the last 25 years (Weidner and Mez 2008: 356–357; Jänicke 2011: 129; Schreurs 2002: 1–2, 10). It committed itself to ambitious emissions reductions from early on (Weidner 2008: 7) and was one of the driving forces behind the establishment of the UNFCCC and later the Kyoto protocol (Böckem 2000: 7; Weidner 2008: 7; Ulbert 1997: 9, 33). Consequently, Germany has ranked well in several comparative climate rankings such as the Climate Performance Index (CPI). Between 2008 and 2013 it always ranked in the top ten of the CPI and then fell to rank 22 in 2015, which is still better than many industrialised countries, especially compared to the US on rank 44 (Germanwatch and CAN 2015). Despite this praise, there are some limitations. For instance, a large share of the GHG reductions between 1990 and 2012 can be attributed to the deindustrialisation of former East Germany (DIW/SPRU 2001: 9; Weidner and Mez 2008: 357; Jänicke 2011: 130). Furthermore, due to pressure from its influential car industry, Germany has repeatedly opposed stronger EU regulations of car emissions and fuel usage standards (Bündnis 90/Die Grünen Bundestagsfraktion 2013; Jänicke 2011: 135). Moreover, as indicated in the fall in the CPI, in recent years Germany has increasingly given up its strong forerunner position in climate matters, not least – and rather ironically – because the 2011 energy turn and nuclear phase out led to the reactivation of particularly GHG intensive coal power plants (Geden and Tils 2013: 25; Dröge 2016: 17–18).

Thus, at the moment it seems unlikely that the country will meet its ambitious future climate targets of reducing CO₂ emissions by 40 per cent in 2020 compared to 1990 (Clean Energy Wire 2015).

Keeping in mind these limitations, Germany is still one of the most progressive industrialised countries when it comes to climate policies, which begs the question whether and how exactly climate security discourses had something to do with this development.

5.1.2 The Origins of the Climate and Security Debate in Germany

When the concept of anthropogenic climate change began to be accepted in the 1960s, it was primarily an academic issue with limited relevance for the political debate in Germany (Mederake and Duwe 2014: 5). In contrast to the US, Germany was not very progressive concerning environmental policies in general at that time. Instead, the post WW2 reconstruction efforts and subsequent rapid economic growth in the 1950s and 1960s led to widespread environmental pollution (Weidner and Mez 2008: 358; Krueck *et al.* 1999: 8; OECD 1993). This changed in the 1970s, when driven by positive examples from the US and Japan (Schreurs 2002: 17) but also by the international debate, environmental issues – and especially the problems of air pollution – gained in importance in Germany (Weidner and Mez 2008: 358; Mederake and Duwe 2014: 5–6). In the early 1970s Germany initiated an Immediate Program for Environmental Protection (*Sofortprogramm Umweltschutz*), an expert commission on environmental issues and a general Environmental Programme (Deutscher Bundestag 1971; Mederake and Duwe 2014: 5). Moreover, following the US example (the EPA had been founded in 1970) in 1974 the Federal Environment Agency (*Umweltbundesamt*) was established (Schreurs 2002: 6). Eventually, the oil crises of the 1970s and the growing importance of a range of environmental problems such as forest dieback, acid rain and air pollution helped to entrench concepts such as ‘sustainable development’ and later ‘ecological modernization’ into the political debate (Arnold *et al.* 2012: 194; Eastin *et al.* 2011: 17).

An additional precursor of the climate (and security) debate in Germany was the international debate on the destruction of the ozone layer between 1974 and the mid-1980s, which already contained several securitising articulations in connection to dangerous changes in the earth’s atmosphere. The difficulties to regulate the excessive emission of chlorofluorocarbons (CFCs) around the globe led to the realisation that it was impossible to

handle environmental issues by national policies alone (Mederake and Duwe 2014: 7, 9). In the wake of these debates, climate change increasingly became one of the important environmental concerns (Weidner and Mez 2008: 360; Ulbert 1997: 21, 33; Schreurs 2002: 154) and Germany became increasingly involved in international research activities and political negotiations on the issue (Mederake and Duwe 2014: 9–10). The awareness of problematic changes in the environment increased even more because of the rise of a range of influential domestic social movements concerning nuclear energy and transnational environmental problems such as acid rain and forest dieback in the 1970s and 80s (Weidner and Mez 2008: 368; Schreurs 2002: 76–77). Eventually, the growing environmental consciousness found entrance into the political landscape with the founding of the Green Party in 1980 (Ulbert 1997: 26; Raschke 1993) and its first electoral success in 1983 (Krück *et al.* 1999: 2; Schreurs 2002: 16).

Moreover, scientists played a central role in sensitising political actors for environmental issues in general and climate change in particular (Weber 2008: 59–95). They were amongst the first to explicitly link climate change to threat conceptions and in the mid-1980s coined the notion of the ‘climate catastrophe’ (*Klimakatastrophe*). In 1985 the Working Group on Energy of the German Physical Society (DPG) issued a highly noticed appeal with the title ‘A Warning of the Coming Climate Catastrophe’ (DPG 1986). A year later this was followed by a joined appeal of the DPG with the German Meteorological Society (DMG), titled a ‘Warning of Global Anthropogenic Climate Change’ (DPG and DMG 1987). Originally, the intention of the DPG had been to push nuclear energy as GHG neutral energy source. However, this plan was largely diminished by the Chernobyl catastrophe in 1986 and instead the debate shifted more in the direction of renewable energy to prevent the climate catastrophe (Weidner and Mez 2008: 368–369), which would later become a recurring theme of the German debate.

Because of the growing awareness for climate change and its possibly catastrophic consequences and further pushed by the Chernobyl disaster (Mederake and Duwe 2014: 7), in 1986 Chancellor Kohl founded the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMUB)⁸ and in 1987 called climate change the single most important environmental concern (Weidner 2008: 6–7; Weidner and Mez 2008: 362). Subsequently, the heightened awareness facilitated various concrete political developments, which paved the way

⁸ Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, BMU, in its German designation. In 2013, however, the BMU was extended to the Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit, in short BMUB, which is why I will use the new abbreviation in the following.

for climate change becoming an important and distinct policy field in Germany. Hence, in 1987 the German Bundestag set up the influential Enquete Commission concerned with taking Precautions for the Protection of the Atmosphere (*Vorsorge zum Schutz der Erdatmosphäre*) (Krueck *et al.* 1999: 1; Weidner 2008: 7). While the commission was initially established in response to the ozone layer problematic, it played an increasingly important role for the development of Germany's climate policies. It created a climate knowledge base, advised the government and the parliament on climate policy (Mederake and Duwe 2014: 8–9) and, as the next sections will show, played an important role in the construction of climate change as security issue.

5.2 Constructing Climate Change as a Security Threat: Analysing the Discourse

As the previous section already has indicated in relation to the ozone layer problematic and the debates about the climate catastrophe, climate security articulations have played a key role in Germany from early on. This section takes a closer look at the period between 1990 and 2015 and discusses how the three climate security discourses identified in this thesis shaped the German debate and helped to render climate change governable in a very specific manner.

5.2.1 The Disciplinary Discourse: Mitigating at Home, Optimising the World's Poor

The disciplinary climate security discourse with its focus on human security and well-being of people especially in developing countries was the most prevalent in Germany throughout the period of analysis. The intention of most articulations of the disciplinary discourse clearly was on supporting the most disadvantaged populations. Nevertheless, it also contributed to paternalistic normation processes by juxtaposing helpless and powerless victims in the Global South to seemingly more advanced climate resilient people in the North, which was reinforced by Germany's self-proclaimed role as a climate vanguard and leader in green technology.

First Disciplinary Articulations in the 1990s: Protecting Humankind and the Planet

By the early 1990s, the disciplinary climate security discourse had firmly arrived in the political debate. A significant role in this respect had the highly influential Enquete Commission on the Protection of the Atmosphere, which was frequently cited in parliamentary debates (Deutscher Bundestag 1995a). Thus, already in 1989, the Bundestag Committee on the Environment recognised the Enquete Commissions' recommendations and echoed the disciplinary discourse,

yet with a decisively global focus, by stating that: ‘The threat to the Earth's atmosphere endangers the life on Earth if the present trend is not fully and comprehensively halted’ (Deutscher Bundestag 1989: 1).

Amid the reunification process of West and East Germany in the early 1990s, climate security articulations in general faded somewhat from the spotlight but the disciplinary discourse remained the dominant representation. On the one hand, parliamentary articulations kept the global focus and portrayed climate change as an important threat to humanity and all human societies, as the following quote exemplifies: ‘The imminent climate catastrophe simply necessitates a decision between a reasonably secure and humane survival of human society as we know it, or the crash into chaos with unmanageable consequences.’ (Deutscher Bundestag 1993a: 2646). On the other hand, they introduced a distinction between the developed and developing world that would become a recurrent argumentation in the German climate security debate. While acknowledging the responsibility for climate change of industrialised countries, members of parliament frequently stressed that developing countries and their inhabitants especially in Africa (Deutscher Bundestag 1997: 18328), would be hit much harder even though not responsible for climate change (Deutscher Bundestag 1991: 3786, 1996: 8942). In the same context, a recurring emphasis was on the inhabitants of the small island states. They were pictured as the first victims of climate change whose only hope was to wait for ‘Noah’s Ark’ for rescue, if industrialised countries would not act soon to abate climate change (Deutscher Bundestag 1995b: 2345).

Concerning the concrete threats, almost all of the parliamentary debates at that time focused on the physical effects of climate change (Deutscher Bundestag 1993a: 12646) and hence cautioned against floods (Deutscher Bundestag 1995b: 2345), extreme weather events (Deutscher Bundestag 1995c: 2529), water scarcity, agricultural losses (Deutscher Bundestag 1998a: 19406) and widespread famines in developing countries and especially in Africa (Deutscher Bundestag 1997: 18328). To counter these problems, most of these early articulations of the disciplinary discourse suggested mitigation measures. Thus, they demanded to limit GHG emissions primarily in industrialised countries (Deutscher Bundestag 1993b: 14254, 1998a, 1998a, 1998a: 19413) by changing consumption patterns (Deutscher Bundestag 1991), reducing energy consumption, investing in renewables but also, especially towards the mid-1990s, by introducing an ecological tax reform (Deutscher Bundestag 1995b: 2345).

When the Red-Green government coalition under Chancellor Gerhard Schröder took office in 1998, the frequency and intensity of securitising articulations increased. The disciplinary discourse still dominated the debates and most articulations kept pointing to the physical dangers of climate change such as extreme weather events including tornados, hurricanes and cyclones (Deutscher Bundestag 1999b: 5985, 2004d: 10247), the spread of tropical diseases and water scarcity (Deutscher Bundestag 1999b: 6000, 2003b: 6439). Members of parliament feared that all these events would have considerable effects on human health (Document 3, Müller, 6000. 98-02), would very soon displace millions of people in the developing world and hence would increase the number of environmental refugees (Deutscher Bundestag 1999b: 6000). Moreover, they stressed that '[...] even today the effects of climate change kill over 150.000 people every year' (Deutscher Bundestag 2004e: 13425) and hence should not be considered a red-green 'luxury' or 'soft' issue (Deutscher Bundestag 2004a: 7675), thereby defending the governing coalitions ambitious environmental policies of that time.

Even though the focus on the juxtaposition between industrialised and developing countries remained, from 2002 on, similar to the US case, the debates began to stress the adverse effects of climate change for people in industrialised countries as well. They referred to the flooding of the Elbe river in 2002 (Deutscher Bundestag 2004d: 10247), to the amplified likeliness of droughts and heatwaves in the US and southern Europe (Deutscher Bundestag 2004d: 10247, 2004e: 13417) or to the possibility of abrupt climate events that could lead to considerable sea level rise in Europe (Deutscher Bundestag 2004c: 8379). Besides improved scientific knowledge about the magnitude and specific regional effects of climate change (IPCC 2001), the 2003 Pentagon study on abrupt changes in the climate system (Schwartz and Randall 2003), which was partly based on research by the German Potsdam Institute for Climate Impact Research (PIK) (Deutscher Bundestag 2004c: 8374), played a crucial role in introducing this argumentation into the debates. Moreover, several members of parliament mentioned the Hollywood movie 'The Day After Tomorrow', which revolved around one of the scenarios of the Pentagon study to exemplify the possible effects of climate change in industrialised countries (Deutscher Bundestag 2004d: 10244, 2005a: 14659).

The proposed countermeasures within the disciplinary discourse almost exclusively remained on mitigation. This included CO₂ reductions in airplane traffic, increasing energy efficiency, the ecological tax reform and the quick ratification of the Kyoto protocol (Deutscher

Bundestag 1999b: 6001, 1999b: 5985). Besides these measures, with a view on the ‘flexible mechanisms’ of Kyoto, and in accordance with the disciplinary concept of normation, members of parliament increasingly also urged to include developing countries in the efforts to mitigate climate change (Deutscher Bundestag 1999b: 5985, 2005d: 193). When new scientific evidence, for example the 3rd IPCC report (IPCC 2001) and the ensuing academic debates, revealed the advanced stadium of climate change, but also as a result of the increased focus on the security implications of climate change, adaptation measures gradually became part of the debates as well. Instead of stopping climate change altogether by tackling its root causes, members of parliament increasingly suggested that one could merely alleviate its worst consequences: ‘Ten years ago, we still discussed whether we could prevent climate change. Today, we merely talk about how we can mitigate the worst effects of climate change with our utmost effort’ (Deutscher Bundestag 2004c: 8370).

Non-Parliamentary Articulations at the Peak of the Climate Security Debate

In addition to the influence of the international climate security debate, several domestic actors played an important role in mainstreaming climate security argumentations in Germany. Thus, beginning at the end of the 1990s, a growing number of reports by German governmental advisory bodies, research-institutions, and NGOs began to articulate climate security discourses and hence also contributed considerably to the peak of the climate security debate in Germany between 2007 and 2011.

Although the debate certainly was most influential between 2007 and 2011, some organisations, such as the environmental consulting firms Adelphi and Ecologic or the Hans Seidel Foundation but also academics such as Hans Günther Brauch, had already begun to articulate climate security discourses around the turn of the millennium (Interview 2014y; Carius and Lietzmann 1998; Rotte 2001; Eberwein and Chojnacki 2001). These early reports were mostly part of the broader academic discussions about environmental security and hence often discussed other environmental stress factors besides climate change as well. The central argument was that ‘scarce resources and environmental degradation’ (Eberwein and Chojnacki 2001: 3) together with the problematic socio-economic situation and population growth in developing countries could have serious security implications (Eberwein and Chojnacki 2001: 13; Carius and Lietzmann 1998). Similar to earlier parliamentary debates, these reports had a genuine concern for the security of people in developing countries and stressed that climate change could become ‘one of the most important challenges for human security’ (Brauch 2002:

15). However, some of the reports included paternalistic argumentations that granted the industrialised countries a ‘special role’ that allowed them to intervene in the developing countries for the sake of climate policy (Rotte 2001: 63).

While these early securitisations moves had only a limited influence, they laid the ground for the ensuing climate security discussions from the mid-2000s. Especially after 2007, these discussions were able to reach beyond academic and expert audiences and began to firmly influence the general discussion on climate change in Germany. Particularly in the wake of the publication of the 2007 WBGU report ‘World in Transition. Climate Change as a Security Risk’ (WBGU 2007c, 2008) climate security articulations in reports and parliamentary debates multiplied. Similar to the earlier parliamentary articulations, many reports stressed that because of problematic socioeconomic and political preconditions the poorest – particularly in Africa (WBGU 2007c: 3–4; adelphi 2013: 42) – will be hit hardest:

Rising global temperatures will jeopardize the bases of many people’s livelihoods, especially in the developing regions, increase vulnerability to poverty and social deprivation, and thus put human security at risk (WBGU 2008: 1; see also GTZ 2008b: 8).

The influential annually published Climate Risk Index of the NGO Germanwatch further reinforced the recurring dichotomization between people in developing and developed countries by stating that the ten countries that were most affected by climate change in terms of economic costs and human suffering between 1990 and 2010 were all developing countries (Germanwatch 2011).

Concerning specific threats, the focus continued to rest on the physical effects of climate change such as water stress (WBGU 2008: 2; Jakobeit and Methmann 2007: 1; Schünemann 2014: 4; Seiler 2011: 25), food insecurity (WBGU 2008: 2; Franke 2011: 14–15; GTZ 2008b: 27), health problems (Jakobeit and Methmann 2007: 7; Seiler 2011: 25; GTZ 2008b: 30) and sea level rise (Schünemann 2014: 6; GTZ 2008b: 29). As a study of Greenpeace summarised in 2013, taken together all the adverse effects of climate change are ‘already taking 5 million lives a year’, a number, that could rise to 100 million deaths in 2030 (Greenpeace 2013: 6). Moreover, climate change would: ‘undermine development and undo progress made in reducing poverty, attaining Millennium Development Goals, and improving the socio-economic well-being of broad sectors of the population’ (adelphi 2013: 42). Finally, the

deteriorating conditions in developing countries could induce in their quality and quantity ‘historically unsurpassed’ migration movements (Germanwatch Document 6, S. 3-4).

Based on this threat assessment – and in accordance with a global justice argumentation (Jakobeit and Methmann 2007: 2) – most reports continued to recommend measures that would benefit the mitigation of climate change in order to prevent the worst threats to human security (Seiler 2011: 18, 24-25). These included the promotion of renewable energy, energy efficiency and the quick abandonment of coal power plants (Greenpeace 2013: 7, 27), which in combination would lead to a ‘transformation of the energy systems in Europe’ (WBGU 2008: 199). But also increased international cooperation (Bayer 2011: 141) and political efforts of Germany and the EU to bring about effective global mitigation treaties to halt global warming below two degrees (WBGU 2008: 189, 193, 198). Beyond that, reports increasingly suggested various adaptation measures (adelphi and UBA 2013: 10). In line with the disciplinary concept of normation, the goal was to alleviate the problematic deviation from the norm, which was primarily vulnerable people in developing countries. Thus, a central argumentation was to point to the responsibility of industrialised countries to protect and support weak developing countries and their inhabitants from the worst effects of climate change (WBGU 2008: 5). More specifically, this entailed an increased monitoring of the most vulnerable people and regions (WBGU 2008: 179, 185-186) and efforts to make them more resilient towards the adverse climatic changes (WBGU 2007b: 116). Furthermore, reports urged to expand the technical and educational preparation of people in developing countries for disasters (GTZ 2008a: 55; WBGU 2008: 10, 115).

In connection to these recommendations, there was a widespread agreement in the German debate on the necessity for ‘establishing climate protection as a crosscutting theme in development cooperation’ (WBGU 2008: 199). The goal was to abolish underdevelopment, to improve the so far inappropriate coping capacities of people in developing countries (adelphi 2013: 15; GTZ 2008b: 9–10; WBGU 2008: 9) but also to foster the role of development institutions in international policy (GTZ 2008a: 49; WBGU 2008: 197). Closely connected to this international focus concerning development policies, the disciplinary securitisation of climate change together with the sovereign discourse also led calls to include climate security into Germany’s foreign policy (WBGU 2008: 193) and to establish concepts such as climate diplomacy (adelphi 2012, 2013). The aim was to develop a holistic approach that especially linked foreign, development and disaster prevention policies (adelphi 2013: 15).

Parliamentary Articulations in the Peak: Saving Vulnerable Populations

Especially the 2007 WBGU report (Deutscher Bundestag 2010: 6855, 2007b: 10403, 2007d: 13389) and reports by the PIK (Bulling-Schröter 2009: 599) received plenty of attention in parliamentary debates. Consequently, the discussions in parliament at that time resembled the tenor of those reports and the focus remained on the physical effects of climate change (Deutscher Bundestag 2009a: 24255, 2008d: 21069, 2008d: 21073). Members of parliament also problematised what this could mean for Europe and Germany, for instance the spread of tropical diseases (Deutscher Bundestag 2008d: 21069), or the increased frequency and intensity of flooding (Deutscher Bundestag 2013b: 31287). However, there was widespread agreement that ‘the first victims of climate change are the people in the countries of the Global South’ (Deutscher Bundestag 2007d: 13389, 2012: 25760). Members of parliament again especially focused on poor populations in Africa (Deutscher Bundestag 2008b: 17247) and partly Asia (Deutscher Bundestag 2009a: 24255), which due to their poverty were constructed as ‘especially vulnerable’ (Deutscher Bundestag 2007c: 10951) and ‘immediately threatened’ (Deutscher Bundestag 2007c: 10950). Hence, climate change threatened ‘millions’ of people around the world (Deutscher Bundestag 2006: 6191, 2005d: 192) and for some, such as the inhabitants of small island states, it even constituted ‘a question of life and death’ (Deutscher Bundestag 2011b: 17991).

Taking up earlier argumentations, the discussions in parliament continued to build a stark distinction between the coping capacities of industrialised and developing countries (Deutscher Bundestag 2013b: 31304), as the following quote fittingly exemplifies:

If we see the consequences of such disasters in an industrialised country with existing infrastructure and a certain level of prosperity, then, of course, is it all the more apparent what that means for Africa, parts of Asia or Latin America[...]. There, climate protection is a matter of life and death (Deutscher Bundestag 2013b: 31291).

Mitigating at Home and Adapting Abroad

In response to the described threat construction in the parliament, mitigation measures continued to be an important cornerstone of the debate (Deutscher Bundestag 2009a: 24255). On the one hand, the recommendations focused on measures in industrialised countries. Many members of parliament emphasised the pioneering role of Germany and the EU that had to be upheld by ambitious targets (Deutscher Bundestag 2006: 6192, 10922) not only to prevent

threats to human security around the world, but also to accomplish intergenerational climate justice (Deutscher Bundestag 2007a: 8144). Consequently, members of parliament frequently called for the adoption of a national climate law (Deutscher Bundestag 2013a: 31291). On the other hand, they also increasingly emphasised the need to include emerging economies and developing countries in the efforts to combat climate change (Deutscher Bundestag 2008a: 14278, 2013b: 31299). Eventually, there was widespread approval of the fact that emerging economies and developing countries had accepted some responsibility of their own at the COP in Bali (Deutscher Bundestag 2008a).

Besides mitigation, the ever-increasing debates on the threats of climate change for the human security of people in developing countries together with the realisation that ‘climate change is a reality now’ (Deutscher Bundestag 2006: 6192) further accelerated the already mentioned discursive shift in the German debate towards adaptation. This was particularly pronounced in the second half of the 2000s (Böcher and Töller 2012: 64-65, 69). In this time period members of parliament increasingly presented adaptation measures as a crucial part of tackling climate change and its security implications (Deutscher Bundestag 2009a, 2008c: 21069, 2007c: 10956). Concrete examples are calls to double Germany’s pledges for the UN Adaptation Fund (Deutscher Bundestag 2006: 6192), to help developing countries to adapt to climate change (Deutscher Bundestag 2007d: 10950), but also to scale up climate and environmental education to raise ‘ecological awareness’ (Deutscher Bundestag 2007c: 10951).

5.2.2 The Governmental Discourse: Risk Groups and Market Mechanisms

While the governmental discourse was an important part of the securitisation of climate change in Germany, it did not appear until the late 1990s and only became more widespread from the mid-2000s on. Overall, the governmental discourse was closely intertwined with the prevailing disciplinary discourse because most of the underlying risk assessments located the high risk-groups and areas in the Global South. However, it has also added several new concepts and practices such as probabilistic assessments, prevention strategies, future oriented scenario planning, a focus on risk groups and, in the spirit of *laissez faire*, less direct or invasive countermeasures such as market instruments and insurance schemes.

Parliamentary Articulations: Constructing Risk Groups

In the early 2000s, parliamentary articulations began to refer to climate change as an overarching global hazard that would gradually increase the risk of extreme weather (Deutscher Bundestag 2007c: 10950), health problems (Deutscher Bundestag 2008d: 21071, 2009a: 24255), flooding, droughts and the extinction of flora and fauna (Deutscher Bundestag 2009a: 24255). Beyond that, they singled out specific risk groups with elevated risk levels. Here, the governmental discourse overlapped with the disciplinary representation of climate change because it specifically constructed developing countries and parts of their populations as high-risk groups, for instance due to a predicted decline in water availability:

In different regions of the world water availability decreases. This reduces agricultural yields. Also in this area one can predict that in parts of the world such as Africa, the Middle East and India, the consequences will be particularly pronounced (Deutscher Bundestag 1999b: 6000).

In difference to the disciplinary discourse, the focus is not on immediate and concrete threats to human security. Instead, the emphasis lies on an aggregate risk analysis that while singling out various high-risk groups or outlier cases, always looks at the broader picture, e.g. at the average risk of the ‘Foucauldian population’. Thus, the early governmental articulations in Germany did not exclusively look at developing countries but constructed specific areas such as low lying coastal regions (Deutscher Bundestag 2004c) as particularly at risk from the adverse effects of climate change. While often located in the Global South – due to geographical but also socio-economic factors –, such high-risk areas were also identified in Germany, for instance in the south-west, at the coasts and in the very east of the country (Deutscher Bundestag 2008d: 21071).

A further important characteristic of the governmental discourse is the focus on economic aspects and the cost-efficiency in the exercise of power. Hence, parliamentary debates frequently began to stress the economic risks of climate change and pointed to the insurance sector that already had started to integrate climate hazards into their risk assessments (Deutscher Bundestag 1999a: 3343, 2003b: 6439). Especially after the publication of the 2006 Stern Report, the economic elements became more important and members of parliament feared that in the long run the financial risks of future adaptation could spiral out of control if mitigation measures in the present were neglected (Deutscher Bundestag 1999a: 3343, 2006: 6184, 2008a, 2008a: 14268).

To handle the multifaceted risks, articulations in the parliament at first almost exclusively focused on mitigation measures with the aim to lower the overall risk to a tolerable level. Once again, the generation of incentives for energy-efficiency, renewable energy and the export of these technologies were an important part of the debate (Deutscher Bundestag 1999a: 3343, 2003b: 6439). This only made sense given the importance of the flourishing green technology and ‘climate protection’ industry in Germany (Jänicke 2011: 138–139). However, in line with governmental power, less direct measures and market instruments such as emission trading schemes became more important as well (Deutscher Bundestag 2005d: 197, 2007c: 10906, 2004d: 10247). Especially for members of the more market friendly liberal party (FDP) and the conservative party (CDU), the goal was to tackle climate change in an ‘economically sound manner’ (Deutscher Bundestag 2009b: 25879). This was not to be accomplished by top-down state interventions only but had to include cost-efficient economic solutions and the business sector itself: ‘With the emissions trading scheme we have established a market-based system in Germany and Europe in order to enlist the big companies in our efforts for efficient climate protection.’ (Deutscher Bundestag 2009b: 25878). In this, vein, many debates revolved around fixing and improving the existing EU emission trade system, which had attracted considerable criticism due to the collapse in the prices of emission certificates (Böcher and Töller 2012: 62–63; Deutscher Bundestag 2009b: 25878, 2013b: 31285).

To enhance the general resilience towards the increasingly complex risks of climate change, adaptation measures in risk areas abroad but also at home became an important part of the debates as well, especially since the peak of the climate security debates in 2007 (Deutscher Bundestag 2009a: 24253). These entailed recommendations that focused directly at Germany, for instance a national adaptation strategy (Deutscher Bundestag 2008d: 21071) but also calls to help high risk developing countries with their adaptation efforts (Deutscher Bundestag 2007c: 10950) and to increase their coping capacity. Furthermore, members of parliament began to discuss weather and climate insurance schemes to control and alleviate the – seemingly non-avoidable – risks of climate change (Deutscher Bundestag 2008d: 21070).

Articulations of the Governmental Discourse Outside Parliament

The first scattered articulations of the governmental discourse in reports of NGOs, environmental consulting firms and academics appeared around the turn of the millennium. The 1998 WBGU report on Strategies to Cope with Environmental Risks dedicated a whole chapter to climate change. The report constructed it as a phenomenon that would gradually increase the

risk in certain areas and groups but also highlighted the considerable degree of uncertainty concerning the exact timing and magnitude (WBGU 1998: 134–135). To cope with these problems it emphasised adaptation measures but also highlighted the importance of the Kyoto protocol as a first step of an ‘international risk management’ system (WBGU 1998: 142). Furthermore, early articulations discussed different concepts of risk, their applicability to environmental problems (Brauch 2002: 44) and identified several environmental risk factors (Brauch 2002: 57; Carius and Lietzmann 1998: 25, 37). They also singled out specific risk areas and groups, for instance low lying coastal dwellings, large areas in Africa and highly populated regions (Rotte 2001: 13). In this vein, the ‘insufficient insurance level’ in developing countries (Rotte 2001: 14) as well as insurance solutions to alleviate climate risks (Rotte 2001: 41) already played a role in the argumentation.

Having said that, it was not until 2007 that climate risk argumentations and related solutions became more common and influential. Thus, several of the already introduced organisations, especially the WBGU, Adelphi, and the PIK – which had compiled a series of reports under the heading ‘Turn Down the Heat’ together with the World Bank and the NGO Climate Analytics (World Bank *et al.* 2012, 2013, 2014) –, engaged in the governmental discourse. They feared that climate change would ‘greatly increase the risk of natural disasters’ (WBGU 2008: 3) and similar to parliamentary articulations singled out specific risk groups and areas with elevated risk levels (adelphi 2012: 31; World Bank *et al.* 2013: xviii, xx). In this respect, they rested on existing scientific findings that: ‘[...] indicate a growing risk for low-latitude regions at quite low levels of temperature increase and a growing risk for systemic global problems above a warming of a few degrees Celsius.’ (World Bank *et al.* 2012: 43). The high risk areas were low-lying coastal dwellings, often located in higher latitudes (Jakobeit and Methmann 2007: 2–3; World Bank *et al.* 2012: xvii), but also mid-latitude regions that already experienced water stress and would stand a much higher risk of droughts in the future (Jakobeit and Methmann 2007: 5; World Bank *et al.* 2012: xvii, 48).

In principle, these risk assessments apply to specific regions or groups in developed countries as well, e.g. predict a higher risk of flooding due to sea level rise in large parts of the Netherlands and some areas in Northern Germany. However, mirroring the parliamentary debates, because of the presumably much lower societal and political coping capacity in the Global South, the focus was especially on developing countries and poor populations (World Bank *et al.* 2012: 2; Germanwatch *et al.* 2013: 8): ‘The burden of climate change in the future

will very likely be borne differentially by those in regions already highly vulnerable to climate change and variability' (World Bank *et al.* 2012: 64). Thus, many articulations constructed climate change as a complex long-term risk, which together with existing problems could gradually overstretch the coping capacity of Southern societies (WBGU 2008: 3).

Most reports emphasise that these risks could escalate and reach developed countries. Thus, the argumentation was closely intertwined with the disciplinary but also partly with the sovereign discourse and entailed the fear that the 'vulnerable could become dangerous' (Methmann and Oels 2015; Methmann and Oels forthcoming; Oels 2009) – for instance by migrating towards industrialised countries or by radicalizing themselves – if left unchecked. All these problems could be further exacerbated by the increase in economic risks that had the potential to undo previous development processes, increase poverty and hence make regions and people even more vulnerable towards the effects of climate change (World Bank *et al.* 2012: xiv, 17). To plan for such 'contingencies' in 'high-risk areas' and hence to keep the risk of migration and instability at a tolerable level and to prevent it from spiralling out of control, reports suggested measures such as 'national resettlement programmes' that would ensure that such movements would proceed in an 'orderly fashion' (WBGU 2008: 127).

Besides these fairly traditional risk assessments, many of the discussions also revolved around non-linear risks and new concepts to cope with the unknown and non-predictable in the case global warming would proceed as fast as predicted (World Bank *et al.* 2012: 59–60): 'And most importantly, a 4°C world is so different from the current one that it comes with high uncertainty and new risks that threaten our ability to anticipate and plan for future adaptation needs.' (World Bank *et al.* 2012: ix). In this context, reports cautioned against 'nonlinear tipping elements in the Earth system', which, even though unlikely, would have severe consequences and were difficult to prepare for (World Bank *et al.* 2012: xvii, 61, 2012). In line with the governmental notion of controlling the risks and keeping them at a tolerable level, reports especially cautioned against 'cascading' and 'escalating' risks (World Bank *et al.* 2012: 60, 44) that could spiral out of control if not closely monitored.

Governmental Recommendations

To handle these multifaceted traditional and non-linear risks of climate change the focus within the governmental discourse was primarily on what reports called 'effective risk management' (World Bank *et al.* 2012: x). This included not only the identification and the monitoring of

risks but also to keep them under control without interfering too much in the normal functioning of the global circulation. Thus, as a *first step* reports suggested: ‘the identification of geographical-climatic risks by means of efficient monitoring systems and technology-supported climatic forecasts’ (WBGU 2008: 186). Beyond that they urged to ‘identify climate-hot-spots’ (GTZ 2008b: 56) and high risk countries in an ‘anticipatory manner’ (GTZ 2008a: 10) by carrying out ‘systematic risk analysis’ (GTZ 2008b: 56) and by conducting scenario planning exercises in order to anticipate and control the future to a certain extent (WBGU 2008: 77–78). Consequently, the *next step* was to prevent the escalation of the identified risks and to control them by taking precautionary measures and by increasing the resiliency and coping capacity of the identified risk groups, which included mitigation measures to prevent the worst risks from materialising in the future (WBGU 2008: 6). Thus, ‘avoiding dangerous climate change’ (WBGU 2008: 208) – at least for developed countries – remained at the centre of all recommendations. Yet, in line with governmental power, top-down state regulations were not the weapon of choice to reach this goal. Thus, reports increasingly recommended less direct and invasive measures such as the clean development mechanism or the introduction of ‘internationally tradable quotas for renewable energies’ (WBGU 2008: 208) to control the crucial variables ‘behind the scenes’ (Elbe 2009: 76) in an as cost-efficient manner as possible. This strategy ensured that the general processes of production, which have led to climate change in the first place, would not have to be disturbed too heavily.

The focus on the seemingly overwhelming and already pressing risks of ‘unavoidable climate change’ (WBGU 2008: 209) and the perceived incalculability of these risks also led organisations to conclude that ‘the case for resilience has never been stronger’ (World Bank *et al.* 2013: xii) and contributed to emphasising adaptation measures (World Bank *et al.* 2012: 46). From a governmental power perspective, this strategy can make sense to a certain extent, especially if the high risks groups or outliers are predominately identified at the periphery and if the overall risk for the total population can be kept at a tolerable level through these measures. In more detail, the suggested adaptation measures included early warning systems for disasters and climate induced conflicts (GTZ 2008b: 11–12; WBGU 2007c: 11–13, 197; Germanwatch *et al.* 2013: 42) as well as the implementation of surveillance and educational programmes to prevent future disasters (World Bank *et al.* 2012: xvii; WBGU 2008: 10; Germanwatch *et al.* 2013: 42). Moreover, reports recommended financial and technological support as well as knowledge transfer for high-risk countries by increasing development aid (GTZ 2008b: 53–54; WBGU 2007c: 12) and by mainstreaming early warning systems for disasters into development

programmes (WBGU 2008: 10) to increase the resilience of the affected populations (World Bank *et al.* 2013: 162). That way reports hoped to considerably decrease the risk for far-reaching catastrophes and thus to bring the outlier cases down to the average risk of the total population (Germanwatch *et al.* 2013: 53).

A further instrument to keep climate risks at bay and to cope with their incalculable nature was the promotion of climate or weather insurance schemes that played an even greater role in the analysed reports than in parliamentary debates. Thus, reports predicted the considerable growth of the insurance market due to climate change and that the industry would have to significantly stack up their funds for climate induced disasters (WBGU 2008: 71). Beyond that they recommended to ‘strengthen microsinsurance’ (WBGU 2008: 12), ‘public insurance pools’, ‘catastrophe bonds’ (adelphi and UBA 2013: 97) or ‘insurance against crop failures’ (World Bank *et al.* 2013: 46, 2014: 26, 225, 228) and to make these instruments part of development cooperation. This would contribute to lowering poverty and vulnerability and thus the risk of certain adverse impacts of climate change (WBGU 2008: 12):

Microfinancing instruments such as microcredits or microinsurance have the potential to make a major contribution to poverty reduction and thus to decreasing the vulnerability of populations in developing countries (WBGU 2008: 211).

While primarily affecting high-risk groups in developing countries, these insurance solution would eventually also benefit developed countries because they had the potential to prevent large-scale migration movements (WBGU 2008: 12, 102, 127). Finally, in response to the diverse risks of climate change, reports also recommended a further integration of climate risk management schemes into Germany foreign policy. In this vein, the emphasis to ‘move from early warning’ to ‘early action in order to prevent future crises and increase security’ (adelphi 2012: 4) increased. Especially Adelphi frequently cooperated with the German Federal Foreign Office to develop a comprehensive ‘climate diplomacy’ (adelphi 2012, 2013) to reduce the risks of climate change and to strengthen the capacity to anticipate potential climate threats in high-risk areas (adelphi 2012: 24).

5.2.3 The Sovereign Discourse: Developing Climate Foreign Policy

Although never becoming as dominant as in the US case, the sovereign discourse played a role in Germany. However, at the beginning of the period of analysis and throughout the 1990s, the

discourse appeared only very seldom and it was not until the end of the 1990s that it gradually became more common. In addition, German actors understood national security in a much more multilateral way and did not link it to the defence sector as readily as in the US.

Non-Parliamentary Articulations: Distributive Conflicts in the Global South

The first distinct articulations of the sovereign discourse mainly appeared outside the parliament at the end of the 1990s, for instance in reports by the Hans Seidel Foundation, Adelphi, Institute for Development and Peace but also in several mainly academic publications. These early sovereign articulations were closely entangled with the academic debates about environmental and ecological security (Eberwein and Chojnacki 2001: 1; Carius and Lietzmann 1998: ix, x). They emphasised that they operated with a 'modern' or 'non-traditional' concept of security that went beyond state-centric and military understandings and questioned a simplistic correlation between environmental problems and conflict (Rotte 2001: 7, 62; Eberwein and Chojnacki 2001: 3, 12, 16; Brauch 2002: 25). Yet, despite these theoretical reflections, many reports clearly articulated the sovereign discourse in being convinced that climate change would be a central threat to the security of Europe and Germany in the 21st century and thus would become a recurring theme in discussions about security and defence policy (Rotte 2001: 7). Many reports focussed on the well-known combination of environmental degradation (Eberwein and Chojnacki 2001: 19) and resource scarcity, which eventually would lead to conflicts particularly in already disadvantaged or unstable regions (Caruis and Lietzmann 1998: vii, ix, 17, 20). The main line of argumentation was a combination of the disciplinary with the sovereign discourse. According to this reasoning, climate change would negatively affect human security, mostly in developing countries, which in turn could lead to instability and violent conflicts over scarce resources (Rotte 2001: 13-15, 20; Eberwein and Chojnacki 2001: 7; Brauch 2002: 22). In the end, this could lead to 'domino effects', escalation dynamics and migration, which eventually would directly threaten Europe's and Germany's interests and national security as well as international stability and security (Rotte 2001: 19, 20, 54-55; Carius and Lietzmann 1998: vii; Brauch 2002: 23).

To prevent these manifold threats from materialising, these reports on the one hand called for mitigation measures, e.g. coordinating with the EU and the promotion of renewables (Rotte 2001: 24-26, 28-29), but also emphasised the importance of early warning mechanisms, hence partly linking the sovereign to the governmental discourse (Brauch 2002: 25-26). On the other hand, they highlighted the importance of backup plans in the case of a failure of mitigation

and prevention. To cope with violent conflicts (Rotte 2001: 50, 52) they highlighted that ‘[...] peacekeeping and conflict management in the third world’ are ‘a vested interest of Germany [...]’ (Rotte 2001: 53). Thus, the security implications of climate change had to become a central pillar of German foreign policy (Rotte 2001: 53–54) and should be included in the planning of the defence sector (Rotte 2001: 57–58, 61).

Despite these initial articulations of the sovereign discourse around the millennium, the influence on the broader political debate was measured and it was not until 2007 that triggered by the 4th IPCC report, the UNSC debates and by the ensuing discussion in the United States (GTZ 2008a: 7), sovereign articulations became more widespread and influential in Germany. Here, the WBGU and Adelphi were the most active proponents but also several other organisations such as the GTZ and the Hans Seidel Foundation occasionally engaged in the discourse. Most organisations were certain that climate induced security threats go beyond human security (Tänzler 2011: 34) and eventually would have ‘major implications for peace and stability’ (adelphi 2012: 15). In this context, climate induced migration would play an important role because mass migration to neighbouring states could escalate human security threats to towards national security issues (Bayer 2011: 141). Moreover, a common theme of most reports was that they again first of all focused on the Global South where climate change could lead to ‘distributive conflicts’, could exacerbate the problem of ‘failing states’, which eventually would trigger violent tendencies in many societies (WBGU 2007c: 2).

Most of the time reports linked the sovereign argumentation to elements of the disciplinary and governmental discourses by, for example, stating that climate change ‘[...] has the potential to cause significant and highly uncertain impacts on societies, undermining human security and increasing the risks of conflict and instability’ (adelphi 2012: 4; see also WBGU 2008: 3). Yet, especially in relation to the small island states climate change was also constructed as traditional national security threat: ‘Climate change threatens lives, livelihoods, sovereign territory and, in some cases, the existence of states. The situation we face is as dire and serious as civil war, terrorism and nuclear weapons’ (adelphi 2013: 21, quote by Tony de Brum, Minister in Assistance to the President of the Marshall Islands).

Even though the focus of most articulations was on the developing world, several reports emphasised that these at first localised threats could soon spill over to industrialised countries. Thus, reports picked up the earlier argumentations about the danger of escalation dynamics,

according to which the effects of climate change could ‘act as a multiplier’ of existing problems (adelphi 2012: 8) and overstretch the ‘adaptive capacities’ of developing countries. At the end of the day this could lead to ‘domino’ effects concerning the destabilisation of fragile states (Tänzler 2011: 34) and contribute to ‘jeopardizing national and international security’ (WBGU 2008: 1; adelphi and UBA 2013: 13; GTZ 2008b: 56; adelphi 2012: 8). Thus, reports saw a real danger that the failure of ‘preventive and adaptive strategies’ could ‘overstretch the global governance system’, which eventually could lead to ‘far-reaching (global) structural policy or even geostrategic consequences’ (GTZ 2008a: 8).

However, even though many reports articulated the sovereign discourse around that time, there was not even one that predominately considered Germany’s national security as threatened or primarily focused on a role for the armed forces. Instead, the reports acknowledged the debates about new or non-traditional concepts of security (adelphi 2012: 15) and did not uncritically adopt a straightforward link between climate change and national security or conflict. The tenor of the sovereign discourse in Germany was that although climate change could have implications for the national security of certain developing countries and could (indirectly) affect international security, the solutions were to be found beyond traditional security and defence policy (WBGU 2008: 21, 23). One Adelphi report directly quoted the then Foreign Minister Guido Westerwelle on this issue, who described climate change as a ‘non-traditional security threat’ that required ‘climate diplomacy’ as well as ‘resource efficiency, energy transformation and technology cooperation.’ (adelphi 2013: 21).

Recommendations: Mainstreaming Climate Change in Development and Foreign Policy

Concerning policy recommendations, most reports included mitigation measures to prevent threats to national security from materialising. Thus, they urged to adopt ‘an ambitious global climate policy’ in the ‘next 10-15 years’ (WBGU 2008: 1, 6) or advised to ‘to promote sustainable energy systems aimed at ending energy poverty and reducing resource competition need to move ahead.’ (GTZ 2008a: 10). However, even more so than in connection to the other two discourses, the focus on the traditional security implications of climate change also led to an increased focus on adaptation measures to tackle the immediate security concerns. Here reports, for instance, suggested ‘conflict sensitive adaptation’ strategies (adelphi and UBA 2013: 2; GTZ 2008a: 9) that could help to contain problematic situations in affected countries in the Global South. In this context, many reports underlined the importance of development policy, which could support local populations and increase their resilience to prevent the

escalation of human security threats to conflicts. Some even saw the discussion about the security implications of climate change as ‘a great window of opportunity’ to increase the importance of the German Federal Ministry for Economic Cooperation and Development (BMZ) (GTZ 2008a: 8) and to ‘upgrade climate-related development cooperation in terms of staffing and funding.’ (GTZ 2008a: 10). Moreover, reports linked the sovereign discourse to governmental articulations by emphasising the importance of ‘prevention’, which would ‘reduce fragility, and lower the risk of future crisis and violent conflict’ (WBGU 2008: 44).

Finally, while reports largely avoided defence policy recommendations, they nevertheless considered climate change one of the ‘key foreign policy challenges of the 21st century’ (adelphi 2013: 5). In this vein, they frequently stressed that it was necessary to ‘strengthen the profile of climate change within the foreign policy agenda’ (adelphi 2012: 12; see also GTZ 2008a: 8). Thus, reports recommended a close cooperation of all OECD countries with the emerging economies and developing countries to prevent global instability and conflicts (WBGU 2007c: 5). Especially the rise of new global powers such as India and China and related conflicts about climate policy necessitated a stronger integration of climate change into German and European foreign policy agendas (WBGU 2008: 193). Furthermore, particularly Adelphi was very keen to foster a dialogue between climate security scholars and political practitioners especially in the German Federal Foreign Office and in this context actively promoted the concept of ‘climate diplomacy’ (adelphi 2012, 2013).

Parliamentary Articulations: Supporting Endangered Developing Countries

In the 1990s, the sovereign discourse only occasionally appeared in the German Bundestag. The reports of the Enquete Commission for instance mentioned the possibility of ‘distributive conflicts’ (Deutscher Bundestag 1990: 89) and ‘threats to world peace’ (Deutscher Bundestag 1992: 15) and some members of parliament referred to the possibility of the territorial extinction of small island states (Deutscher Bundestag 1995a: 809). Paralleling non-governmental articulations, the discourse gradually became more common in the early to mid-2000s. One important trigger was the publication of the 2003 Pentagon study, which was directly discussed in the German Bundestag to emphasise the traditional security dimension of climate change (Deutscher Bundestag 2004b: 8374, 8379). However, the discourse remained a minority position and it was not until the mid-2000s and especially in the peak of the climate security debate between 2007 and 2011 that sovereign argumentations became more important in the parliament. Similar to the above described reports, members of parliament most of the time did

not discuss traditional security implications of climate change in isolation but always emphasised the close interconnectedness to human security (Deutscher Bundestag 2008a: 14269).

Throughout most debates, the emphasis was on threats in already instable developing countries. Thus, members of the parliament highlighted how climate change could lead to new conflicts (Deutscher Bundestag 2009c: 604) or at least could exacerbate existing ones, e.g. ‘[...] fierce wars and conflicts over water, food and the access to raw materials [...]’ (Deutscher Bundestag 2007c: 10953; see also: Deutscher Bundestag 2008b: 17247, 2011a: 17375). Once again, a particular focus was on Africa where according to some members of parliament – and concurring with the US debate – climate change already had fuelled violent conflicts, for instance in Darfur:

There are already wars and civil wars as a result of climate change. For example, the deserts in Sudan have spread by 100 kilometres in the past 40 years. Part of the war and civil war happening there is a conflict over the land mass [...] (Deutscher Bundestag 2008d: 21069).

In contrast to the US debate, the discussion only seldom revolved around direct threats to Germany. Thus, members of parliament occasionally argued that conflicts in the Global South could eventually pertain Europe’s and Germany’s security as well (Deutscher Bundestag 2008a: 14278). More specifically, they feared that climate change could lead to ‘global tensions’, ‘conflicts’, ‘migration’, ‘extremism’ and ‘terrorism’, which all could become direct threats to Germany if left unattended (Deutscher Bundestag 2009c: 604, 2011b: 17991). Here, members of the German Bundestag again adopted some of the arguments most vigorously stressed by US think tanks and occasionally directly referred to their reports, for instance to the 2007 CNA report (Deutscher Bundestag 2008e: II). Finally, the debates frequently mentioned the debate in the UNSC to highlight that ‘[...] climate change is a potential threat to global peace and security.’ (Deutscher Bundestag 2012: 25936).

However, direct threats to Germany’s national security or to international peace and security were mostly portrayed as an unlikely scenario and never became the centre of the debate. Moreover, the articulations always made clear that in response to these threats traditional military measures should not be the first choice. Instead, the focus ought to be on preventive strategies (Deutscher Bundestag 2012: 25936). Thus, mitigation measures and

helping developing countries were central pillars even within the sovereign discourse. Members of parliament called for more CDM projects (Deutscher Bundestag 2008b: 17247), for technology transfer (Deutscher Bundestag 2007d: 13377, 2011b: 17991) but also for reducing CO₂ on a global scale for instance through emission trading systems (Deutscher Bundestag 2007c: 10953). Besides mitigation, even more so than in relation to the other two discourses, the focus on climate change as a driver of traditional security threats increasingly contributed to a discursive shift towards adaptation measures during the end of the 2000s. Thus, members of parliament more and more emphasised that ‘[...] climate and adaptation policies should be understood as an element of preventive security policy’ and called for ‘effective instruments to finance the high costs of adaptation.’ (Deutscher Bundestag 2007d: 13377). Once again, some articulations clearly displayed a tacit acceptance of a considerable degree of global warming and merely focused on measures to cushion its worst blows, for instance through an ‘international fund for compensation’ (Deutscher Bundestag 2008a: 14269) but also with a focus on Germany through a ‘national adaptation strategy’ (Deutscher Bundestag 2008d: 21069).

5.3 Political Impact

Although all three discourses played a role in Germany, the disciplinary and to a lesser extent, the governmental discourse, dominated the debates. Thus, concerning the concrete political consequences, the picture in Germany differs considerably from the US. The prevailing combination of climate security discourses had an impact on the legitimatisation and the content of a range of policies and governance practices in several different political fields. It helped to raise the attention for climate change in general and it directly contributed to legitimise Germany’s progressive climate policies, including mitigation and adaptation strategies. Beyond that, the focus on security threats in the Global South led to a considerable impact on its development policy. The specific securitisation also played an important role in transforming climate change from a largely environmental towards a key foreign policy issue. Finally, while it was not without any effect, the impact on defence policy in Germany was small.

Unsurprisingly, climate security discourses were never the only driving force behind these developments. Instead, climate justice argumentations aiming at global distributional as well as intergenerational justice and an influential environmental movement also played an important part in the German climate debate. Beyond that, particularly since the mid-1990s, climate protection measures increasingly were also presented as an economic opportunity (Beck

et al. 2009: 19), leading to the already mentioned concepts of ecological modernisation and environmental industrial policy that became even more influential in the 2000s (Jänicke 2011: 134). Nevertheless, these concepts did not stand in opposition to climate security discourses but were often directly combined with them to reinforce the overall strength of the argument.

In the following, I take a closer look at the political sectors in which climate security discourses were most influential.

5.3.1 Environmental and Climate Policy

Abating climate change with decisive mitigation measures has always been one of the key demands in the German climate security debate. It eventually led to the adoption of several key policies and facilitated Germany's rise as global climate leader in the 1990s and 2000s (Jänicke 2011: 129, 137; Ulbert 1997: 9). A first tangible political consequence of the mostly globally focused securitising articulations in the late 1980s was the establishment of the influential Enquete Commission on the Preservation of the Earth's Atmosphere. In its first reports it adopted the disciplinary discourse and the emphasis on the global dimension by constructing climate change as 'a danger of almost unimaginable proportions for all mankind' (Deutscher Bundestag 1990: 88), as a 'global threat' (Deutscher Bundestag 1992: 3) and by highlighting the increased frequency of climate induced catastrophes (Deutscher Bundestag 1992: 10). Therefore, the commission favoured a global solution for the problem and decisive restrictions for harmful substances, similar to the by then fairly successful Montreal protocol.

Consequently, in 1991 Germany announced an ambitious CO₂ reduction target of minus 25 per cent between 1987 – later 1990 – and 2005 and began to convince other industrialised countries to do the same (Böcher and Töller 2012: 54; Weidner 2008: 7). Subsequently, as one of the first signatories, Germany became a dedicated promoter of the UNFCCC (Böckem 2000: 7; Weidner 2008: 7) and kept up the political attention for the international climate regime. Eventually, these efforts cumulated in the first COP in Berlin and the adoption of the famous Berlin Mandate (UNFCCC 1995), which paved the way for the establishment of the Kyoto Protocol in 1997. Motivated by the recurring climate security articulations, Germany was one of the few industrialised countries that advocated for binding emission cuts in these early negotiations about the climate regime (Jänicke 2011: 133) and beyond that pushed for the establishment of the precautionary principle in relation to climate change (Mederake and Duwe

2014: 11; Schreurs 2002: 4). Consequently, the country was also the driving force behind the EU's Kyoto pledge of minus eight per cent until 2012 and agreed to burden the largest share of reduction within the EU (Weidner and Mez 2008: 363; Mederake and Duwe 2014: 14; Geden and Tils 2013: 24).

Early Impacts on Domestic Climate Policy

The early articulations of the disciplinary discourse also contributed to Germany's domestic climate policies. In 1990 the BMU established the Interministerial Working Group 'CO₂-Reduction' (IMA) that was supposed to develop guidelines for climate protection for the Federal Cabinet (*Bundeskabinett*), especially concerning mitigation measures (BMU 2006: 4–5). The third IMA report published in 1994, called climate change a 'global threat', emphasised the importance of multilateral solutions, and in accordance with the dominant disciplinary discourse highlighted the special responsibility of industrialised countries to reduce their emissions (Deutscher Bundestag 1994: 5, 57, 160). Beyond that, throughout the 1990s, several members of parliament had advocated for measures that were supposed to combine a prevention of the security implications of climate change with (green) economic opportunities (Deutscher Bundestag 1995b: 2345, 1997: 18328, 1999b: 5985, 5988, 5990). This eventually led to the adoption of the ecological tax reform in 1999 by the newly elected Red-Green (SPD/Green Party) coalition government (Böcher and Töller 2012: 58), which aimed at increasing the tax for energy, especially for fossil fuels and to promote energy efficiency as well as renewables (Deutscher Bundestag 1998b: 1). One year later, the Renewable Energy Law (*Erneuerbare Energien Gesetz, EEG*) followed, which aimed at increasing the percentage of renewables to 25-30 percent of electricity production until 2020 and also introduced fixed feed in tariffs to reach this goal (Böcher and Töller 2012: 59; Jänicke 2011: 138). The draft bill explicitly articulated the disciplinary discourse by emphasising that the increasing frequency of climate induced natural disasters necessitates immediate legislative action to mitigate GHG emissions but also highlighted the economic opportunities of renewables (Deutscher Bundestag 2000a: 18, 1).

Later that year, the government coalition established the German National Climate Protection Programme, which underlined Germany's mitigation target of minus 25 per cent between 1990 and 2005 (Deutscher Bundestag 2000b). The programme emphasised the dangers of climate change, especially due to more frequent occurrence of storms and floods but also food security and the responsibility of developed countries to mitigate (Deutscher Bundestag

2000b: 5, 137). In 2005, the new conservative led coalition government (CDU/SPD) prolonged the programme, and set a new target of minus 21 per cent between 2008 and 2012 relative to 1990 (Deutscher Bundestag 2005c: 4). Again, the initial report about the programme published by the IMA articulated the disciplinary discourse by emphasising that: ‘Extreme events cause billions in damage and threaten the health and livelihoods of the population in many regions of the world.’ (Deutscher Bundestag 2005c: 4). To handle these problems, the report highlighted the importance of decisive mitigation measures to restrict global warming to a maximum of two degrees and underlined Germany’s ambition to remain a climate forerunner (Deutscher Bundestag 2005c: 4).

The Rise of Market Solutions and the Peak of the Climate Security Debate

Whereas Germany had been reluctant towards market solutions for the climate problem for a long time, this began to change with the rise of the governmental discourse in the early to mid-2000s. Parliamentary debates and policy documents began to mention emission trading programmes and the like as important cornerstones of handling climate change in a cost-efficient manner (Deutscher Bundestag 2003a: 6249) and emphasised the economic opportunities that CDM as well as Joint Implementation Projects would bring for German firms (Deutscher Bundestag 2005b: 16616). Subsequently, this helped to reduce the prejudice against market solutions and contributed to a more favourable attitude in Germany towards the European emission trading scheme (EU ETS), which entered into effect in 2005 (European Commission 2013: 1). In 2007, Germany announced a new even more demanding emission reduction target. With the Integrated Energy and Climate Programme (*Integriertes Energie und Klimaprogramm*), it reaffirmed the 40 per cent GHG reduction target by 2020 (Jänicke 2011: 135; Böcher and Töller 2012: 63) and further pledged to cut emissions by 80-94 per cent until 2050 (BMUB 2014). In line with the governmental discourse, the programme intended to control the risks of climate change as cost-efficient as possible by increasing energy efficiency and promoting renewables, and at the same time ensuring economic growth (BMU 2007a: 1).

Between 2007 and 2011, the climate security debate intensified and diversified, which raised the political profile of climate issues considerably and led to several tangible consequences. In 2007 the BMU published an influential report about the Relevance of Renewable Energies for Security Policy (*Die sicherheitspolitische Bedeutung erneuerbarer Energien*) written by Adelphi and the Wuppertal Institute (BMU *et al.* 2007), which frequently articulated the sovereign discourse. In contrast to the US however, the emphasis was not on the

defence sector but on preventing resource conflicts and geopolitical tensions by promoting renewable energy sources (BMU *et al.* 2007: xi, xiii). In the run up to the COPs in Bali (2007) and Copenhagen (2009) (Dröge 2014: 199), during its EU and G8 Presidency, as well as at the G8 summit in Heiligendamm (Jänicke 2011: 135) Germany reassumed its international leadership role. Consequently, chancellor Angela Merkel called climate change the ‘biggest challenge of the twenty-first century’ (TAZ 2007). Moreover, German politicians at several occasions articulated climate security discourses to emphasise the central importance of decisive mitigation measures. A prominent example is the then Environmental minister Sigmar Gabriel who called climate change a ‘threat to all of humanity’ and urged to integrate climate protection into the EU constitution (FAZ 2007).

While the climate security debate had become less pronounced after the failed summit in Copenhagen in 2009 and in the wake of the financial crisis (Geden and Tils 2013: 24), it never disappeared and helped to sustain a fairly progressive climate path under the new conservative-liberal CDU/CSU-FDP government from 2009 on (Jänicke 2011: 135). One of the most outstanding political developments concerning climate policy was the German Energy Turn beginning in 2011. Whereas the Fukushima incident in March 2011 clearly was the final trigger for the phase out of nuclear energy (Dröge 2016: 17), the far reaching transformation of the German energy production system towards renewables energies had long been legitimised by the security implications of climate change (WBGU 2007a: 1–9; Richert 2012). Thus, parliamentary debates (Deutscher Bundestag 1999b: 5987, 1999c: 7252), the Green Party (Bündnis 90/Die Grünen Bundestagsfraktion 2008: 3) and several reports had frequently called for a transition of the German and European energy production system towards green energies to avoid dangerous climate change (WBGU 2003, 2008: 193, 199). Additionally, the already mentioned 2007 BMU report even had directly emphasised the advantages of renewables from a security policy perspective (BMU *et al.* 2007: 1).

After 2011, Germany continued its fairly progressive climate policies but did not come up with new substantive ideas or ambitious reduction pledges at the COPs from Durban (2011) to Paris (2015). While the frustration after the failed COP in Copenhagen was one important reason, the gradual decline of the climate security debate at that time also contributed to the fading enthusiasm for climate issues. Thus, within the second period of the Kyoto protocol and at the COPs in Warsaw 2013, Lima 2014 and Paris 2015, Germany continued to be one of the

more progressive countries but increasingly gave up its distinctive forerunner position (Geden 2013: 1–2; Dröge 2016: 6, 19, 21).

Adaptation, Resilience and Climate Insurance Policy

Mitigation always remained the first priority in the German debate but since the mid-2000s adaptation measures gradually became more important as well (Böcher and Töller 2012: 69). While this was also due to new research about the unavoidable effects of climate change, climate security discourses played a significant legitimising role. They contributed to shift the attention to the security implications or ‘symptoms’ of climate change that could not be prevented entirely by mitigation but had to be kept under control by adaptation and resilience measures (see also Oels and von Lucke 2015: 45, 61; Oels 2013). Thus, in 2006 the UBA founded the Competence Centre on Climate Impacts and Adaptation (*Kompetenzzentrum Klimafolgen und Anpassung*, KomPass) that was supposed to prepare Germany and Europe for the unavoidable effects of climate change (UBA 2016) and to compile the German Adaptation Strategy (*Deutsche Anpassungsstrategie*, DAS), which was initially published in 2008. Articulating the by the by then fairly common governmental discourse, the DAS mainly revolved around an ‘integrated approach’ to identify the relevant risks of climate change for Germany and to lower the resulting vulnerability as well to develop ‘strategies to cope with uncertainties’ (Bundesregierung Deutschland 2008: 4–5). In this context, it also highlighted the importance of the insurance industry to keep climate risk at a tolerable level and for instance referred to the influential Munich Climate Insurance Initiative (MCII) (Bundesregierung Deutschland 2008: 37).

In 2011, the DAS was developed further by the publication of the Action Plan Adaptation (*Aktionsplan Anpassung*) (Bundesregierung Deutschland 2011b) and the founding of an Inter-Ministerial Working Group on Adaptation. The 2011 Action Plan again adopted the governmental discourse and aimed at ‘prioritising different climate risks’ to develop an ‘integrated vulnerability assessment’ in order to lower those risks and vulnerabilities in a cost-efficient manner (Bundesregierung Deutschland 2011b: 12). Beyond that, it emphasised the principles of subsidiarity and underlined that ‘the responsibility for adaptation was mainly among citizens and companies themselves’ (Bundesregierung Deutschland 2011b: 9) thereby again relying on a core principle of governmental power. Finally, in 2015 the BMZ organised a conference on Climate Risk Insurance and the German government promised to support the insurance of climate risks with 150 million Euros until 2016 (MunichRe 2015).

5.3.2 Development Policy

One of the defining traits of the German climate security debate was the emphasis of the threats of climate change for poor people in developing countries. While this in combination with the global justice argumentation helped to legitimise mitigation measures, it also had an impact on German development policy and on which practices were seen as appropriate in this sector. Similar to the field of environmental policy, from the mid-2000s on, the emphasis gradually moved from mitigation to adaptation and resilience measures. A special focus was on disaster preparedness and management, climate education, climate risk prevention and management schemes as well as insurance solutions. Besides these measures that primarily aim at tackling the physical effects of climate change, the constant construction of climate change as a threat to human and occasionally also to national and international security also facilitated a closer integration of development and security i.e. defence policy.

Early Impacts on Development Policy

Climate change and its security implications became more influential towards the end of the 1990s and particularly in the course of the 2000s in German development policy. Apart from a general reorientation of development policy towards security aspects (Ziai 2010: 140; Pospisil 2009), this was also due to personnel changes. The new head of the BMZ, Heidemarie Wieczorek-Zeul laid a much greater focus on climate change and its security implications than her predecessors (Bohnet 2015) and already in 2000 stressed that climate change ‘threatens the foundations of human life’ (Wieczorek-Zeul 2000). Consequently, the BMZ increasingly began to consider the effects of climate change for human security and partly also its potential to fuel violent conflicts in key policies. At a conference on disaster preparedness and coping mechanisms that identified climate change as one of the main drivers behind the increase of disasters (Goldammer 2000: 9), BMZ spokesperson Horst Müller claimed that ‘environmental degradation and resource scarcity together with population growth’ lie at the core of many conflicts (Müller 2000: 17). He furthermore underlined that the BMZ understood development policy as a promotion of ecological sustainable development as well as conflict prevention and considered disaster preparedness and the promotion of coping mechanisms central components of its mission (Müller 2000: 17).

Thus, a particular focus of the German development policy was on the promotion of sustainable development and on ‘global structural policy’ (Ziai 2010: 136). The basic idea was

that improving the living conditions of poor populations around the world and lowering their vulnerability towards the adverse effects of climate change would also help to prevent violent conflicts. Thus, the influential 2004 report on Civil Crisis Prevention, Conflict Resolution and Peace Building matched the disciplinary and sovereign discourse by identifying the physical effects of climate change as important driver for the destruction of habitats, migration movements and violent conflicts that eventually could threaten entire states and the international system (Bundesregierung Deutschland 2004: 12). To prevent these dire consequences, the report emphasised the importance of global climate treaties but also local environmental cooperation projects (Bundesregierung Deutschland 2004: 54). As the name of the report implies, a further result of climate security discourses was the increasing combination of climate, foreign, development and security policy, to prevent problematic situations from arising in the first place and if necessary to deal with them in an integrated manner (Bundesregierung Deutschland 2004: 55). In this vein, adaptation measures increasingly gained in importance and the already mentioned 2007 BMU report stated that ‘The identification and implementation of appropriate adaptation measures can contribute decisively to timely response to an increased potential for conflict’ (BMU *et al.* 2007: 94).

Integrating Climate Security and Development Policy

At the peak of the climate security debates, especially the 2007 WBGU report had a direct influence on German development policy. In 2007 at the commencement of the G8 summit in Heiligendamm, Wieczorek-Zeul called climate change ‘the biggest security threat the world faces today’ and demanded multi-billion euro investments for climate protection instead of financing new defence equipment (N-TV 2007). Moreover, in a press statement of the BMU, she directly adopted the disciplinary argumentation of the WBGU that climate change would become a threat to millions of people especially in developing countries and would lead to millions of climate refugees. To prevent these problems, Germany had to support those people for instance by providing technological knowhow concerning renewables. Mirroring the 2007 BMU report on the relevance of renewables for peacebuilding, Wieczorek-Zeul emphasised that in contrast to ‘wars over the access to oil’ there will be no ‘wars over the access to the sun’ (BMU 2007b).

Subsequently, the German Development Agency GIZ (formerly GTZ) began to integrate climate security aspects into its planning schemes. In its widely noticed 2008 report on climate change and security (GTZ 2008a) it saw an opportunity for the ‘foundation for new

international alliances geared towards making adaptation to climate change and (conflict-sensitive) preparation for its adverse effects a key issue of negotiations' (GTZ 2008a: 49–50). The report directly adopted disciplinary and governmental notions by emphasising the importance of disaster risk management schemes that would become 'key elements of structural prevention policy geared to avoiding and containing future crises' (GTZ 2008a: 53). It furthermore inherited the risk-group approach by setting regional priorities based on the recommendations of the GTZ's Crisis Prevention and Conflict Transformation Programm (GTZ 2008a: 53–54). In addition, contributing to the merging of climate, development and security policy, the GIZ strived to further integrate its three sector programmes on Climate Protection, Crisis Prevention and Disaster Risk Management and to 'conduct systematic security analyses and risk assessments in the preparatory phase of projects and in affected countries' (GTZ 2008a: 54). In the following years, the understanding of climate change as a security problem and the expansion of adaptation, disaster management and climate education schemes has become an important aspect in several projects, programmes and reports of the GIZ (GTZ 2008c; Hannen 2012: 17; GIZ 2011).

The 2008 German Adaptation Strategy also explicitly highlighted the relevance of adaptation measures in developing countries and identified several tasks for German development policy (Bundesregierung Deutschland 2008: 7). In the same vein, the 2011 Action Plan on Adaptation emphasised the vulnerability of developing countries and the need to support their adaptation efforts. This would not only benefit the people in those countries but because of the prevention of large scale migration movements eventually also industrialised countries (Bundesregierung Deutschland 2011a: 36). Reflecting the disciplinary and governmental discourse, the focus was particularly on lowering the vulnerability of affected populations, increasing the coping capacity and risk management capabilities of local administrations and promoting disasters preparedness and early warning systems. Moreover, every German development project since 2011 had to undergo a 'climate-check' to ensure its compatibility with the German climate policy goals (Bundesregierung Deutschland 2011a: 38–39). Beyond these bilateral instruments, the Action Plan emphasised the importance of international instruments for adaptation. These included the Fast-Start Finance Module, in which Germany had committed itself to provide 260 million Euros between 2010 and 2012 for adaptation projects (Bundesregierung Deutschland 2011a: 37) and the International Climate Initiative, which supports a range of climate risk management and insurance measures in developing countries (Bundesregierung Deutschland 2011a: 37–38).

The general growth of climate security articulations that pointed to threats for human security in the Global South also had a lasting effect on policies of the BMZ. In 2007, the Programme of Action on Climate and Development emphasised that ‘climate change threatened all of humankind’ but also that the poor would be disproportionately affected by its adverse effects (BMZ 2007: 1). Hence, combating climate change, reducing poverty and keeping peace should go hand in hand to prevent conflicts around the world (BMZ 2007: 1) and the BMZ pledged to increase its climate related funding from 500 million Euros in 2007 (BMZ 2007: 2) to about 1,3 billion in 2011 (Bundesregierung Deutschland 2012: 156). In the spirit of keeping the risks at a tolerable level and preventing climate change from becoming an issue of international security, the BMZ sought to establish disaster risk management approaches as a cross-cutting issue in high-risk countries as well as to alleviate emerging crises through the Civil Peace Service (GTZ 2008a: 53–54).

Although the 2009 newly appointed Minister for Development Dirk Niebel (FDP) was less enthusiastic about climate protection than its predecessor, climate security considerations remained important. In 2010 at a conference about climate change as a challenge for security policy organised by the Hans Seidel Foundation, the Department of Peacebuilding and Crisis Prevention of the BMZ underlined the need for a holistic strategy to tackle climate induced conflicts that involved all relevant ministries from the BMZ to the BMU to the Foreign Ministry (Jones 2010: 5–6). Beyond that, in an 2011 Information Brochure the BMZ called climate change a ‘threat to human rights’ (BMZ 2011: 16) highlighted the devastating physical threats of climate change and emphasised the crucial role of affordable renewable energies to ensure the continuation of economic development in the Global South and to prevent the worst impacts of climate change (BMZ 2011: 4). Thus, climate security discourses were a key driver of the integration of development and (preventive) security policy (Pospisil 2009; Ziai 2010: 142–143; Schmidt 2014b). In this context, Chancellor Merkel repeatedly emphasised that there was ‘no development without security and no security without development’ (Merkel 2010), which also led to a integration of this mantra into BMZ reports (BMZ 2013a: 2).

Subsequently, the BMZ acknowledged the central importance to ‘strengthen the adaptive capacity and resilience of states and their societies against external shocks and crisis’ such as climate change (BMZ 2013b: 10) and to include climate adaptation and disaster management as core tasks of German development policy (BMZ 2013a: 16). In hence integrated

measures such as climate risks management and the promotion of climate resilient agricultural methods (BMZ 2015a: 10, 17) into its Catastrophe Risk Management Strategy (BMZ 2015a: 9). The overall aim of the German development policy in this respect was to prevent risks from spiralling out of control by increasing the coping capacity and resilience of the most affected groups (BMZ 2015a: 26; see also BMZ 2015b: 26, 2016b, 2016a). This also included the promotion insurance schemes such as the G7 Climate Risk Insurance Initiative, which Germany had initiated during its Presidency of the G7 and which strived to increase the number of people with coverage against changes in weather and climate to about 500 million until 2020 (BMZ 2015a: 18).

5.3.3 Foreign Policy

While climate change had played a role in Germany's foreign policy in the 1990s, this was mainly in an environmental context i.e. the Foreign Ministry contributed to shape Germany's behaviour and climate policies concerning the UNFCCC negotiations but did not on a broader scale devote resources or adopt specific policies on the issue. This began to change in the early 2000s when the Foreign Ministry (*Auswärtiges Amt*, AA) took a stronger interest in questions of disaster prevention and early warning systems (Goldammer 2000: 12, 14, 16) and became part of the 2004 Action Plan on Civil Crisis Prevention, Conflict Resolution and Peacebuilding (Bundesregierung Deutschland 2004). Gradually, the focus on the various threats of climate change helped to establish the issue as part of Germany's foreign policy. In its quest to act as a 'good global citizen' and civilian power Germany's foreign policy had for a long time focused on facilitating a more just global order and on supporting disadvantaged populations around the world (Interview 2015b; Hellmann *et al.* 2006: 188, 192; Gareis 2005: 59). Moreover, the growing number of references to actual conflicts and threats to national and international security in climate debates as well caught the attention of foreign policy experts. In this context, climate change ceased to be exclusively or primarily handled by the BMUB and instead the AA progressively resumed more responsibility, particularly concerning the security aspects (Interview 2014y, 2015a).

Around the peak of the climate security debate in 2007 climate change was increasingly integrated into Germany's foreign policy on a broader scale (Interview 2015b). Important triggers were the quickly accelerating global climate security debate, the appointment of the more climate friendly foreign minister Steinmeier (SPD) in 2005 (Interview 2014y) and

especially the 2007 WBGU report on climate change and security. Thus, in 2007 at the 43rd Munich Security Conference, Steinmeier called climate change a problem of national and international security (Steinmeier 2007a) and at the G8 summit in Heiligendamm emphasised the links between the security implications of climate change and energy security (Steinmeier 2007c). In the same year the AA organised a conference on climate change as security issue (Auswärtiges Amt 2007) where Steinmeier particularly mentioned the 2007 WBGU report. He stressed that ‘the foreign and security policy challenges’ of climate change ‘are enormous’ and necessitated new global mitigation alliances, diplomatic efforts and détente policies i.e. ‘preventive environmental diplomacy’ to avoid conflictual situations especially in developing countries (Steinmeier 2007b). He concluded that Germany would continue to consider climate change as a core aspect of its foreign policy and that it would soon be discussed by the European Council (Steinmeier 2007b). Subsequently, this led to the publication of the influential EU Commission report on climate change and security in 2008 under German EU presidency (Solana and EU Commission 2008).

The UNSC Debates

It was also in the peak year of 2007 that Germany vigorously stressed the security implications of climate change in the UNSC. In the first UNSC debate on climate change in 2007 Wieczorek-Zeul represented Germany, which exemplifies the close interconnections between foreign and development policy and the emphasis on supporting the world’s poor particularly in the context of the security implications of climate change. Wieczorek-Zeul mainly echoed the disciplinary and governmental discourse by emphasising the vulnerability of poor populations in developing countries (UNSC 2007b: 20). Consequently, she demanded that the ‘security implications of climate change should receive more attention’ (UNSC 2007b: 19) especially in the context of conflict prevention (UNSC 2007b: 19) and that the world needed a ‘global framework of risk management’ as well as ‘preventive diplomacy’ (UNSC 2007b: 20).

In 2011, Germany itself organised a second debate on climate change in the UNSC. In a letter addressed to the secretary general (UNSC 2011c), the Permanent Representative of Germany to the UN, Peter Wittig, primarily articulated the disciplinary and sovereign discourse. He stressed that ‘the impacts of climate change on peace and security are already tangible’ and that climate change was a ‘risk multiplier’ concerning armed conflict especially in already fragile countries in the Global South (UNSC 2011c: 2). To tackle these problems he suggested an ‘integrated approach to conflict prevention’ that included all relevant UN organs from the

UNDP, the UNEP to the UNSC (UNSC 2011c: 5). In the debate itself, he named climate change a ‘driver of conflict’ that could destabilise whole regions and once again highlighted the importance of crisis prevention policies (UNSC 2011a: 21).

Developing ‘Climate Diplomacy’ and ‘Climate Foreign Policy’

Especially from 2011 onwards, the AAs climate security initiatives were continuously expanded and became an important cornerstone of German foreign policy (Interview 2015b; Auswärtiges Amt 2011). In close cooperation with Adelphi, which had been one of the most active non-governmental proponents of climate security, the AA developed the concept of ‘climate diplomacy’ (Pieper 2011; adelphi 2012, 2013; Adriázola *et al.* 2013)⁹, which also included an online knowledge base on ‘on environment, conflict, and cooperation’¹⁰. The aim of these initiatives was to increase the attention for the security risks of climate change and eventually to build support for a comprehensive climate agreement until 2015 that would be able to significantly reduce the security risks of climate change (adelphi 2012: 8). Simultaneously, in cooperation with the KlimaCampus and the Research Group Climate Change and Security (CLISEC) at the University of Hamburg, the AA established the global Climate Security Dialogues, which particular aimed at bridging the science-policy gap (adelphi 2012: 30). Moreover, again in cooperation with Adelphi, the AA organised policy briefings on climate diplomacy and the security implications of climate change for German embassy officials, officers from German implementing agencies, and representatives of German foundations around the world (adelphi 2012: 34; Adriázola *et al.* 2013: 13). Finally, in 2011 the AA established the Federal Foreign Office Climate Fund, which financed several projects around the world that aimed at raising awareness for the implications of climate change (adelphi 2012: 54).

In 2013 a BMZ report extended the concept of climate diplomacy to ‘climate foreign policy’ (BMZ 2013a: 20) and at the 50th Munich Security Conference Steinmeier once again underlined that climate change was a ‘pillar of German foreign policy’ (Steinmeier 2014). In 2015 at the G7 Foreign Ministers’ Meeting in Lübeck under the German Presidency the security implications of climate change were a central aspect in the final communiqué (G7 2015). Mirroring the dominant discourses in Germany, the communiqué stressed that the world needed to ‘mitigate the risks of climate change’ and to ‘support preparedness and resilience to disasters’

⁹ The Climate Diplomacy Initiative also has a website: <https://www.climate-diplomacy.org/>

¹⁰ <https://www.ecc-platform.org/>

(G7 2015). Moreover, it emphasised that we had to ‘better understand, identify, monitor and address the compound risks associated with climate change and fragility’ to prevent the further spread of instability and fragile states especially in the Global South (G7 2015). Besides establishing a working group supposed to ‘conduct integrated climate and fragility risk assessments’ (G7 2015), the G7 commissioned a report on ‘A New Climate for Peace: Taking Action on Climate and Fragility Risks’ carried out by Adelphi, International Alert, The Wilson Center and the Institute for Security Studies of the European Union (G7 *et al.* 2015). It called climate change ‘[...] a global threat to security in the 21st century’ and urged to ‘[...] act quickly to limit the future risks to the planet [...]’ (G7 *et al.* 2015: vii). The report particularly engaged in the governmental discourse by highlighting that the aim was to reduce the overall risk of climate change to a controllable or tolerable level, without explicitly calling for massive mitigation. It hence recommended to ‘increase the resilience of states and societies’ (G7 *et al.* 2015: vii, xi), to ‘make climate-fragility risks a central foreign policy priority’, establish a ‘global resilience agenda’, carry out a ‘global risk assessments’ and develop disaster risk reduction programmes to eventually come to a ‘more peaceful and more resilient future’ (G7 *et al.* 2015: xv–xix).

5.3.4 Defence Policy

The overall impact of climate security discourses on Germany’s defence policy was limited. This was not least due to the fact that many advocates of the sovereign discourse themselves did not see an important role for military actors or solutions in the defence and security sector (Brauch 2002: 25; Eberwein and Chojnacki 2001: 10). Instead, the construction of climate change as a threat to human and occasionally national security especially in the Global South facilitated the spread of holistic or ‘networked’ approaches to security that included defence, environmental and developmental aspects. Already in 2008 the then Defence Minister Franz Josef Jung (CDU) emphasised the increasing connections between different sectors and government agencies in order to ‘prevent crisis’ from materialising in the first place (Bundesministerium der Verteidigung 2008). Beyond that, the 2010 published 3rd Report of the German Government concerning the Action Plan on Civil Crisis Prevention and Peacebuilding further specified this holistic approach and recommended to integrate climate security aspects into the planning schemes of various actors such as the EU, NATO, the OECD, the G8 and development agencies (Bundesregierung Deutschland 2010: 33-35).

During the peak of the climate security debate from 2007 on and in the wake of the increased appearance of the sovereign discourse in Germany, the German Armed Forces (*Bundeswehr*) began to acknowledge the security implications of climate change. However, they only very reluctantly deduced concrete pathways of action for themselves from this debate (Interview 2014w, 2015c). In stark contrast to the US, German military officials mostly refrained from talking publicly about climate change and if anything began to discuss the issue internally or in reports that were not primarily targeted at a broader audience. A first report published in 2012 mainly revolved around the security implications of climate change for the Middle East and North Africa. It acknowledged the potential of climate change to further destabilise this region but at the same time emphasised that ‘Increasing resilience is in the first place not a military task but rather a challenge for the state as a whole.’ (Bundeswehr 2012: 7). In this vein, it also critically discussed the problems associated with ‘securitising’ climate change (Bundeswehr 2012: 21). In a second report issued in 2014, the Bundeswehr identified the Arctic as an important future topic concerning climate security (Bundeswehr 2014). It stressed the possibility of conflicts over resources or territorial disputes in the face of a melting arctic and especially in the context of an increasingly aggressive behaviour of Russia (Bundeswehr 2014: 1). However, it only predicted a marginal probability for military conflict and explicitly highlighted that the climatic changes in this region do not entail a ‘future challenge for security policy that is relevant for the Bundeswehr’ (Bundeswehr 2014: 1).

5.4 Tracing the Preconditions for Specific Discourses

How come that the disciplinary and governmental discourses were so prevalent in Germany and the impact on environmental and development policy so far reaching whereas the sovereign discourse had a much harder time than in the US and largely failed to influence the defence sector?

Germany's Troubled Past and the Primacy of Multilateralism

A first key contextual characteristic is the specific political culture in Germany when it comes to the use of force and questions of national security. Due to the country’s problematic experiences with nationalism and the unilateral use of military force in the past, the concept of ‘national security’ has been largely discredited and thus does not play an important role in political discussions (Hellmann *et al.* 2006: 187). This does not mean that security policy and governance are unimportant entirely but rather that the governmentalisation of security

practices towards disciplinary and governmental power is more advanced than for instance in the US. In practice, this means that instead of focusing on Germany's national security and the development of its own military capabilities or sovereign solutions, the emphasis is on ideas such as shared sovereignty and collective security that primarily strive to ensure international stability (Böckenförde 2014; Böckenförde and Gareis 2014). In this context, international law, the UN and particularly the European Union play a central role (Hellmann *et al.* 2006: 188). Thus, Germany tries to act as a civilian or normative power that primarily relies on soft power and leadership by example to facilitate multilateral solutions to global problems such as climate change (Interview 2014z; Maull 1993; Hellmann *et al.* 2006: 192). This is further reinforced by a quest to make up for the wrongdoings in the past, to become a good and respected global citizen and to help disadvantaged populations and states and hence to increase human security around the world (Harnisch and Wolf 2010: 45–46).

This specific political culture has had several concrete consequences for the climate security debate. Together with the influential peace movement and widespread 'anti-militarism' in Germany (Gareis 2005: 46) it has led to a much less influential role of the armed forces, which has even further deteriorated since the end of the Cold War. Besides a comparatively small size and budget – Germany spends 1.2 per cent of GDP on defence, compared to 3.3 per cent in the US (Statistika 2017) –, the Bundeswehr or military solutions as such do not have a particularly favourable reputation in the public or amongst political actors. Thus, the Bundeswehr usually does not participate in political debates. Especially concerning climate change, the involvement of the armed forces would not have helped the debate but would most likely have been received as dangerous 'militarisation' (Wagner 2008) of the issue. Consequently, the security implications of climate change were mostly linked to foreign and development policy, which resonated much better with the general role of Germany in international society and its strive for collective solutions, and preventive diplomacy (Harnisch and Wolf 2010: 49). Moreover, although this has begun to change since the 1999 Kosovo war, the German constitution has defined the role of the Bundeswehr rather narrowly as a 'defensive army' (Gareis 2005: 166, 175). This has for a long time prevented it from a more active role around the world and extensive peacekeeping missions and thus to directly operate in areas constructed as threatened by climate change. Accordingly, in contrast to the much more globally active US army, the German armed forces have not picked up climate change as a key security threat.

Besides the less important role of the defence sector, the absence of a strong national security culture has also led to a much closer integration of Germany into international society, most importantly epitomised in its membership and role in the European Union (Jänicke 2011: 142). The key role of multilateralism in its foreign policy in general (Hellmann *et al.* 2006: 217; Gareis 2005: 56) has also had a considerable effect on which climate security discourses and respective solutions were seen as appropriate. Thus, discursive interventions from the EU Commission (Solana and EU Commission 2008), the UN (UNGA 2008, 2009a; UNSC 2007a, 2011a) were highly influential and helped to forge a much more multilateral debate on climate security than for instance in the US. Together with the efforts to make up for past wrongdoings and global justice considerations this has facilitated the focus on the threats of climate change for poor populations around the world and the focus on development policy.

Environmental Policy as Mainstream Issue

In contrast to the US, climate security discourses had a far-reaching impact on federal climate mitigation policy in Germany. One important explanation for this striking difference is that although climate security articulations in both countries have pointed to the necessity of mitigation measures, in Germany these demands met a much more favourable discursive context. Partly due to the much higher density of the population and the hence seemingly more precious value of nature as such (Ulbert 1997: 22) as well as due to the fear of nuclear annihilation, beginning in the 1970s Germany saw the growth of an influential anti-nuclear and environmental movement (Schreurs 2002: 5–7). Subsequently, a green consciousness and post-materialistic worldview has quickly expanded and with the rise of the Green Party also became part of the political game and in 1998 even part of a governing coalition (Ulbert 1997: 26; Schreurs 2002: 6; Kuckartz *et al.* 2006). Consequently, environmental and climate protection soon became mainstream positions in Germany, with over nine percent of the population being members of environmental organisations (Jänicke 2011: 131) and a huge majority feeling directly threatened by climate change (Kuckartz *et al.* 2006: 20) and favouring progressive policies in this sector (Jänicke 2011: 141, 144; Geden and Tils 2013: 24). In this context, all parties – with a possible exception of the far-right and extremist parties such as the AFD and NPD – have adopted decisive climate protection measures as important goal (Jänicke 2011: 131, 141; Geden and Tils 2013: 24). Moreover, political actors closely cooperate with several environmental NGOs, research institutions and business actors to come to progressive climate solutions (Schreurs 2002: 4).

From early on, the German research landscape concerning climate change became one of the most advanced and well financed worldwide (Krück *et al.* 1999; DWD 2013b). Its findings were broadly disseminated (Schmidt 2012: 69) and today several German climate scientists such as Joachim Schellnhuber or Mojib Latif play key roles in the German and international climate debate (Dehmer 2015). In this context, scientific organisations and knowledge became a driving factor in the climate debates in Germany and had a direct influence on political discussion. Examples are the Enquete Commissions on climate change, the PIK, the Wuppertal Institute for Climate, Environment and Energy and the WBGU, which all worked at the intersections between science and politics and eventually helped to facilitate human security and risk focused climate threat constructions in Germany (Jänicke 2011: 141). In this context, scientific ‘expert knowledge’ is usually not questioned or politicised – at least not to the same extent as in the US – and often has been directly integrated into Germany’s climate policies. Together with the strong role of environmental NGOs and the absence of influential climate sceptics, this has facilitated the far-reaching impact of climate security discourses on actual mitigation policies. Beyond that, the rather reversed or even outright judgemental attitude towards military solutions or military research at German universities and research institutions (Massenbach 2017), has generated further headwind for the sovereign discourse and military solutions to the climate threat.

5.5 Conclusion: Germany

Connecting climate change to security conceptions played a role in Germany from early on and similar to the US contributed to setting climate change on the agenda in the first place. In the 1990s, it was especially the disciplinary discourse coupled with a concern for all of humanity that coined the picture of climate change as security problem. In connection with global justice considerations, this discursive representation saw industrialised countries and Germany in particular as obliged to stop this from happening and to support and rescue the most affected populations in the Global South. It contributed to Germany becoming one of the leading proponents of the international negotiations and adopting an ambitious mitigation agenda at home. Together with a focus on ecological modernisation and the precautionary principle this led to a range of policies mostly at the intersections between environmental and energy or industrial policy and often aimed at combining environmental protection with economic opportunities. In the early 2000s, the disciplinary discourse kept dominating the debate in

Germany and together with the ambitions of the Red-Green coalition government further expand Germany's climate agenda. In the first half of the 2000, most measures revolved around mitigating climate change at home and were closely connected to energy transformation and ecological tax policies. Toward the second half of the 2000s, the climate security debate in Germany intensified and diversified and peaked around 2007-2009 when numerous influential reports came out and parliamentary articulations of climate security discourses multiplied. While the representation of climate change as threat to human security prevailed, it was increasingly combined with climate risk articulations and occasionally also included references to the sovereign discourse.

This predominant securitisation of climate change helped to keep the issue on the political agenda when the centre-right, and not overly environmentally enthusiastic CDU/CSU came out strongest after the election. The main impact throughout the 2000s and 2010s was on German climate policy with an emphasis on mitigation measures. It further strengthened domestic climate policies but also sparked renewed efforts to fulfil Germany's self-proclaimed leadership role concerning the international climate negotiations, which at that time mainly revolved around establishing a more comprehensive successor of the Kyoto Protocol. While the focus continued to lie on regulatory measures and binding reduction commitments, the growing importance of the governmental discourse contributed to ease German reservations against market solutions to climate change such as the European emission trading scheme. Together with the sovereign discourse, this also helped to increase the importance of adaptation and resilience measures.

Beyond climate policy, the continuous juxtaposition of poor populations in the Global South as first victims of climate change with resourceful industrialised countries in the Global North, had a considerable impact on Germany's development sector. The aim was to support Southern populations in their efforts to combat climate change but also to monitor and control their behaviour to prevent climate induced crises, which included a gradual conflation of foreign, defence and development policy. Gradually, the spread of climate security argumentations also affected German foreign policy in general and led to a transformation of what climate change meant politically. Thus, particularly from 2007 on a growing number of reports and parliamentary debates began to highlight the 'hard' security implications of climate change such as violent conflict or a destabilisation of international security. This increasingly established climate change as a key foreign policy priority. It also shifted the responsibility for

climate policy and the international negotiations from the environmental towards the foreign ministry and coined new political approaches such as ‘climate diplomacy’ or ‘climate foreign policy’.

Summing up, the securitisation of climate change in Germany was highly influential when it comes to redefining what climate change meant politically and legitimising concrete policies and practices. In stark contrast to the US, the German case study shows how the securitisation of climate change can develop in an entirely different direction by constructing the issue as a threat to human security and general risk instead of relying on narrow national security conceptions. Accordingly, it mainly affected climate, development and foreign policy and did not lead to any meaningful changes in the defence sector. This form of securitisation certainly is more favourable in terms of abating climate change and preventing human suffering and hence partly supports the idea of the emancipatory qualities of human security in comparison to narrow and military focused national security conceptions. Nevertheless, the case also exemplified several possibly problematic effects of such a human security driven securitisation, especially when it comes to perpetuating certain identities and dependencies, which will be discussed in more detail in section *7.1 and 7.3*. Beyond that, the German case study also showed how securitisation processes evolve in a discursive arena that was highly interconnected with the global and European debate and which left more room for a broad variety of actors to participate in the debate.

6. Mexico: Analysing Securitisation in the Global South

6.1 Introduction

[...] Mexico is a country that is vulnerable to climate change and according to the results of a country level study, the areas that are moderately suitable for agriculture are shrinking, which would affect millions of people that rely on agricultural products
(Cámara de Diputados 2007d: 330).

As the above quote from a parliamentary debate in Mexico's *Camara de Diputados* / Second Chamber of the Parliament exemplifies, Mexican politicians have begun to understand climate change as serious risk with profound impacts on the vulnerability and wellbeing of its population. However, instead of pointing to national security, violent conflicts and to fostering its military readiness, the Mexican debate primarily rested on disciplinary and governmental discourses. Consequently, the policy focus was on long-term mitigation measures as well as on strategies to manage the risks of climate change and to protect the Mexican population. Besides these differences regarding dominant discourses, securitisation in general played a less important role than in the US and Germany, at least as a standalone discourse. Instead, Mexico saw a relatively successful politicisation of climate change as environmental and justice issue as well as economic opportunity (El Economista 2012; González 2012), which developed alongside securitising articulations and was mainly driven by President Vicente Calderón. While this on the one hand reinforced the moderate disciplinary and governmental discourses, on the other hand it limited the overall success of the securitisation of climate change and particularly prevented the sovereign discourse to gain a foothold in Mexico.

Notwithstanding, the country remains an interesting case because it provides a considerably different context for securitisation, especially in comparison to the US and Germany. Despite its history of close entanglement with the US and the recent acceleration of its economic and political development, which led to a classification as 'emerging economy' (González 2014), Mexico is a country of the Global South, which still ranks well below industrialised countries in the Humans Development Index (HDI) (UNDP 2015: 48). Moreover, for years it had been under quasi-authoritarian rule of the *Partido Revolucionario Institucional* (PRI) and it was only in the 2000s with the electoral win of the *Partido Acción Nacional* (PAN)

that it made considerable steps forward in its democratisation process (Dussel Peters and Maihold 2007: 8).

Besides these institutional factors, Mexico's predicted affectedness and vulnerability towards climate related problems stemming from geographical features and its socio-economic profile with a high percentage of poor people and limited resources and control of the government (World Bank 2012; Bertelsmann Stiftung 2012: 12), distinguish it from the two other country cases. IPCC predictions and rankings such as Germanwatch's Climate Risk Index or the Gain Index construct the country and its population itself as highly threatened by climate change (Germanwatch 2014: 7; ND-Gain 2015). This makes an important difference to the US and Germany, which such rankings only see as indirectly threatened not least because of their immense financial and technological coping capacity (ND-Gain 2015). At the same time, Mexico has managed to position itself as one of the most progressive countries concerning climate policies in recent years, which is mirrored in its remarkably good standing in several comparative rankings. Although being the 13th biggest economy worldwide (Akerberg 2011: 38) and one of the top ten global emitters – about 1.6 per cent of global GHG emissions come from Mexico (Dröge 2016: 11) – the Climate Performance Index has always ranked the country among the 15 most progressive countries concerning climate policy between 2005 and 2014 (Germanwatch and CAN 2015). Additionally, the Climate Action Tracker has placed Mexico in its 'medium' category, hence putting it next to other progressive countries such as Germany (Höhne *et al.* 2012). Thus, at least since the mid-2000s, the country has acted as a strong vanguard concerning climate abatement (Detsch 2011: 34–35), which is underscored by its membership in progressive alliances such as the Cartagena Dialogue and the Environmental Integrity Group.

In sum, the country provides a considerably different political, socio-economic and discursive context for securitisation and hence can advance our understanding of securitisation in non-Western or Southern contexts (Boas 2014; Bilgin 2010). As the detailed case study will show, this different environment influenced which climate security discourses played a role in the political debate, how they were able to influence political decisions and how they related to the parallel politicisation of climate change. The empirical analysis of the Mexican case rests on a discourse analysis of the 27 most influential reports that contain securitising articulations. Moreover, the analysis covered 126 parliamentary debates in the *Senado de la República* / First Chamber of the Mexican Parliament and the *Cámara de Diputados*. Additionally, I conducted

20 interviews in Mexico and in the UK with key stakeholders in the climate security debate. Amongst them, Royal United Services Institute (RUSI), the British Embassy, Centro Mexicano de Derecho Ambiental (CEMDA), Centro Mario Molina (CMM), Partners for Democratic Change International (PDCI), WWF, the Heinrich Böll Foundation, and Reforestamos Mexico.

6.1.1 The Origins of the Climate and Security Debate in Mexico

In Mexico, the first precursors of a growing environmental awareness on the political level appeared in the 1970s when environmental concerns were integrated into the constitution and the first environmental law was adopted (Mumme *et al.* 1988: 12; Mumme and Lybecker 2002: 314). However, it was only in the 1980s that, driven by a gradual economic and political opening after years of authoritarian rule of the PRI, these issues began to be discussed on a broader basis (Dussel Peters and Maihold 2007: 8; Sánchez Gutiérrez *et al.* 2009: 4). Subsequently, Mexico saw a reform of its environmental law in 1981, an integration of environmental problems into the National Development Plan 1983-1988 and the adoption of a new environmental law in 1988 (Mumme *et al.* 1988: 15–19; Assetto *et al.* 2003: 255). While occasional local protest as well as intense political debates, hence some form of proto-securitisation, already were part of the debate at that time, the driving factors behind this development lay elsewhere. Besides President Miguel de la Madrid (1982-1988), the most influential proponents of the environmental agenda were academic institutions such as the *Universidad Nacional Autónoma de México* (UNAM) and the Mexican Ministry of Health (Mumme *et al.* 1988: 12). Beyond the influence of these domestic actors, the increasing interdependence with the US, which at that time still was an environmental forerunner, further contributed to this development (Mumme and Lybecker 2002: 314; Mumme *et al.* 1988: 15).

When climate change became a more important political concern on the global level after the establishment of the IPCC in 1988 and the UNFCCC in 1992 (which Mexico ratified in 1993), it also began to move to the centre of the environmental discussion in Mexico. Again, US influence played a key role, for instance through the establishment of the North American Free Trade Agreement (NAFTA) in 1994 (Assetto *et al.* 2003: 256; Mumme and Lybecker 2002: 320), which also contained environmental norms and the US Countries Studies Program, which was supposed to support developing countries in designing a strategy towards climate change (Pulver 2006: 51; Sánchez Gutiérrez *et al.* 2009: 3–5). Other key domestic drivers were academic institutions such as the UNAM and the newly founded state-owned environmental

think tank *Instituto Nacional de Ecología* (INE), which both pushed for the creation of Mexico's *Programa Nacional Científico sobre Cambio Climático Global*. The awarding of the Nobel Prize in chemistry to Mexican researcher Mario Molina – who would later found a think tank dedicated to climate change research in his name – in 1995 for his work on the decomposition of the ozone layer further increased attention for atmospheric environmental problems in Mexico (Nobelprize.org 1995). Subsequently, and similarly to the US and Germany at that time, parliamentary debates often discussed the destruction of the ozone layer and global warming as interlinked environmental problems (Cámara de Diputados 1997: 25).

Eventually, it was in the mid-1990s that first securitising articulations appeared in the Mexican parliament (Senado de la República 1994b: 14, 1994a: 2). Together with some alarming scientific projections about the country's vulnerability towards climate change they contributed to an increasing attention paid to climate change in Mexico, however without yet initiating a widespread climate security debate (Salazar and Masera 2010; Wolf 2007). Beyond that, the environmental and climate security discussion was further facilitated by a study of the famous environmental-conflict scholar Homer-Dixon about environmental origins of the 1994 Chiapas uprising (Howard and Homer-Dixon 1996). Nonetheless, the broader academic environmental security and conflict debates that were unfolding in the 1990s and that had a considerable impact on the political debate in other countries (especially in the US), were less important in Mexico.

6.2 Constructing Climate Change as a Security Threat: Analysing the Discourse

Nevertheless, all three climate security discourses played a role in the Mexican climate debate. They brought the issue on the agenda, rendered it governable in a specific way, and legitimised particular policies and practices. This section analyses each of the three discourses between 1990 and 2015 in detail.

6.2.1 The Disciplinary Discourse: Poor People Under Threat

Although no single climate security discourse clearly dominated the debate, the disciplinary was the most common and influential one in Mexico. Thus, many climate security articulations focussed on the direct physical effects of climate change for poor individuals and constructed their human security as threatened.

First Traces of the Disciplinary Discourse: Protecting the Planet and Humanity

The initial climate security articulations in the parliament in the early to mid-1990s, primarily constructed climate change as a threat to the global atmosphere or certain ecosystems and often linked the problem to the destruction of the ozone layer (Senado de la República 1993: 74). Like in US and Germany, the focus hence was on the whole of humanity that was threatened by global climate change. Thus, the main concern was with: '[...] the prevention of pollution of the atmosphere [...] the universal concern for the future of the human species and the survival of the planet that we cohabit with other peoples and nations' (Senado de la República 1994b: 14). It was only towards the end of the 1990s that the focus shifted towards concrete human security threats for specific groups of individuals. The main argumentation was that the world would soon be hit by a range of natural disasters such as storms, droughts and sea level rise that would seriously affect especially people that do not live up to the norm of the climate resilient individual (Cámara de Diputados 1998: 14; Senado de la República 2000: 4). Concerning Mexico itself, parliamentary debates often conflated the concerns with climate change with several localised environmental problems such as the contamination of the air and water supplies that constituted a threat to the health of Mexico's inhabitants (Senado de la República 1998: 19).

The Rise of the Disciplinary Discourse

During the early 2000s, climate security articulations in general only played a minor role in the debates and it was not until the mid-2000s that they reappeared on a broader scale. Compared to only seven clearly securitising debates between 1990 and 2004, the number rose to 23 between 2005 and 2013. From 2005 on, parliamentary articulations highlighted how climate change could seriously worsen slow-onset (e.g. drought, desertification, changed precipitation patterns) and rapid-onset disasters (e.g. extreme weather, flooding) and how this eventually would affect Mexico's populations and economy (Cámara de Diputados 2005a: 157, 2005c: 47). Anew, several speakers conflated climatic change with other pressing environmental problems in Mexico such as air pollution in bigger cities and thus painted a rather broad picture of the problem, in which a degrading environment gradually worsens the life of people on several levels (Cámara de Diputados 2005a: 157, 2005c: 47, 2005d: 185). Additionally, they argued that climate change could contribute to the degradation of natural resources and to the contamination of the air and water supplies, which again would threaten the wellbeing of the people living in Mexico (Cámara de Diputados 2005b: 80).

When the global climate security debate gathered momentum from 2006 on and the election of Calderón spurred the general climate debate in Mexico, the number of climate security articulations increased considerably. To a large extent, securitisation and politicisation of climate change developed in Mexico alongside each other, which suggests that in this case it was a mutual reinforcement of several factors that eventually increased the attention for climate matters. While Calderón never made the security dimension of climate change his main line of argumentation, some of his speeches point to the implications of climate change for human security, the whole of humanity (Calderón 2010) and especially for the poor (CNN México 2010). Yet, the main arena for the articulation of climate security discourses remained the Mexican parliament. Several parliamentarians constructed climate change as one of the key threats to the human security of poor populations around the world (Senado de la República 2011d: 9, 12). They argued that due to geographical and socio-economic factors, the inhabitants of Mexico were particularly vulnerable to the effects of climate change (Cámara de Diputados 2007a: 63, 2007d: 330), making Mexico one of the five most affected countries in the world (Senado de la República 2011d: 8):

Given its geographical location, Mexico is a country that is highly vulnerable to climate related phenomena, which entails significant risks in terms of health, availability of natural resources, protection of ecosystems, infrastructure and security of the population (Cámara de Diputados 2007a: 63; see also Cámara de Diputados 2007c; Senado de la República 2011d).

According to the prevailing disciplinary argumentation, climate change would threaten coastal populations in Mexico (Cámara de Diputados 2007d: 330) and would seriously hamper agricultural activity thereby inciting a ‘crisis of alimentation’ (Senado de la República 2008: 2). It would facilitate the spread of diseases as well as increase the death toll due to heat waves, and would eventually become one of the major threats to the health of the Mexican population (Cámara de Diputados 2007b: 71, 2007c: 205, 2007e: 103).

Recommendations: Supporting and Disciplining Individuals

On the one hand, this prevailing securitisation increased the attention for the direct effects of climate change for poor individuals. Thus, parliamentarians pointed to mitigation measures, for instance the promotion of energy efficiency and other green technologies, but also to initiate several campaigns aimed at promoting a climate conscious lifestyle (Cámara de Diputados 2005b: 79, 2005c: 248, 2005d: 188). In order to protect endangered populations, they also

frequently highlighted the need for disaster prevention and management schemes (Cámara de Diputados 2011a: 58). On the other hand, these articulations also contributed to normation processes. The prevalent disciplinary discourse constituted the most affected people as highly vulnerable and thus in need of immediate outside support and correction of their dangerous living conditions. Consequently, the Mexican parliament proposed vulnerability assessments to keep track of deviations from the norm and to find measures to alleviate the problems (Cámara de Diputados 2008a: 272, 2008b: 48, 2009a: 108). In relation to this strategy, parliamentarians especially aimed at constructing climate change as health issue and proposed measures to monitor the increase of cases of disease or deaths due to heat waves and to come up with appropriate rules of conduct for endangered individuals (Cámara de Diputados 2007c: 204–205). One suggestion was to incorporate the *Secretaría de Salud / Ministry of Health* in the CICC (Cámara de Diputados 2007c: 204) and to integrate climate health issues into the General Law on Climate Change (Cámara de Diputados 2006: 230–231; Senado de la República 2013a).

Moreover, they called for widespread and aggressive educational and publicity campaigns and urged to include these into the General Law on Climate Change (Senado de la República 2013b). The aim was to make people aware of the dangers of climate change and to prescribe appropriate (adaptive and mitigating) behaviour to avoid problematic consequences for human security (Cámara de Diputados 2007d: 332, 2007c: 206, 2007a: 63, 2007d, 2007e: 105). In a move to partly individualise climate protection, these articulations also emphasised that the burden of overcoming the climate problem cannot exclusively lie on the state or on large companies, but that every individual has to contribute to the solution as well (Senado de la República 2011a: 3; see also Paterson and Stripple 2010). Subsequently, parliamentarians proposed a *Guía Nacional de la Sostenibilidad / National Sustainability Guide*, which would contain detailed instructions how to behave in a climate friendly way to contribute to the sustainable development in Mexico (Senado de la República 2011a: 10).

The Disciplinary Discourse in NGO and Think Tank Reports

Beginning with the Globe Americas Legislators Forum organised by GLOBE International and the World Bank in 2008 in Mexico City (World Bank 2008), the disciplinary discourse also became more important in the argumentations of several non-governmental organisations in Mexico. Above all two groups of organisations were especially active.

Firstly, Partners for Democratic Change International (PDCI) and its Mexican associates – most importantly the Centro de Colaboración Cívica – who published several key reports and organised a dialogue project on climate security in the Cámara de Diputados (which was partly financed by the British Embassy in Mexico). The dialogue project was supposed to increase awareness for the security implications of climate change and to strengthen the coordination between politicians and civil society (Gutiérrez *et al.* 2009: 10–11; Cámara de Diputados 2008b: 48).

Secondly, the British think tank Royal United Services Institute (RUSI) together with the British Embassy who arranged several public events and published three influential reports on climate security. The overall aim was to influence Mexico's general climate strategy and especially its upcoming 5th communication to the UNFCCC and the National Security Strategy (Feakin and Depledge 2010; Deheza 2011; Deheza and Mora 2013). Interestingly, people working at RUSI and with the British Embassy on climate security had direct connections to the US climate security debate and hence adopted several arguments of US think tanks for their own reports about Mexico. Elizabeth Deheza, who compiled the second report of RUSI, cited repeatedly from US reports (Deheza and Mora 2013: 10, 20) and in 2013 presented the RUSI work on Mexico at the Washington DC based Wilson Center (Wilson Center 2013). Moreover, the Climate and Energy Security Envoy of the United Kingdom at that time, Neil Morisetti, who was also involved in the RUSI/British Embassy work in Mexico, later became an influential member of CNA's second Military Advisory Board (CNA Military Advisory Board 2014: iii).

Besides the two most influential groups of actors, several other mostly foreign organisations such as Greenpeace (Greenpeace México 2009, 2010: 2), WWF (WWF México 2010: 2), the German Böll Foundation (Jungehülsing 2010: 3) and Agrifor/EuropeAid (AGRIFOR Consult and Europe Aid 2009: 13) occasionally articulated the disciplinary discourse. However, either did they not make it the main framing of their argumentation or they were not able to generate much attention in the Mexican debate and thus were less relevant for the securitisation process.

The core line of argumentation in the non-governmental articulations of the disciplinary discourse resembled the parliamentary debates. The tenor was that due to its geography and socio-economic preconditions, Mexico and especially its poor population were particularly

vulnerable towards climate change (CCC 2008: 4; Sánchez Gutiérrez *et al.* 2009: 8): ‘The most exposed areas are likely to be occupied by the poorer levels of society that cannot afford to live in well-protected and maintained neighbourhoods, and it is these people that will bear the brunt of the associated risks’ (Deheza 2011: 18). Consequently, climate change would make it much more difficult to overcome existing poverty and eventually could reverse past improvements in the fight against poverty and underdevelopment (CCC 2008: 1). As main threats the reports identified the direct physical effects of climate change, hence a whole range of natural disasters that would further decrease the vulnerability of these people: ‘The physical effects [...] of climate change, such as hurricanes, droughts, floods, extreme hydrometeorological phenomena, forest fires and heat waves, directly affect the quality of life and increase people’s vulnerability’ (Brodziak *et al.* 2011: 11; Feakin and Depledge 2010: 9). In more detail, NGO reports identified several slow-onset disasters as problematic. For example, decreasing natural resources (particularly food and water) due to changing climatic variables (heat, drought, changed precipitation patterns), sea level rise and the spread of disease due to a warmer or more humid climate. Together these processes would gradually affect the living conditions of Mexico’s inhabitants, could hamper agricultural activity and put food security into jeopardy (Deheza 2011: 8; CCC 2008: 1; Brodziak *et al.* 2011: 11):

More than 20 million people in Mexico are considered to live under circumstances of food insecurity and between 2008 and 2010 alone, almost 2 million people in Mexico were added to this group. Increasing irregularities in the rainy season brought about by climate change will impact the groundwater level and have a disruptive effect on food production (Deheza and Mora 2013: xv; see also CCC 2008: 1; Feakin and Depledge 2010: 2).

Apart from that, they pointed to a range of rapid-onset disasters such as severe storms, floods or heatwaves that could seriously affect especially poor and indigenous people in Mexico’s southern and rural areas (Deheza 2011: 7; Brodziak *et al.* 2011: 11). All of these events would eventually become a problem for energy security – which reports occasionally constructed as a problem for Mexico as a whole and for its economy but also as a direct threat to human security in the case of power cuts and hampered supply of items of daily use (Deheza and Mora 2013: 60–62) – and lead to increased migration (Deheza and Mora 2013: 3).

In addition to these fairly straightforward and isolated articulations of the disciplinary discourse, reports also occasionally linked to the sovereign discourse. However, in contrast to

the US debate, the sovereign argumentation only played a supporting role for the dominant disciplinary discourse and the wellbeing of individuals, as this quote exemplifies:

However, an adversarial reaction could exacerbate existing tensions and social anxiety if things are not resolved, which could, in turn, lead to violent conflict and thus further decrease the quality of life and increase the vulnerability of people (Brodziak *et al.* 2011: 21; see also Brodziak *et al.* 2011: 8; Feakin and Depledge 2010: 29; Deheza 2011: vi).

Recommendations: Managing Disasters and Protecting Humans

What were the main counter measures that the analysed reports tried to legitimise by articulating the disciplinary discourse?

Firstly, similar to the German debate, they suggested actions that aimed at mitigating climate change such as increasing energy efficiency or acquiring CDM projects to foster technological development and hence taking climate protection as economic opportunity and as pathway to a sustainable development that would benefit Mexico's poor people (CCC 2008: 5–6). Secondly, they recommended adaptation measures that would reduce the vulnerability of Mexicans (CCC 2008: 1; Gutiérrez *et al.* 2009: 11; Deheza 2011: 27). In line with this argumentation they wanted key stakeholders to notice 'the security dimension of adaptation' (Feakin and Depledge 2010: 19) and to understand it as an important 'security imperative' (Feakin and Depledge 2010: 66) because it could cushion the impacts of climate change on human security. In connection, some reports also stressed the positive value of internal migration as adaptation strategy (Deheza and Mora 2013: xvii). Embodying the concept of normation, a further recommendation was to influence the knowledge and thus the behaviour of the people. Similar to parliamentary debates, to this end NGO-reports suggested several climate education programmes, events and workshops to raise awareness on the issue and to give practical instructions how to behave correctly (Deheza and Mora 2013: xvii; Deheza 2011: 25). Thirdly, due to the prevalent focus on climate induced natural disasters that would seriously affect the wellbeing of individuals, improving the detection, prevention and management of natural disasters was another key recommendation (Deheza 2011: 27–28). Thus, reports recommended to further strengthen Mexico's *Sistema Nacional de Protección Civil* (SINAPROC) / National Civil Protection System as well as to improve the financial endowment of the *Secretaría de Desarrollo Social* (SEDESOL) / Ministry for Social Development and disaster funds such as *Fondo para la Prevención de Desastres Naturales* (FOPREDEN) / Fund for the Prevention of Natural Disasters (Greenpeace México 2010: 57).

In connection to this and to the occasional linking of the disciplinary to the sovereign discourse, reports sometimes also proposed to strengthen the interlinkages between civilian and military institutions when coping with disasters (Feakin and Depledge 2010: 18).

6.2.2 The Governmental Discourse: Insuring Endangered Populations

Although the disciplinary discourse was slightly more influential in Mexico, the governmental discourse as well played an important role and was often directly combined with a human security centred argumentation. Thus, several reports and parliamentary debates constructed climate change as a long-term and all-encompassing risk relying on probabilistic future scenarios. Based on these risk assessments and on the concept of normalisation they also constructed several risk groups and areas that they deemed to be especially at risk of being adversely affected by climate change.

The First Traces of the Governmental Discourse

The early and mid-1990s only saw very few scattered articulations of the governmental discourse in the Mexican parliament, which mostly conceptualised the whole planet at risk but also singled out specific areas as particularly vulnerable, for instance the Pacific region (Senado de la República 1994a: 2, 1994b: 14). It was not until the end of the 20th century that the governmental discourse became more intense and more common. At that time, the planetary perspective and the connection to the destruction of the ozone layer was still an important part and parliamentary articulations frequently constructed climate change as global risk that could eventually bring the entire ecosystem of the earth out of balance (Cámara de Diputados 1997: 25). Beyond that, the debates often constructed developing countries as more vulnerable towards climatic risks due to their lack of resilient infrastructure and means to support affected areas: ‘In this case, Third World countries would be most vulnerable because of their shortcomings in terms of infrastructure and due to the resources needed to provide relief to the affected regions’(Cámara de Diputados 1997: 25–26). In connection to this assessment, Mexican politicians also highlighted that Mexico itself and other developing countries were least responsible for climate change but at considerably higher risk than the industrialised countries who caused the phenomenon in the first place (Cámara de Diputados 1997: 27). They hence combined a climate risk argumentation with a politicisation of climate change as problem of global justice, which would later become a central pillar of Mexico’s argumentation in relation to climate change.

After a noticeable break at the beginning of the 2000s, governmental articulations again became more numerous from the middle of the decade on and alike to the US and Germany especially between 2007 and 2013. In the parliament, the argumentation was often based on scientific long-term predictions concerning the whole planet (Cámara de Diputados 2005c: 47, 2009a: 108) but at the same time constructed developing countries such as Mexico and poor populations as particularly at risk (Cámara de Diputados 2007a: 63, 2007c: 205): ‘Mexico is a country that is highly vulnerable to climate change since developing countries are predicted to be most affected by the adverse effects of climate change’ (Senado de la República 2011d: 9).

At this time, the close interlinkages with the disciplinary discourse and the focus on the vulnerability of individuals already became noticeable. Articulations highlighted how climate change gradually increases the risk of droughts, decreases areas suitable for cultivation and could contribute to various health risks such as diseases, air and water pollution as well as heat waves, all of which would eventually pertain the human security of individual:

[...] in Mexico, droughts will worsen and will reduce the areas suitable for cultivation [...]. Furthermore, climate change will increase the spread of diseases and the death toll due to the contamination of air and water resources and will facilitate erosion, heat waves and flooding (Cámara de Diputados 2007b: 71).

Besides poor parts of the population in general, proponents of the governmental discourse particularly highlighted the vulnerability of children towards climate change (Cámara de Diputados 2009c: 95). Moreover, they fostered a view into the future a tried to calculate the future interlinkages between a growing population in Mexico and accelerating climate risks (Cámara de Diputados 2009b: 203). The governmental discourse also contributed to subdivide the country into several different zones that differed regarding their risk towards climate-induced problems. Parliamentary articulations constructed the north of the country as high risk area concerning heatwaves and droughts (Cámara de Diputados 2005c: 47, 2008a: 271) and the coastal areas as endangered by sea level rise and flooding (Cámara de Diputados 2007d: 330; Senado de la República 2013c: 2). Moreover, they depicted certain ecosystems as highly vulnerable due to the fragile equilibrium between different species (Senado de la República 2013c: 2). The following quote from a debate in the Senate exemplifies this compartmentalising risk construction that enables to break down the all-encompassing menace of climate change into politically better manageable pieces: ‘[...] of the 2457 municipalities of the country, 1385

are included in the high-risk category of disaster and are highly vulnerable and at high risk for weather events. These areas are inhabited by 27 million people' (Senado de la República 2014: 6). It also facilitates a seemingly more efficient employment of resources because they can be directly targeted at high-risk groups. Finally, climate change was also constructed as a key economic risk that in the long run could become a serious challenge for Mexico's development and which costs in the future could be much higher than acting today (Cámara de Diputados 2007e: 274; Senado de la República 2011b: 4).

All these risk calculations mostly rested on scientific predictions and climate models compiled by the IPCC or by domestic research institutions and organisations such as the UNAM or the *Unión de Científicos Comprometidos con la Sociedad, A.C* (Senado de la República 2011c: 9; Salazar and Masera 2010). Thus, they often adopted the specific future oriented, probabilistic and statistical model based understanding of the problem prevalent in these reports:

[...] the UNAM predicts that by 2050, Mexico's climate will be up to two degrees Celsius higher than the normal temperature. In addition, projected rain will decrease by up to 15 per cent in certain regions of our country (Senado de la República 2013c: 1; see also Senado de la República 2011b: 2; Salazar and Masera 2010: 22–24).

Hence, the governmental discourse constructed climate change as a serious long-term risk that would gradually increase the vulnerability of a whole range of high-risk areas and groups. Primarily, the phenomenon could be made intelligibly through ever more sophisticated climate models and scenarios, thereby on the one hand empowering scientific actors and solutions, and on the other hand risk management and preventive approaches.

Consequently, to prevent these multifaceted risks from spiralling out of control, parliamentarians suggested counter-measures that fall within the above-described categories and concur with a governmental approach to the problem that tries to cautiously influence key variables behind the scenes (Elbe 2009: 76). These consisted of several actions to mitigate GHG emissions and thus to control and reduce the future risks of climate change (Senado de la República 2010: 2). However, instead of entirely banning CO₂ emissions and to suppress economic growth, the focus of these initiatives was often on trying to balance the mitigation of climate change with a further development of Mexico to be able to overcome poverty (Senado de la República 2011a: 2–3). In relation to this, the propagation of the efficient use of natural

resources (Senado de la República 2011a: 4) and energy, was a key element or parliamentary articulations.

Parliamentarians also resorted to actions that were more focused on adaptation and resilience building. In debates about Mexico's General Climate Law, many politicians called for an increase in risk and vulnerability assessments and the monitoring of high risk groups of the population (Senado de la República 2011b: 8). These entailed the funding of new projects supposed to diagnose the specific vulnerability of all federal Mexican districts (Cámara de Diputados 2008a: 272). The aim was to be better able to predict problematic developments in certain societal layers or geographical areas and hence to control or even prevent climate related risks from spiralling out of control and exceeding the tolerable risk level (Senado de la República 2010: 2):

[...], given the vulnerability of our country to climate change, the initiative they presented constitutes a comprehensive approach to risk management, which includes threats, vulnerabilities and response actions in particularly exposed areas [...] (Senado de la República 2013c: 1).

In addition, parliamentarians voiced the need for contingency plans (Cámara de Diputados 2007e: 103) as well as preventive measures that would keep the risk in acceptable margins such as social security networks for the poor (Cámara de Diputados 2008a: 275). The aim of all these initiatives was to firstly diagnose the risks and then to keep them at a tolerable and controllable level by manipulating the appropriate societal, political, economic and technical variables. Yet, this risk management approach also entailed that the risk was not to be prevented by all means but to a certain extent had to be accepted and could merely be alleviated by increasing the resilience of affected groups and geographical areas (Senado de la República 2011b: 10). This also included the dissemination of climate or disaster insurance schemes (Cámara de Diputados 2011b: 436, 2005a: 211).

Furthermore, due to the focus on economic risks of climate change and in combination with the politicisation of climate change as economic issue, several debates also proposed a 'green economy' as one solution to reduce climate related risks. Politicians argued for sustainable economic growth that while reducing poverty and not suppressing Mexico's economy, would at the same time respect ecological boundaries. Such sustainable development that would be increasingly decoupled from the increase of GHGs would

eventually also contribute to Mexico's image as a climate role model on the world stage, which it had acquired during the climate negotiations (Senado de la República 2013d: 2–3, 2011b: 1). It would also be much more cost efficient than waiting until the risks would materialise in the future (Senado de la República 2011b: 6). Consequently, climate change was often presented as a unique opportunity to transform Mexico's economy into a 'truly sustainable future' (Senado de la República 2011b: 3).

The Governmental Discourse in NGO and Think Tank Reports

Several central NGO publications also articulated the governmental discourse from 2008 on. They saw Mexico in general as particularly vulnerable to climatic effects due to its high percentage of poor non-resilient people (CCC 2008: 1; Gutiérrez *et al.* 2009: 21) and feared that climate change could reverse the fight against poverty and hinder sustainable development (CCC 2008: 8). In line with this argumentation they also tended to link the governmental risk analysis to the disciplinary discourse and a focus on the vulnerability of individuals, for instance through a threatened food security (CCC 2008: 8). Moreover, NGO articulations often based their analysis on scientific risk predictions (Gutiérrez *et al.* 2009: 3) and identified various high-risk areas and groups (CCC 2008: 7; Greenpeace México 2010: 3; Deheza 2011: 7; Deheza and Mora 2013: 8). For instance, they particularly highlighted that Mexico ranked 45th in the Global Climate Risk Index (1990–2009) and was considered at high to extreme risk from climate change according to Maplecroft's 'Climate Change Vulnerability Index' for 2011 (Deheza 2011: 7; Deheza and Mora 2013: 25). Climate risks would be even more exacerbated through the interplay with various other existing risks in the country (WWF México 2010: 2; Greenpeace México 2010: 19; CCC 2008: 4; Gutiérrez *et al.* 2009: 8). This combination would put two thirds of the Mexican population at risk, especially those living in dry areas, near the coast and rivers, or in particularly densely populated areas (Deheza 2011: 7). The following quote from a RUSI report exemplifies this line of argumentation:

In the context of climate change, the rapid urbanisation in Mexico increases the vulnerability of people by concentrating populations in areas of higher risk. The most exposed areas are likely to be occupied by the poorer levels of society that cannot afford to live in well-protected and maintained neighbourhoods, and it is these people that will bear the brunt of the associated risks (Deheza 2011: 18).

Closely connected, they also constructed climate change as future economic risk because natural disasters already accounted for 80 per cent of the economic losses between 1980 and

2005. Hence reports often argued that it would be more cost-efficient to tackle climate change now than to pay for its various impacts later (Deheza 2011: 7).

Connecting to this specific risk analysis, NGO reports proposed several measures to control and reduce the risks. On the one hand, they focused on ways of assessing climate risks and highlighted the need for more sophisticated means to identify risk groups and areas (Greenpeace México 2010: 25) that would produce more fine-grained and region specific vulnerability assessments (Deheza 2011: 25). Relating to this, they also recommended better cooperation between all relevant branches of government and more support for environmental governance in general (CCC 2008: 2; Sánchez Gutiérrez *et al.* 2009: 9; Deheza and Mora 2013: xvii). More concretely they suggested to integrate climate migration into the National Risk Atlas (Deheza 2011: 28) and to improve all other existing mechanisms that keep track of environmental risks in Mexico such as the National Atlas of Risks or the System of Tropical Cyclones Early Alert (Deheza 2011: 14; Feakin and Depledge 2010: 12; Deheza and Mora 2013: 8).

On the other hand, they proposed measures to control and to eventually reduce those risks. This included several measures that would contribute to the mitigation of GHGs such as CDM projects and energy efficiency measures (CCC 2008: 5) but also more reactive ways of reducing the vulnerability and overall risk of the Mexican population (CCC 2008: 1; Gutiérrez *et al.* 2009: 11; Greenpeace México 2010: 21; Deheza and Mora 2013: 75–76). In this context, they also emphasised the importance of early warning systems that could indicate whenever the risk would exceed the tolerable level (Greenpeace México 2010: 25). Reports were keen to propose actions that while reducing vulnerabilities, would still keep economic growth (Gutiérrez *et al.* 2009: 8) and would not restrain people too heavily. Hence, the focus was often on reducing the outcome vulnerability i.e. to increase the general living conditions in Mexico and to enhance democratic governance to increase peoples coping capacity and to make them more resilient to climatic shocks (Gutiérrez *et al.* 2009: 9; Deheza 2011: 26–27; Deheza and Mora 2013: 78; Greenpeace México 2010: 65). This strategy also included the propagation of micro insurance schemes that would alleviate the overall risk in Mexico (Deheza 2011: 27; Deheza and Mora 2013: 75–76).

6.2.3 The Sovereign Discourse: Reinforcing Human Security

The sovereign discourse was least common in Mexico. When it appeared, it was most of the time directly connected to the prevailing disciplinary argumentation and not able to generate much attention as standalone discourse. Attempts of a few foreign actors (RUSI/British Embassy) to propagate climate change as a key threat to Mexico's national security were largely unsuccessful and even clearly rejected as outside interference in Mexico's security policy.

The Sovereign Discourse in Parliamentary Debates

While a few scattered traces of the sovereign discourse already appeared towards the end of the 1990s (Howard and Homer-Dixon 1996: 4; Senado de la República 1998: 10), it was not until the mid-2000s that it became more pronounced. The direct connection between climate change and national security firstly appeared in 2005 (Cámara de Diputados 2005b: 79) and then was articulated more frequently from 2007 onwards (Cámara de Diputados 2007b: 72, 2009b: 212).

Climate change was constructed as a multifaceted threat that in its totality had to be considered a problem of national security: '[...] due to its environmental, social and economic impacts, climate change is a national security threat that requires immediate and unified attention' (Cámara de Diputados 2007b: 72). In general, parliamentarians mostly used the term 'seguridad nacional' as a catchphrase that was understood in a much broader and less militaristic sense than for instance in the US and ultimately pointed to the human security of Mexicans. Thus, climate change was understood as new and 'non-conventional' threat to national security that primarily materialises in terms of 'rising food prices', 'famines' and 'the spread of diseases' that endanger Mexico's population (Cámara de Diputados 2009b: 212). The following quote exemplifies this broad understanding of the term and the close interlinkages to human security and the disciplinary discourse. Member of the Cámara de Diputados Alejandro Chanona Burguete depicts climate change as '[...] a threat to national security because it has to do with the life of people, their material and cultural goods and the integrity of ecosystems' (Cámara de Diputados 2007b: 72). Even president Calderón publicly referred to climate change as problem of national security. Yet, he as well avoided a traditional defence oriented understanding of the concept and clearly pointed out that this would primarily mean that Mexico would put great effort in its climate mitigation policies and the safety of its population (El Universal 2008). Thus, in the Mexican debate, climate change was mostly seen as a threat to national security precisely because it directly threatens ecosystems and the livelihoods of

Mexicans (Cámara de Diputados 2005b: 79) and not, as in the US debate, because it generates problems such as violent conflicts that constitute a threat to the state or its defensive institutions.

Apart from this dominant understanding, there were occasional articulations that resembled the traditional version of the sovereign discourse and to arguments that often appeared in the US climate security debate. Hence, parliamentarians pointed to the conflict in Darfur to ‘exemplify the linkages between climate change and national security’ (Cámara de Diputados 2009b: 210) and infrequently mentioned the possibility of social unrest that could undermine ‘the integrity of the state’ (Cámara de Diputados 2009b: 212). Nevertheless, even in these seemingly more traditional articulations, a holistic understanding of the term prevailed, which connected the integrity of the state to the wellbeing of the population and its ecosystems (Cámara de Diputados 2009b: 204). Due to this broad understanding of national security and the close linkages to the disciplinary discourse, most recommendations that appeared in the parliamentary debates rather targeted individuals and only rarely the state of the defence sector. Thus, often parliamentarians used the phrase national security to highlight the need for mitigation measures especially through inventing new, cleaner technologies and through a more sustainable development model (Cámara de Diputados 2007b: 75–76). Moreover, the sovereign discourse was articulated to legitimise various climate policies, most importantly the General Law on Climate Change i.e. several amendments to it (Senado de la República 2012, 2013c). Beyond that, parliamentarians directly called for a widening of the term national security in relation to climate change (Cámara de Diputados 2009b: 211), which takes into account the problems of individuals and which facilitates an inter-institutional repose (Cámara de Diputados 2009b: 211–213).

Only rarely did the recommendations also target more traditional understandings of national security. Hence, parliamentarians urged to ‘identify the risks of climate change as a real and direct threat to national security’ and to implement ‘direct and immediate actions’ to maintain the ‘integrity, stability and persistence of the Mexican state’ (Cámara de Diputados 2007b: 72). Furthermore, they called for a legislative agenda concerning climate change and national security (Cámara de Diputados 2008b) and wanted climate change to be integrated into the National Security Law (Cámara de Diputados 2007b).

Apart from parliamentary debates, non-governmental reports also occasionally engaged in the sovereign discourse. While most environmental NGOs such as Greenpeace, WWF, CEMDA or CMM largely avoided national security conceptions, others such as PDCI, Adelphi (Carius and Maas 2009: 3; Maas and Tänzler 2009: 9) and particularly RUSI constructed climate change as possibly triggering violent conflict and hence threatening Mexico's national security. Yet, similar to the parliament, the discourse only rarely appeared in an isolated fashion or primarily targeting the defence sector. An exception was the first RUSI report that emphasised the already problematic security environment in Mexico and pondered about resource scarcity – especially 'water as strategic matter of national security' (Feakin and Depledge 2010: 27; see also Deheza and Mora 2013: 54) – that could eventually lead to discontent with the government and to violent conflict:

As climate change intensifies these dynamics, challenges must be handled so as to avoid aggravating current tensions and contributing to an already deteriorating security environment (Feakin and Depledge 2010: v; see also Deheza and Mora 2013: 7; Brodziak *et al.* 2011: 7; CCC 2008: 4; Carius and Maas 2009: 3).

Apart from the quite explicit first report, RUSI subsequently avoided the term national security and explicitly tried to come up with a new, broader understanding of the term (Deheza 2011: vi; Deheza and Mora 2013: 9–10). Hence, the second (Deheza 2011) and third report (Deheza and Mora 2013) almost entirely lacked direct references to national security and instead focused more on the disciplinary and governmental discourse. Besides theoretical considerations (Deheza 2011: vi, v), a key reason for this behaviour was that RUSI increasingly met resistance from Mexico's Foreign Ministry that feared foreign interference with Mexico's internal security policy (Interview 2014c, 2014x).

In general, alike to the parliamentary debates, most NGO reports tied the sovereign argumentation to the prevailing disciplinary discourse. Thus, they clearly articulated the sovereign discourse to a certain extent by acknowledging that climate change could endanger 'the stability and prosperity of states' (Deheza and Mora 2013: 15), could trigger 'social conflicts over scarce resources' (CCC 2008: 8), or 'threatening infrastructure and resources' of the Mexican state (Deheza and Mora 2013: xiv). However, most of the time the reports directly linked these articulations to human security considerations and to the wellbeing of the Mexican people and largely avoided to point to solutions in the defence sector:

However, an adversarial reaction could exacerbate existing tensions and social anxiety if things are not resolved, which could, in turn, lead to violent conflict and thus further decrease the quality of life and increase the vulnerability of people [...] (Brodziak *et al.* 2011: 21).

Similar to the parliamentary articulations, ‘seguridad nacional’ often merely was picked up as a political catchphrase to increase attention (Sánchez Gutiérrez *et al.* 2009: 8–9; Interview 2014e). For instance, in contrast to its title, ‘Cambio Climático y Seguridad Nacional’, the project of PDCI and its partners in the Cámara de Diputados mostly articulated the disciplinary and governmental discourse (CCC 2008: 1; Sánchez Gutiérrez *et al.* 2009: 8).

Consequently, the recommendations of NGO reports only seldom exclusively targeted the defence or security sector. Instead, they aimed at supporting individuals by including actors from the defence sector, thus called for more holistic approaches to tackle the security effects of climate change. They proposed to increase the involvement of the security services in disaster management and recommended a closer cooperation between civilians and the military for instance by using worst-case scenarios in civilian climate emergency plans (Feakin and Depledge 2010: 18; Deheza and Mora 2013: xvii). Moreover, they introduced ‘multi-use’ and ‘no-regrets’ strategies that would help to adapt to climate change as well as to prevent social unrest (Feakin and Depledge 2010: 65). Furthermore, emphasis was put on making crucial infrastructure in Mexico resilient to climate shocks and to integrate appropriate measure into climate management plans at all levels of the Mexican state (Feakin and Depledge 2010: 66; Deheza and Mora 2013: xv). Another focus introduced into the debate by PDCI and its partners was put on improving the societal and governmental preconditions to deal with possible conflicts due to climate change and to increase the conflict-sensitiveness in general in Mexico. Thus, they called for better consultation with local stakeholders in mitigation and adaptation projects, the integration of democratic principles into all climate decision making processes and to strengthen democratic procedures and governance in general in Mexico (Brodziak *et al.* 2011: 17–21).

The RUSI reports to a certain extent also directly targeted more traditional security policies. For instance, they recommended the integration of climate change into regional security strategies, for instance of the *Sistema de la Integración Centroamericana* (SICA), and into the relevant Mexican policies such as the National Security Strategy, the National Security Law and the Annual Risk Agenda (Deheza and Mora 2013: 63; Deheza 2011: 37; Feakin and

Depledge 2010: 65). Moreover, one aim was to convince the Mexican authorities to integrate the security implications of climate change into Mexico's 5th Communication to the UNFCCC (Deheza and Mora 2013: xv). Finally, taking the US as a role model, they also proposed to set up a 'Center for Climate Change and Security' at the Mexican intelligence agency *Centro de Investigación y Seguridad Nacional* (CISEN) (Deheza and Mora 2013: 80). However, despite these occasional recommendations that targeted the defence sector, even RUSI continued to stress that there was no military solution for the security problems of climate change (Deheza and Mora 2013: 9).

6.3 Political Impact

Although all three discourses played a role in Mexico, the disciplinary and governmental discourses remained the prevailing representation of climate change. When the sovereign discourse and national security conceptions appeared, securitising actors usually relied on a broader understanding of national security and connected this argumentation directly to the two other discourses. Thus, the specific securitisation in Mexico was primarily concerned with the wellbeing of individuals and with the assessment and control of risks triggered by climate change and hence rendered climate change governable as a problem for human security and as a long-term risk. Consequently, most recommendations were designed to firstly assess the risks of certain groups in the country and secondly to provide measures to teach them more appropriate behaviour or to support them in adapting to climate change to eventually keep the future risk within an acceptable margin. Having said that, the securitisation of climate change was less intense and widespread in Mexico than in the US and Germany. It was partly overshadowed by a politicisation of climate change as environmental issue, question of global justice and economic opportunity, which eventually as well had a strong influence on the legitimisation of policies. Nevertheless, this does not mean that the construction of climate change as security issue was entirely inconsequential. Thus, together with the politicisation, the specific discursive arrangement had an impact on the legitimisation and on the content of concrete policies and transformed political practices. In the following, I take a closer look at the political sectors in which climate security discourses were most influential.

6.3.1 Climate and Environmental Policy

Climate security articulations had a considerable impact on climate and environmental policy in Mexico. However, in this context, one cannot ignore the importance of the politicisation of climate change that largely developed alongside the securitisation. Thus, both politicisation and securitisation tended to reinforce rather than to work against each other – at least to a certain extent – which sometimes makes it difficult to clearly associate certain developments with either of the two. Nevertheless, in providing a detailed analysis of the key policies that were adopted in this sector and in openly discussing their multiple origins I intend to address this problem.

In the early 1990s, climate security discourses played a marginal role in Mexico. Thus, the first steps concerning climate policies – the ratification of the UNFCCC in 1993 and the initial greenhouse gas inventory and the first national communication to the UNFCCC (Pulver 2006: 51; UNFCCC 2014) – were mostly driven by other factors (see section 6.1) (Gutiérrez *et al.* 2009: 5). Towards the mid to end-1990s, however, climate security discourses became slightly more influential. During the mid-1990s climate reports of the IPCC had predicted a heightened vulnerability of Mexico towards climate change (IPCC 1990: 2-3, 2-10, 1995: 409-410, 415). While this finding did not immediately translate into securitising argumentations on a broader basis, it nevertheless contributed to the rising importance of climate change in the country. Besides economic considerations (Pulver 2006: 55–56), the first securitising articulations helped to generate support for the ratification of the Kyoto Protocol and parliamentarians frequently legitimised an active role of Mexico with reference to climate change as security problem (Cámara de Diputados 1997, 1998: 15, 2005b: 81; Senado de la República 2000: 1). In 1997, then Foreign Minister José Angel Gurría Treviño demanded in the parliament to ‘go to Kyoto as an active country, as an activist in defence of the environment’ (Cámara de Diputados 1997: 27), thereby underlining Mexico’s ambition to become an environmental forerunner.

Main Impacts on Domestic Climate Policy

Besides signing the Kyoto protocol and participating in the international negotiations, a notable development in Mexico’s domestic climate approach was the establishment of the *Comité Intersecretarial de Cambio Climático* in 1997, which was the predecessor of the 2005 founded CICC. The Comité coordinated the work on climate change of different ministries and was

supposed to oversee the development of Mexico's domestic and international policies on climate change (Sánchez Gutiérrez *et al.* 2009: 6). It also played a central role in putting together the *Estrategia Nacional de Acción Climática* that was published in 2000 and which aimed at contributing to Mexico's 'transition to sustainable development' (INE 2000: 9). This strategy contains occasional references to the disciplinary and governmental discourse and for instance mentions 'the vulnerability of various regions in the country' and 'heightened economic, social and environmental risks' due to climate change (INE 2000: 11). In more detail it states that: 'Mexico's vulnerability to climate change means potential risks in public health, basic food production, water availability, ecosystem protection and human safety and infrastructure settlements.' (INE 2000: 33). However, despite these first concrete impacts of climate security discourses, the focus of the political debate remained on the politicisation of climate change as environmental problem, sustainable development issue and moral obligation of humankind (Senado de la República 2000: 2).

After a temporary break in the early 2000s, climate security discourses increasingly became more influential from 2005 on and together with the parallel politicisation and the influence of President Calderón helped to legitimise various key climate policies in Mexico. As the following paragraphs will show, even if securitisation was not alone responsible for the creation of these policies, climate security discourses certainly shaped their concrete content.

The Comisión Intersecretarial de Cambio Climático (CICC)

The first important development was the establishment of the CICC in 2005 due to a decree of then President Fox (SEGOB 2005). The CICC was an advancement of the *Comité Intersecretarial de Cambio Climático* and now included more ministries and acquired more competencies. While the establishment of the CICC was not primarily legitimised with reference to security argumentations, the commission itself took up a climate security framing. Shortly after commencing its work, it issued a statement in which it called climate change 'a problem of strategic national security' (Cámara de Diputados 2009b: 209). While this on first sight points to the sovereign discourse, the concrete role of the CICC was never to prepare for climate change as traditional security issue. Instead, 'strategic national security' in this context can be understood in a much broader sense as predominately targeting the security of individuals and the environmental preconditions for their wellbeing. In this vein, the frequent articulation of the disciplinary discourse and the concern for human wellbeing in the parliament led to the integration of the Ministry of Health in the CICC (Cámara de Diputados 2006: 230–

231, 2007c: 204). Eventually, the main role of the CICC was the coordination of Mexico's climate policies between all relevant ministries and the preparation of the upcoming policies on the issue, e.g. the ENAC and PEAC (SEMERNAT 2015).

The National Development Plan

Another key development was the integration of climate change into the *National Development Plan 2007-2012*. Parliamentarians had argued in favour of this with reference to climate change as a threat to human security and as a long-term risk for certain groups and areas as well as for the environment as such (Cámara de Diputados 2005b: 79). Ultimately, climate change was integrated into the plan in chapter four on 'environmental sustainability' (Mexican Government 2007: 6). The respective paragraphs depict climate change as a serious global environmental risk with considerable effects on the availability of key resources and on human health (Mexican Government 2007: 258–259). To prevent these risks from materialising, the plan on the one hand highlights Mexico's dedication to a range of international environmental regimes including the UNFCCC and Kyoto and the importance of global mitigation measures in 'the fight against climate change' (Mexican Government 2007: 256). On the other hand, corresponding to the prevailing disciplinary and governmental discourses, it also considers domestic energy efficiency measures as well as a range of preventive adaptation measures that could alleviate the negative consequences for Mexico's citizens and lower the vulnerability of high risk areas and groups in the country (Mexican Government 2007: 260–262). In this vein, it pushes for a 'culture of environmental sustainability' in Mexico through the dissemination of education and training schemes (Mexican Government 2007: 266). Particularly corresponding to the governmental discourse, it also highlights the importance of scientific knowledge and sophisticated modelling to assess and control the spatially and socio-economically varying risks of climate change (Mexican Government 2007: 263).

ENAC, PECC and the General Law on Climate Change

Besides the National Development Plan, one of the most important policies that exclusively targeted climate change was the *Estrategia Nacional de Cambio Climático 2007* (ENAC) that had been prepared by the CICC and was published in 2007. Parliamentary debates had time and again articulated the disciplinary and governmental discourse (Cámara de Diputados 2006: 229, 2007d: 332, 2009a: 109–110) to legitimise this policy. In the ENAC the phrase of 'climate change as issue of strategic national security' reappeared (Mexican Government and CICC

2007: 13) but again mainly aimed at threatened individuals in Mexico and political action in the climate sector. Consequently, the concrete solutions proposed by the ENAC focus on mitigation measures for instance through the global climate regime, energy efficiency but also through emission trading schemes. At the same time the recommendations highlight the importance to not ‘threaten the development of a healthy and competitive economy’ (Mexican Government and CICC 2007: 9). Thus, they refrain from restrictive sovereign interventions and instead construct these measures as ‘economic opportunities’ (Mexican Government and CICC 2007: 8), which also mirrors the importance of the politicisation of climate change as economic issue.

The 2009 published *Programa Especial de Cambio Climático* (PECC) further specified Mexico’s approach to climate change. Parliamentarians had regularly emphasised the central role of this policy with reference to the disciplinary and governmental discourse (Cámara de Diputados 2009a: 108, 2009c: 248), which eventually had an direct impact on its contents. Thus, the PECC depicts climate change as ‘one of the greatest threats to the process of development and human welfare’ (Mexican Government and CICC 2009: 9). Moreover, it highlights the importance of risk management and disaster prevention to ensure the security of the population and its food supply (Mexican Government and CICC 2009: 25). Beyond that, the PECC reacts to calls of several parliamentarians to include climate change into the National Risk Atlas and to integrate the issue into the civil protection frameworks of the country (Mexican Government and CICC 2009: 25).

The most noticeable piece of climate legislation was the 2012 adopted *General Law on Climate Change*. While again climate security discourse did not constitute the only driving force behind this policy, debates in the Mexican parliament had frequently engaged in all three climate security discourses, albeit with a focus on the disciplinary and governmental discourse, to gather support for the law and its amendments between 2011 and 2013 (Senado de la República 2011b, 2011d, 2012, 2013c). The focus of the law is not on the security implications of climate change but more broadly on ‘establishing provisions to address the adverse effects of climate change’ (Cámara de Diputados 2012: 1). These include for instance far-reaching mitigation commitments of Mexico itself (30 per cent below the levels of 2000 in 2020, and by 50 per cent in 2050) (Cámara de Diputados 2012: 42), a broadening of the competencies of the INE and the renaming to *Instituto Nacional de Ecología y Cambio Climático* (INEC) (Cámara de Diputados 2012: 3, 9-10).

However, the law also contains several paragraphs that clearly correspond with the prevailing disciplinary and governmental securitisation and exemplify a move towards bio political modes of governance that aim at increasing the welfare of the population. Thus, it is preoccupied with ensuring the ‘health and security of the population’ (Cámara de Diputados 2012: 39) and particularly urges to ‘Facilitate and promote food security, the productivity of agriculture, livestock, fisheries, aquaculture, and the preservation of ecosystems and natural resources’ (Cámara de Diputados 2012: 16). Due to frequent articulations of the governmental discourse in the parliament (Senado de la República 2011b: 18), the law also contains several references to ‘comprehensive risk management’ approaches, especially concerning Mexico’s population and ecosystems (Cámara de Diputados 2012: 3, 13, 16). Moreover, it highlights the central role of these approaches to prevent or minimise the ‘present and future’ risks of climate change (Cámara de Diputados 2012: 16) and calls for the continuous advancement of the General Risk Atlas (Cámara de Diputados 2012: 2, 4).

Under the 2012 elected President Nieto, climate change has taken the back seat, at least concerning its visibility in the political debate, and climate security articulations have become fewer in the parliament. However, the legacy of the climate security debate still carries on. Consequently, the updated version of the ENAC, the *Estrategia Nacional de Cambio Climático* (ENCC), which was published in 2013, still concurs with a the disciplinary and governmental discourse by mentioning food security (37, 51, 53), the National Risk Atlas (14-15), the vulnerability of the population towards disasters (33) and risk management as well as civil protection measures (Mexican Government *et al.* 2013: 37). Moreover, the newest *National Development Plan 2013-2018* calls climate change a risk for the population and demands a further increase in civil protection and disasters prevention measures (Mexican Government 2013: 37).

International Climate Policy

The securitisation has also affected Mexico’s behaviour and policies concerning the international climate regime. However, again, securitisation only was one side of the coin. Another crucial factor behind Mexico’s surprisingly progressive stance on the international stage was the personal dedication – and partly populist strategy aimed at deflecting attention away from electoral controversies and problems in the war on drugs (Akerberg 2011: 37; Sánchez Gutiérrez *et al.* 2009: 5–7; Interview 2014a) – of President Calderón (Sánchez Gutiérrez *et al.* 2009: 7). Under Calderón, who later received a GLOBE Award (2009) and

the Champions of the Earth Award of the UNEP (2011), tackling climate change became one of the cornerstones of Mexican environmental and foreign policy. Hosting the 16th COP 2010 in Cancun further contributed to Mexico's image as climate vanguard and the country was widely praised for its successful lead of the negotiations (Dussel Peters and Maihold 2007: 2–3). Mexico also participated in the progressive Cartagena Dialogue (Araya 2011) and became a member of the Environmental Integrity Group that tried to mediate between developing and industrialised countries. Moreover, it tried to lead by example but also by constantly reminding the industrialised countries of their historical responsibility and their role model function (Detsch 2011: 34–35).

Nevertheless, securitisation processes were not without impact in this sector and parliamentary debates as well as NGOs and think tank reports had begun to link security concerns to Mexico's international policies – for instance to the regular Communications to the UNFCCC –, especially since the mid-2000s. Due to the lack of widespread securitisation at that time, the focus of the first (1997) and second (2001) Communication to the UNFCCC was not on the security implications of climate change. They only occasionally articulated security discourses, for instance by referring to certain potential future risks of climate change (Mexican Government 1997: 2, 11, 25), to Mexico's vulnerability to the phenomenon and to specific risk zones and groups in the country (SEMERNAT *et al.* 2001: 31, 109, 118, 345). The Third Communication to the UNFCCC in 2006 was more explicit and referred to climate change as a problem for food security (SEMERNAT *et al.* 2006: 114), mentioned specific high-risk areas and groups (SEMERNAT *et al.* 2006: 117) and highlighted the importance of the National Risk Atlas as well as disaster prevention and management measures (SEMERNAT *et al.* 2006: 117). Thus, the aim of the policy was on a comprehensive risk management strategy, as the following quote exemplifies:

In the framework of risk reduction in climate change, it is desirable to reduce the size of the danger or threat, in this case the heating up of the planet, and the vulnerability of the country's different socioeconomic and environmental sectors in the face of extreme climatic conditions (SEMERNAT *et al.* 2006: xxxii).

Matching the increasing articulation of this discourse in the Mexican debate, the fourth Communication to the UNFCCC in 2009 was even more unambiguous in articulating the disciplinary discourse. Thus, it constructed climate change as serious threat to the wellbeing of the Mexican population. In more detail it was concerned with 'societal security'

(SEMERNAT *et al.* 2009: 56), ‘food security’ (2009: 170, 271) and highlights the key role of the *Programa Nacional de Protección Civil 2008-2012* (2009: 124) to ensure the security of Mexicans. Moreover, it emphasised the governmental discourse by stating that: ‘The growth of vulnerability intensifies the magnitude of impacts and increases the risk and probability of disasters to materialise’ (2009: 119) and consequently recommended to strengthen risk management measures (2009: 119). Eventually, it even directly mentioned the Programa Cambio Climático y Seguridad Nacional, which had been organised in the Cámara de Diputados by PDCI and others (2009: 125). Finally, the most recent fifth Communication issued in 2012 as well primarily reacted to disciplinary and governmental threat constructions. It referred to ‘public security’ (SEMERNAT *et al.* 2012: 105), ‘food security’ (132, 158) and also directly worried about human security, especially in connection to natural disasters: ‘The tendency to extreme events, known as rain downpours, has increased in virtually all areas of the country and in some cases it has become a threat of great magnitude for the security of people’ (173).

Beyond these communications to the UNFCCC, Mexico’s utterances in the UNSC debates in 2007 and 2011, further demonstrate the dominance of disciplinary and governmental discourses as well as the reluctance of the Mexican officials towards climate change as national security issue and the involvement of traditional defence institutions. While the Mexican representative recognised the risks of climate change for individuals and the need for mitigation and adaptation measures he was sceptical regarding the involvement of the UNSC and the connected understanding of climate change as traditional threat to peace and security (UNSC 2007a: 19–20, 2011b: 9–10).

6.3.2 Disaster Management Policy, Risk and Civil Protection

The prevalence of the disciplinary and governmental discourse also impacted on adaptation policy and on strategies to prevent and manage the direct risks of climate change for Mexico’s population. Overall, the focus was on risk management approaches that gradually were integrated into various policies at the federal, state and municipal level (Interview 2014f).

Due to the rather low-key climate security debate in the 1990s and early 2000s, the impact on Mexico’s disaster management and civil protection policies only became more pronounced during and after the peak of the climate security debate in the second half of the

2000s. Another important reason were the increasingly more dire projections concerning the direct physical impacts of climate change for the Mexican population (IPCC 2001; Ibararán *et al.* 2008; Brodziak *et al.* 2011). Thus, the 2007 adopted ENAC suggested several measures in line with the disciplinary discourse to monitor climate risks, to install early warning systems, to reduce the vulnerability of Mexicans and to improve civil protection measures (Mexican Government and CICC 2007: 3, 9, 10). Moreover, corresponding to the governmental discourse it highlighted the importance of risk management approaches and the dissemination of climate insurance schemes to lower the overall impact of climate risks (Mexican Government and CICC 2007: 9–10).

In 2008, Mexico adopted the *Programa Nacional de Protección Civil 2008-2012* (SEGOB 2008). Corresponding with the disciplinary and governmental discourse, the Program stressed the various kinds of risks emanating from climate change and the heightened vulnerability of the Mexican population for extreme weather events, which necessitated preventive strategies and disasters management schemes (SEGOB 2008: 2). It urged to further integrate climate risks into the *Sistema Nacional de Protección Civil / National Civil Protection System*, the epidemic monitoring schemes, and to increase the education of the population in this respect in order to lower the risks of climate change (SEGOB 2008: 4, 6). Beyond these programmes, a 2010 review of the Mexican government of its current adaptation efforts – *Marco de Políticas de Adaptación de Mediano Plazo* – included several references to the disciplinary and governmental discourse. It again especially highlighted the vulnerability of the Mexican population and the problem of food insecurity and as well calls for an integration of climate risks into the National Risk Atlas (Mexican Government 2010: 34). Furthermore, in 2011 the director of the INE recognised the impact of climate change on food security (Alatorre 2011).

Subsequently, the *Centro Nacional de Prevención de Desastres / National Centre for the Prevention of Disasters* (CENAPRED) successively began to integrate climate change as an important overarching risk into its National Risk Atlas. In this respect, the focus was to ‘[...] consider current and future climate vulnerability scenarios and to preferentially focus on the most vulnerable populations and on high-risk areas [...]’ (Cámara de Diputados 2012: 17). This constitutes a relatively clear example of a governmental form of governance that particularly fosters a view into the future and a focus on specific risk groups and areas. Beyond the federal level, there exist various state level Risk Atlases that as well have begun to focus on climate

risks (Senado de la República 2011b: 26). Moreover, the CENAPRED has published a *Guía Básica para la Elaboración de Atlas de Estatales y Municipios de Peligros y Riesgos* / Basic Guide for the Preparation of State and Municipal Atlases of Hazard and Risk to further facilitate the creation of such risk management schemes (Senado de la República 2014: 6–7; Interview 2014d). CENAPRED also has increasingly integrated climate adaptation and the management of climate risks into its overall planning activities (CENAPRED and SEGOB 2014).

Additionally, to ensure that the future risks of climate change will not spiral out of control but also to hand over some of the responsibility of climate risk management to the high-risk groups themselves, the Mexican government has enabled the distribution of agricultural insurance schemes, both by private companies and government agencies (e.g. SAGARPA's Agrosemex) (Deheza and Mora 2013: 76; Agrosemex 2015). In this vein, Mexican authorities have also supported the establishment of various financial disaster management and prevention instruments such as the *Fondo Nacional para el Desarrollo Nacional* / National Fund for the National Development (FONDEN) and the *Fondo para la Prevención de Desastres Naturales* / Fund for the Prevention of Natural Disasters (FOPREDEN). In a 2012 publication the FONDEN highlighted that 'Mexico is at the forefront of efforts to develop an integral disaster risk management framework, including the effective use of risk financing mechanisms and insurance solutions to manage fiscal risk from disasters.' (SEGOB 2012: 1).

6.3.3 Defence and Security Policy

Although the sovereign discourse was least common, it still had some influence on policies in the security and defence sector; not least because this had been a central objective of PDCI and RUSI (Sánchez Gutiérrez *et al.* 2009: 16–17; Deheza and Mora 2013: 82). Moreover, parliamentarians had occasionally tried to adopt a reform of the Mexican National Security Law and in 2007 the Diputado Alejandro Chanona Burguete explicitly urged to 'consider the effects of climate change as a threat to the national security' (Cámara de Diputados 2007b: 70–71, 2009b: 49). Thus, in 2009, the Cámara de Diputados discussed a first concrete attempt to make amendments to the National Security Law and to explicitly address climate change as a national security threat under article 5 of the law (Cámara de Diputados 2007b: 72–76, 2008b: 48–49, 2009b: 211–213). In 2011 a second attempt sought to include human rights considerations into the law (Deheza and Mora 2013: 79; Taniguchi 2011). While these reforms are still pending, climate change eventually ended up in Mexico's National Security

Programme. Whereas the Programme 2009-2012 only mentions the issue in passing (Mexican Government 2009: 5), the most recent Programme for 2014-2018 referred to climate change as an important topic in a message of President Nieto at the beginning of the document (Mexican Government 2014: 17). Yet, even this very traditional security document did not construct climate change as a conventional national security issue. Rather, in accordance with the disciplinary and governmental discourse, it was concerned with Mexico's overall vulnerability towards the phenomenon and especially focused on the security of the food supply and of the Mexican population (Mexican Government 2014: 86–88).

Beyond these strategy documents, climate change has been discussed at the Mexican Centre for Intelligence and National Security (CISEN) and there have been plans to include it into the Annual Risk National Agenda, which CISEN develops for the National Security Council and that forms the basis for the National Security Programme (Deheza and Mora 2013: 80; Interview 2014x). Beyond these attempts, climate change is slowly being integrated into the planning of the Armed Forces, however, also predominantly in relation to its disaster management capabilities (Deheza and Mora 2013: 79).

Despite these scattered influences of the sovereign climate security discourse, it never was able to gain the same amount of acceptance as in the US debate. Thus, the all-encompassing national security concern in Mexico remained the widespread violence in the country linked to the war on drugs and most people in the security and defence sector did not consider climate change an important threat. An unofficial quote by a military official 'whether they should now chase and arrest storms' (Interview 2014e) exemplifies this hesitant reaction towards climate change as national security issue. Moreover, in an interview with RUSI experts the Security Adviser for the Security and the Armed Forces of the Democratic Revolutionary Party (PRD), Victoria Livia Unzueta, asserted that: 'climate change "has no place in the scheme – in theory climate change is a topic of national security concern but not in practice"' (Deheza 2011: 11).

6.4 Tracing the Preconditions for Specific Discourses

It is impossible to understand the development, concrete configuration and political impact of security discourses detached from the broader context. Thus, the following paragraphs traces

the key historical, cultural and institutional preconditions that rendered the unique securitisation process in Mexico possible in the first place.

Politicisation as Adjuvant and Counter Discourse

Arguably, the most important contextual condition was the simultaneous politicisation of climate change as environmental concern in its own right and as economic as well as global justice issue. While this had been a gradual development from the 1980s on, it was considerably accelerated and intensified under the government of Calderón since 2006 and by the hosting of the COP 16 in 2010 (Interview 2014a). Eventually, it had a at first sight paradoxical double effect. On the one hand, the politicisation went hand in hand with the securitisation of climate change and both have at times reinforced each other. The dominant understanding of climate change in the Mexican debate was that of an important environmental concern and moral obligation of humankind as well as an opportunity for a greener and more sustainable economy in Mexico. This fitted well together with the prevalent security discourses that were less militaristic than, for instance, in the US and constructed the issue as a long-term risk and as a threat to human security. Thus, both politicisation and securitisation referred to progressive mitigation and energy policies as well as measures to develop disadvantaged people to increase their coping capacity and hence to reduce their vulnerability to climate change.

This parallelism worked as long as the securitisation was only moderately successful and hence did not went so far as to entirely narrowing down the political debate towards a specific understanding of climate change and related (extreme) countermeasures. Thus, on the other hand, the politicisation also rendered a more intense form of securitisation unnecessary (or directly inhibited it) because climate change already was on the federal agenda and did not need to be securitised further to generate attention or legitimise policies. In fact, several NGO representatives stated that the cooperation with the Mexican authorities on climate issues worked quite well so that they did not see the need to increase the pressure on them by pointing to climate change as security issue (Interview 2014a). Thus, the real problem in Mexico was not the lack of progressive climate policy but rather their effective implementation especially at the local level in more remote parts of the country (Mumme and Lybecker 2002: 317; Höhne *et al.* 2012: 4–5). In this respect, a more intense securitisation would probably not have been of much help. This is especially true for the sovereign discourse, which did not fit well with the prevailing form of politicisation.

Beyond that, the relatively weak civil society in Mexico, especially in relation to climate matters, limited the success of the securitisation process. Not least due to its only recent democratisation, Mexico has only few influential non-governmental organisations compared to similar countries in South America such as Brazil (CIVICUS 2011; Bertelsmann Stiftung 2012). Moreover, while COP 16 in Cancun increased the numbers temporarily (Interview 2014a), only a couple of organisations primarily worked on environmental issues or climate change. Thus, except for CEMDA and The Centro Mario Molina, many environmental NGOs in Mexico are local sections of foreign organisations such as Greenpeace or WWF. When the climate security nexus became more salient in the mid-2000s, only very few Mexican NGOs adopted the security framing. Instead, most Mexican NGOs that worked on climate change, most importantly CEMDA and CMM, refrained from the security dimension and focused on technical issues or on monitoring the financial pledges concerning climate measures (Interview 2014b, 2014a; Centro Mario Molina 2014; CEMDA 2010, 2015).

Thus, besides individuals in the Mexican parliament itself, most attempts to construct climate change as security issue were driven by foreign actors such as RUSI and partly PDCI. This seriously undermined their standing in the Mexican debate, especially concerning sensible security issues, because they were perceived as outsiders who wanted to impose a certain framing of the situation, which was not compatible with how Mexican authorities interpreted the situation (Interview 2014x). This was particularly relevant in relation to the sovereign discourse. Firstly, the construction of climate change as traditional national security concern was not compatible with the broader understanding of national security in connection to climate change that prevailed in Mexico. Secondly, given the widespread problems with the drug cartels and violence in the country, Mexican authorities were eager not to let foreign actors interfere in security policy in general.

This corresponds to findings from studies of the climate security debates in the UNSC (Oels and von Lucke 2015) and in other developing countries such as India (Boas 2014) or Turkey (Diez *et al.* 2016: 142–143), that found that developing countries and emerging economies – apart from the small island states – often reject a ‘Western’ led sovereign securitisation of climate change because it diminishes their political influence. Focusing on the traditional security implications constitutes industrialised countries or fora such as the UNSC as powerful agents that provide solution for security problems while taking away agency from

the countries that are constructed as endangered, which in most cases are developing countries and emerging economies. Moreover, it deflects the attention away from the responsibility of industrialised countries to mitigate climate change and instead blame developing countries for not adapting properly. Interestingly, in the UNSC debates, the same developing countries were much more open to accept climate security discourses focused on human security considerations because these had different, less exclusionary and military focused political consequences (Oels and von Lucke 2015: 59), which gives some hints as to why the disciplinary discourse was much more successful in Mexico as well.

Finally, specific institutional characteristics of the Mexican political system further hindered a more successful securitisation of climate change in general. Due to the high turnover of politicians and public servants after elections, experience and networks were often lost, which made it difficult to anchor specific climate security discourses on a permanent basis in the Mexican debate (Interview 2014e, 2014x). This was especially important due to the fact that many securitising actors in Mexico came from abroad and thus had problems to spread their understanding of climate security to Mexican politicians.

In general, the Mexican case shows that no individual actor alone can initiate, control, or prevent climate security discourses. Instead, to successfully securitise an issue one needs a broad range of local actors that articulate a specific threat construction, which also has to resonate with certain cultural, historical and political preconditions.

The Importance of 'Hard' Security Issues

Another central contextual condition in Mexico, which differentiates this case from the US and Germany, was the existence of seemingly 'hard' security issues within the country, meaning the widespread crime and violence due to fights amongst and against various drug cartels that increasingly also pertained thousands of civilians (Dominguez 2010: 152, 154). In a 2011 poll of the Pew Research Center, widespread crime connected to the drug cartels was considered the number one security concern in the country (Pew Research Center 2011). Although one could argue that even in the US many perceived the threat of terrorism as a comparable 'hard' and pressing security issue, the problems in Mexico were on a completely different level. Several statistics concerning number of deaths (CNN 2016) and the categorisation of certain parts of the country as failed state underline this assessment (Bertelsmann Stiftung 2012: 6).

Thus, many politicians in Mexico and especially Mexican security authorities were fairly occupied with tackling these issues and therefore did not consider a in their eyes rather long-term problem such as climate change as immediately deserving the same level of attention (Dominguez 2010: 152-153, 168). In contrast to the US or Germany where the absence of immediate threat discourses had opened a window of opportunity for climate change to emerge as important ‘discourse of danger’, in Mexico there already existed a seemingly more existential and immediate threat than climate change. This made it much more difficult to successfully frame climate change as such. This is again especially true for the sovereign discourse, which consequently was the least successful in Mexico. In contrast, constructing climate change as a threat to human security or as a long-term risk, was more successful because it did not have to directly compete with other security problems of the same kind.

In the same vein, the academic debates about ‘new security issues’ in general and environmental conflicts in particular were not as widely discussed in Mexico. Accordingly, there was no influential first phase of the securitisation of climate change in the 1990s. Instead, the political debate about security in general remained largely focused on traditional security conceptions (Dominguez 2010: 152). Thus, when the discourses concerning the nexus between climate change and security gathered momentum during the 2000s, Mexican civil society organisations as well as politicians had much less experience with this kind of argumentation than it had been the case in the US or Germany (Interview 2014e). Eventually, this also contributed to a rather reserved resonance of securitisation in general and especially in the sovereign discourse. Beyond that, one important reason why Calderon was so dedicated to progressive climate policies was precisely to deflect attention away from traditional security issues i.e. the problems in the fight against the drug cartels. Constructing climate change as national security issue in the narrow sense would have directed the attention back to these issues, which is why he and many others did not engage in the sovereign discourse but rather preferred a politicisation of climate change or a securitisation within the disciplinary and governmental discourse.

Socio-Economic Situation of the Population and Vulnerability Towards Climate Change

Although now widely referred to as ‘emerging economy’ (González 2014), large parts of the Mexican population especially in rural and southern areas of the country are still considered poor or very poor (Bertelsmann Stiftung 2012). Together with several unfavourable geographical preconditions and limited resources of the state to organise adaptation measures,

this makes them highly vulnerable to the direct physical effects of climate change (Ibarrarán *et al.* 2008; Appendini and Liverman 1994; Salazar and Masera 2010: 22–25; Wolf 2007: 36). Moreover, the IPCC predicts severe impacts of climate change in Mexico, including increased temperatures and droughts in the North, more precipitation and flooding in the South, an increased in extreme weather events and considerable sea level rise on Mexico's costs (IPCC 2007b: 79, 92, 153). As a result, even though on a lower level than in Germany, environmental issues have for some time been a widespread concern in Mexico at least on the elite level but increasingly also for the general population, especially in bigger cities. A 2012 poll also found that climate change is increasingly perceived as important risk in the country (AXA and IPSOS 2012: 4). Given this pretext, it does not come as a surprise that discourses constructing climate change as a threat to the human security of individuals and hence a focus on the direct physical effects for the population dominated the Mexican debates, whereas the sovereign discourse and policies to foster military responses were rare.

6.5 Conclusion: Mexico

In contrast to the US and Germany, the early to mid-1990s saw only very few securitising articulations in Mexico and the impact on policies was limited. This began to change in the mid-2000s when the international discussions on climate security increasingly spilled over to the Mexican debate. Thus, several organisations – mostly international NGOs and think tanks – and a range of parliamentary debates started to emphasise the severe security implications of climate change for Mexico, leading to the peak of the climate security debate between 2007 and 2013. Concerning specific discourses, climate change was predominately constructed as a threat to the human security of (poor) Mexicans and as a long-term risk for specific high-risk groups and areas. While not being absent altogether, national security conceptions only played a limited role in the debates and were not able to influence policies to a greater extent.

In general, securitisation was only moderately influential. Instead, the key impetus for Mexico's progressive stance on climate policy was an intense politicisation of climate change as environmental issue, problem of global justice and (green) economic opportunity after the election of Calderon as President in 2006, which was further intensified in the run up to the COP 16 in 2010. On the one hand, this politicisation went hand in hand with the securitisation – especially concerning the disciplinary and governmental discourses – and both processes reinforced each other. On the other hand, the politicisation eventually prevented the security

framing – particularly the sovereign discourse – from becoming more influential because it had already established a convincing and popular representation of climate change. Notwithstanding these inhibitive factors, the specific construction of climate change as long-term risk and threat to human security was able to influence key policies and governance practices, especially concerning the environmental and civil protection sector, not least the widely praised National Law on Climate Change. It also contributed to Mexico's progressive stance in the international negotiations on climate change and directly influenced its periodical communications to the UNFCCC. Beyond that, especially from the second half of the 2000s on, the focus on the threats of climate change for Mexico's population itself increasingly facilitated the incorporation of climate change into a range of civil protection policies and instruments. Examples are the Programa Nacional de Protección Civil 2008-2012, the Sistema Nacional de Protección Civil and the federal as well as regional Risk Atlases. At the same time, the continuous importance of climate risk articulations also facilitated efforts to control the manifold risks of climate change and to increase civil resiliency by promoting and funding disaster funds and weather or climate insurance policies.

Beyond that, the Mexican case has generated three key findings concerning securitisation processes in general. Firstly, it exemplifies the conditions under which securitisation and politicisation can reinforce or compete with each other and also which climate security discourses might be more compatible with politicisation. Secondly, similar to the German case, it shows how a securitisation of climate change mainly based on human security and risk conceptions can be conducive to progressive climate and civil protection measures. It thereby partly calls into question the harsh criticism of human security in the literature (Duffield 2007; Duffield and Waddell 2006; McCormack 2010) i.e. provides some examples how and under which contextual conditions the negative effects might be preventable. Finally, the case also highlighted some (partly generalisable) peculiarities of (climate) securitisation processes in the Global South. The absence of strong domestic actors and the parallel prevalence of foreign organisations that eventually failed to gain far-reaching influence is one example. Another one is the existence of competing and in this case more influential discourses of security and the resulting reluctance of local authorities to fully accept climate security constructions.

After the last three chapters have elaborated in greater detail on the specific forms of securitisation of climate change in different domestic contexts, the following *chapter 7* relates

these findings to my overall research questions and discusses their relevance for the theoretical conceptualisation of securitisation in general.

7. The Securitisation of Climate Change and the Governmentalisation of Security

The observation that a variety of actors has connected climate change to a range of different conceptions of security since it became a key policy issue in the 1980s builds the starting point of this thesis. Despite the widespread attention for the security dimension in the political debate, *chapter 2* showed that there is no consensus in the academic literature about how to conceptualise these different forms of securitisation and whether, exactly how and where they have had tangible political consequences. Based on these observations, I have identified a number of theoretical and empirical aspects that, in my opinion, have not received sufficient attention in the existing literature and hence complicated the task of finding convincing answers to the just mentioned questions. Theoretically, I have argued that a missing or at least insufficient problematisation of power constitutes one of the major gaps in the existing literature. To fill this gap, I have drawn on a Foucauldian governmentality reading of securitisation established amongst others (Opitz 2008b) by Elbe (2009) and Oels (2011, 2012a) and developed three ideal typical climate security discourses that correspond to different forms of power. Empirically, I have outlined how many existing works have focused on the global level or on exemplary data, leaving room for more in depth and comparative studies. Taken together, these aspects have led to my research questions:

How can we understand different forms of securitisation and their political effects?

- *What are the dominant forms in different countries?*
- *What are the country specific domestic political effects of such different securitisations?*
- *What are the normative implications? Is it possible to distinguish between good and bad securitisations of climate change?*

In this chapter, I discuss how my case studies have contributed to answering these questions and how the empirical findings may help to address the theoretical and empirical gaps in the literature, which I have pointed out in *chapter 2-3*.

The in-depth analysis of the securitisation of climate change in the three countries (*chapters 4-6*) has provided detailed answers to the questions about what forms of securitisation dominated in different countries and how the political effects varied in each case. It revealed that we can find very different forms of securitisation in these political arenas and that the

conceptualisation based on the three power forms derived from the governmentality approach can help us to make sense of these diverse discourses of climate security. Moreover, the degree of intensity and the ‘success’ of securitisation varied considerably, hence paving the way for a range of political consequences. Beyond that, the three cases have revealed how the specific form of securitisation in each country played a vital role in shaping not only domestic climate policies but also the behaviour of the three countries concerning the international climate negotiations.

Now, what do these findings tell us about securitisation(s) in general? In the remainder of this chapter, I focus on my main theoretical research question, namely on *how we can understand different forms of securitisation and their political effects* and hence explore the broader theoretical, political and ethical implications of securitisations of climate change in different contexts. In the *introduction* to this thesis and in *chapter 2 and 3* I have claimed that a governmentality reading can help us to understand the multiplicity of climate security discourses, their diverse political consequences and the role of power in securitisation processes in general. This chapter further substantiates these claims. It discusses three key areas, namely: the governmentalisation of security and the three climate security discourses (7.1); the diverse political consequences of securitisation(s) (7.2); and the normative assessment of securitisation (7.3).

7.1 The Governmentalisation of Security and Multiple Climate Security Discourses

Based on Foucault’s concept of the governmentalisation of the state, a core claim of this thesis is that we also witness a constant governmentalisation of security (Elbe 2009: 9). This means that just like governance in general, security practices undergo a constant transformation (Opitz 2008b: 204, 216). They increasingly include characteristics of all three power forms and mainly aim at the Foucauldian population as main referent object. It is this claim that sets the GA apart from both the classical CS and the Paris School or literature on risk. The former cannot theorise change of the security logic and hence mainly emphasises a traditional conception of security. The latter predominantly understand (in)securitisation as everyday process or gradual ‘riskification’ (Corry 2012).

7.1.1 The Governmentalisation of Security

From a GA perspective, we cannot conceptualise security in such a monolithic way but should understand it in a more dynamic fashion (Opitz 2008b: 216). One way to interpret Foucault's governmentality lectures is hence to expect a constant move from 'older' power forms, such as sovereign power, towards the 'younger' ones, such as disciplinary and governmental power. This also entails a refocusing from the state territory towards individuals and the population as main referent objects (Elbe 2009: 71). The development of the discipline of (increasingly more critical) security studies towards a whole range of new referent objects and threats (Booth 1991, 2005b; Krause and Williams 1997; Mutimer 2010) and the quickly expanding literature on risk emphasise this argumentation (Beck 1992, 2000; Hameiri and Jones 2013; Aradau and van Munster 2007; Lobo-Guerrero 2007). Likewise, the considerable broadening of political debates when it comes to security issues from the 1980s until today support this argument. In fact, the development of the global debate on climate security as well as my country cases entail concrete examples for a significant broadening and deepening of what is understood as political security problems. For instance, the conceptual debates about new environmental security issues played a central role in the US in the 1990s and were closely linked to the rise of climate change as security issue. The same is true for the debates in Germany and Mexico, where political practitioners have increasingly expanded their views on what constitutes a relevant political security issue, though especially in Mexico this happened later than in the US.

Apart from this broader development, however, as the theory chapter and my empirical cases illustrate, the governmentalisation of security does not proceed in a linear or one-directional fashion. Instead, it includes constant struggles between the three forms of power and associated conceptions of security. It can proceed contrarily in different contexts and policy fields and also can include the re-emergence of forms of power that were already thought to be dead and buried for good (see also Larrinaga and Doucet 2008; Opitz 2008b: 205, 216-217). This observation rests on Foucault's claim that 'new' forms of power do not simply replace the 'older' ones. Rather, what changes is the 'system of correlation' between these power form (Foucault 2006b: 161).

Looking at my cases, while new security concepts such as environmental security already played an important role in the US in the 1990s and contributed to the rise of the disciplinary climate security discourse at that time, traditional national security conceptions

never became obsolete. Quite the contrary, the sovereign discourse and a national security framing of climate change dominated the debates from the mid-2000s on. This being said, the sovereign discourse often was directly linked to human security and risk conceptions and several reports in the US acknowledged that traditional defence measures are not sufficient anymore (Campbell *et al.* 2007: 9). Thus, even though the sovereign discourse is alive and well and was the dominant representation of climate security in the US, national security conceptions undergo a constant transformation and have to cope with and include alternative conceptions of security (Opitz 2008b: 217). This gradual re-interpretation of traditional conceptions of security was even more pronounced in Germany and Mexico. As the next section points out in more detail, participants of climate security debates in Germany interpreted national security in a much more multilateral way especially in connection to climate change. Similarly, in Mexico ‘seguridad nacional’ entailed entirely different connotations depending on whether people used it in connection to drug trafficking or climate change.

These examples show that the governmentalisation of security does not proceed in a linear fashion and depends heavily on the broader context and specific policy fields. They also illustrate that sovereign conceptions of security – even though the classical process of securitisation as described by the CS can be understood as an attempt to reinstate them (Opitz 2008b: 217) – cannot operate in an isolated fashion anymore and are constantly linked to and partly transformed by ‘newer’ conceptions of security and power. Although keeping their core characteristics, ‘older’ power forms increasingly aim at securing the welfare of the population and include characteristics originally associated with governmental power – especially statistical knowledge, future orientation, cost-efficiency, indirect interventions and a focus on processes of circulation (Foucault 2006b: 90-97, 161; Elbe 2009: 67-76, 126; Dean 2010: 29–30). Thus, even articulations that have primarily constructed climate change as a threat to US national security always emphasise that this is not the only dimension of the problem but that it simultaneously is a threat to individuals or a long-term risk, both of which must be figured into the appropriate responses. The rising importance of risk management approaches and plans for preventive or pre-emptive strategies in the US military further exemplify how traditional conceptions of security and power gradually become infused with these new understandings of security. The next section on the three climate security discourses and their materialisation in my empirical cases further discusses these transformations of power forms, security conceptions and the connections between different discourses.

7.1.2 The Power Triangle and Three Securitisation Discourses

One of the corner stones of this thesis is the observation that although climate change has repeatedly been connected to security conceptions, there is no consensus about what exactly the threats are, who is threatened and what should be done about it. To shed light on these questions, in this section, I discuss my three climate security discourses and how they have materialised in the country cases. In particular, I show how they have constructed entirely different versions of climate security and how they have changed due to different contexts and in the wake of the general governmentalisation of security. I also discuss how they have prevented different understandings of climate change to become dominant, and finally how these discourses have been combined to form entirely new representations of climate security.

The Sovereign Discourse

From Legitimising Climate Policy Towards Climatizing the Defence Sector

In my empirical cases, the United States constitutes the prime example for a securitisation of climate change that predominantly rested on the sovereign discourse. In the 1990s, references to climate change as a threat to US national security primarily appeared in the context of attempts to raise attention and secure support for genuinely environmental policies. Thus, at that time, the sovereign discourse was broad and often connected to other representations of climate security. This changed considerably in the second phase of securitisation. In stark contrast to the 1990s, the discursive representation of climate change as national security threat became much narrower. Climate change became a direct threat to the well-being and even survival of the sovereign, which necessitated extensive preparations in the security and defence sector. Important reasons for this discursive transformation were a change in the motivation of key actors but also of the internal logic of the sovereign discourse itself. As the possible security implications of climate change grew more real and immediate in the wake of more robust scientific findings in the 2000s, the obvious response was not anymore long-term environmental policy but short or middle-term defence measures. Thus, especially from the mid-2000s on, think tank reports and parliamentary debates mainly emphasised the socio-economic effects of rising temperatures e.g. an increase of violent conflicts, instability, mass migration and even terrorism, which together threatened the international order of states in general and the US and its military in particular. Climate change hence was constructed as a traditional security problem, which necessitated adequate responses in the defence and security sector. While it still

fell short of a straight militarisation of climate policy (Hartmann 2010; Gilbert 2012) and could work as a door opener towards more progressive climate policies in general, it nevertheless had problematic side effects from an environmentalist or democracy perspective.

The Naturalisation of Climate Security

Although the responsibility of industrialised countries for the accumulation of GHGs and the necessity of mitigation were not omitted in this representation of the problem, it nevertheless largely constructed climate change as a problem external to the US. Something that would cause unrest and instability amongst the already poor and unorganised masses around the globe against which the US as the 'indispensable nation' and 'shining city upon the hill' (Kutz 2011; Koschut 2011: 31) would have to defend the world and itself. This discursive representation hence underlined a range of existing stereotypes and reinforced in-group/out-group or othering dynamics that for long have been a cornerstone of US foreign and defence policy and the construction of US identity in the first place (Campbell 1992). Despite the honest attempts of most reports in the US to highlight the root causes of the problem and the need for mitigation, the attention generating focus on the national security threats, as well as the traditional role of most of the key actors as advising defence policy, largely overshadowed these intentions.

As a result, the dominant sovereign representation naturalised climate change and the connected security implications such as conflicts and instability. It painted them as largely given, as unavoidable and hence devalued attempts to stop climate change from happening in the first place (Hartmann 2010: 235; Oels and von Lucke 2015: 61). While it hence helped to re-politicise climate change after years of neglect under the Bush administration by kick-starting a debate on security focused adaptation measures, it at the same time depoliticised the debate about climate mitigation. Thus, the solution that this representation suggests is first of all a focus on the symptoms and damage control, i.e. adaptation to this new situation. This includes adapting the US military, for instance by making its bases flood proof, adjusting training exercises or reconfiguring technology to work under more extreme weather conditions but also preparing for increased and more robust missions abroad. The underlying rationale is to defend the core against the threats that develop in the periphery. As Pugh and Duffield have outlined it in their criticism of the peacekeeping paradigm, the aim is to pacify and control an 'unruly' South without tackling the root causes that are to be found in the wider economic and political relations (Pugh 2004: 46; Duffield 2007). It is a security strategy of 'spatial exclusion' that does not look for the problems and answers in its own way of life and patters of

consumption but tries to ‘distance the threat’ and mainly focuses on tackling the arising threats in the periphery (Dalby 2014: 6–7; Eckersley 2009: 87). All this partly underscores the criticism that has been raised in general concerning climate protection discourses as ‘empty signifier’ (Methmann 2010), meaning political strategies that largely aim at only making minor adjustments to existing systems of governance without changing anything substantial concerning the actual causes of the problem.

Beyond that, the extensive integration into the planning of the defence and intelligence sector in the US furthered a tendency to secrecy (Interview 2014v) and a hierarchical dealing with climate security issues and excluded a range of actors from the debate (environmental NGOs, scientific institutions, Al Gore). It thereby largely prevented alternative representations of climate security, which might have been more expedient for progressive climate policies, from gaining ground in the political arena. This pertains especially to human security or environmental security argumentations. Both the secrecy and the exclusivity are problematic as they circumvent public scrutiny and close down the range of possible solutions (Gilbert 2012: 4). They exemplify the narrowing qualities of securitisation and the dangers of extraordinary politics described by the CS (Buzan *et al.* 1998: 21, 24, 29).

The Transformation of National Security?

Despite these arguably far reaching effects, even in the US, the sovereign discourse never became as strong as to eliminate all other choices or to actually establishing a state of exception and hence suspending the rule of law or democratic procedures. Hence, there were always traces of the disciplinary and governmental discourses and representations of climate change as environmental issue in its own right or economic opportunity never got out of sight entirely, especially at the state level. The prevailing sovereign discourse also has not (yet) legitimised military operations that only have the goal to subjugate peripheral countries to US rule. It mainly helped to establish climate change as relevant issue in the security and defence sector, which besides military preparedness could increase human security around the world and contribute to more effective climate abatement. Thus, large parts of the military planning on climate change revolves around military led humanitarian and disaster relief missions (see Brzoska 2012b).

Moreover, the national security representation of climate change has facilitated the implementation of several win-win strategies on climate change. Examples are attempts to

'green' the military by developing alternative drives (US Navy 2016), which saves costs, enhances the tactical utility of certain military units and helps to limit GHG emissions. In the light of the fact that the US military is the world's single largest consumer of energy (Singer and Warner 2009) these effects cannot be dismissed from a consequentialist perspective. On the other hand, while the participation of the military could financially and technologically advance the research on green energy, it also restricts it to the specific needs of the military and possibly limits open access to the technology (Gilbert 2012: 8). These examples show that despite some similarities with the original concept, we should not simply equate the sovereign discourse with the CS definition of securitisation, although it certainly has the greatest potential to eventually come very close to this negative understanding.

Another reason for the limited sovereign effects of the securitisation was that even in the US the sovereign discourse did not materialise in an entirely pure fashion but incorporated elements of the other two discourses and power forms. This was even more pronounced in Germany and Mexico where, although never moving centre stage, the sovereign discourse did appear in the climate security debates. Yet, primarily due to a very different culture of foreign and security policy (Maull 1993, 2007; Risse 2004), in Germany whenever the sovereign discourse was articulated it seldom only revolved around direct threats to Germany's national security. Instead, it was more about the possible repercussions of instability and violent conflicts for the impoverished people in the Global South themselves and for global governance in general. Although reports and members of parliament discussed the traditional security implications of climate change, they primarily connected them to a responsibility of industrialised countries to take the international climate negotiations seriously. It was not primarily about defending Germany against the violence caused by climate change elsewhere and thereby drawing boundaries between the inside and outside. Instead, national or state security was interpreted as something shared, something that cannot be established in one part of the world while other regions fall into chaos or while huge numbers of people remain vulnerable towards climate change. Thus, the sovereign discourse in Germany was closely connected to human security conceptions. It ultimately helped to legitimise progressive climate policy and development aid as well as to construct climate change as a key foreign policy priority.

Likewise, in Mexico traditional understandings of 'seguridad nacional' are not entirely absent and have played a role in debates concerning drug trafficking and the widespread

violence in the country (SEGOB and CISEN 2014; az 2014). Yet, in relation to climate change, the meaning of national security was much broader and respective articulations largely avoided direct connections to the security and defence sector. In contrast to the US where this happened the other way around, the discussion of climate change as threat to Mexico's national security reinforced the dominant representation of climate change as threat to the human security of the poorest Mexicans and as a danger to public safety. In both Germany and Mexico, national security was more of a catchphrase or argumentative starting point to generate political attention and to emphasise the vulnerabilities of individuals, but only very seldom to boost military readiness.

In general, constructing climate change as national security threat is a powerful way of generating attention for the issue especially amongst audiences that otherwise would not have taken the problem seriously. This comes with the catch, however, that it often legitimises adaptation measures instead of tackling the root causes of the problem. However, the specific characteristics of such as discursive representation heavily depend on the context in which it is enacted and the examples from Mexico and Germany have shown that it can also materialise in a quite different manner that is more conducive to progressive climate and human rights policies.

The Disciplinary Discourse

The Emancipatory Qualities of the Disciplinary Discourse

Compared to the sovereign discourse and its tendency to value state security over the needs of individuals, constructing climate change a threat to human security has the potential to particularly draw the attention towards the problems of individuals. In the words of its original proponents it might help to emancipate individuals and to free them from want and from fear (Booth 1991; Wyn Jones 2005; UNDP 1994). The case studies underline this to a certain extent: In Germany and Mexico, the emphasis of the climate security debates was primarily on the direct physical effects of climate change such as extreme weather events, sea level rise and the spread of disease, which all would seriously affect the wellbeing, daily lives and hence human security of individuals.

In Mexico, the prevailing disciplinary discourse focused directly on Mexican citizens, which made intuitively sense as scientific reports predict the region to be heavily affected by

climate change in the near future (Amador 2010; IPCC 2015, 2007b). Moreover, the human security focused securitisation was largely compatible with the prevailing politicisation of climate change as environmental and global justice issue. Highlighting the direct physical effects of climate change played an important role in generating political attention for the issue but also to translating the abstract scientific data into tangible problems that directly affected the everyday lives of Mexican citizens. It helped to connect individual natural disasters, which had become more frequent and intense, to a broader coherent narrative and to legitimise appropriate political solutions. In Mexico, these were primarily to be found in the international climate negotiations but also in domestic climate laws and in civil protection measures. Thus, the construction of climate change as human security threat helped to legitimise key climate policies, which included far reaching mitigation and adaptation measures. It also made the issue more real and tangible for the average Mexican and helped to integrate it into a range of disaster management and vulnerability assessment schemes.

In Germany, the predominant argumentation was similar. In contrast, however, while threats for people in Germany were not entirely absent, the endangerment of the domestic population was not the core argumentation. Instead, the discourse constructed poor people in the Global South as main victims of climate change. This representation of climate security resonated well with underlying cultural and political preconditions such as Germany's role as civilian power that has learned its lessons from its violent past and now strives to make the world a better place for all of humankind (Gareis 2005: 45, 231; Hellmann *et al.* 2006: 79). It firmly established climate change on the political agenda and increased the pressure to act without locating agency primarily in the defence sector. It was often directly coupled with global justice conceptions and hence contributed to legitimise ambitious mitigation measures but also established climate change as key issue in development policy. In addition, in both Germany and Mexico, the construction of climate change as human security issue did not narrow down the political space as much as the sovereign led debates in the US and in both countries the spectrum of actors and solutions was quite broad.

Even in the US, we can observe emancipatory effects of human security. In the 1990s, the disciplinary discourse and a view on dangers for all of humankind helped to ensure the active participation of the US in the international negotiations in climate change. In the 2010s, even though the sovereign discourse had gained dominance, a gradual revitalisation of the

disciplinary discourse helped to highlight the vulnerabilities of less wealthy Americans and to legitimise increased planning to help those people in the case of natural disasters.

Normation and the Ambiguity of Human Security

Apart from these emancipating qualities, however, invoking human security also unleashes the concept of ‘normation’ that is inherent to disciplinary power. This became particularly apparent in the German and US case where the disciplinary representation of climate change and the recurring argumentation that the ‘poorest will be hit hardest’ helped to establish a juxtaposition of wealthy and climate savvy people in industrialised states with the poor and unprepared in the Global South. This reinforces a distinction between powerful Western actors and vulnerable populations of the Global South that have to be saved, controlled and disciplined by external interventions (Methmann and Oels forthcoming; Oels and Carvalho 2012; Duffield and Waddell 2006). It perpetuates a paternalistic relationship between industrialised and developing countries where the ‘West always knows best’ (Donnelly and Özkazanç-Pan 2014) and reinforces the dependency of those countries on outside support and guidance.

Moreover, primarily pointing to human security threats of people that live far away in countries that have immense political problems anyway, frames climate change as a problem of poverty and underdevelopment. Not the severity of climate change per se determines the level of the threat but the inadequate coping capacity of these affected populations. Similar to the above-described effects of the sovereign discourse, this shifts the responsibility for the security implications of climate change away from industrialised countries and locates it directly in seemingly dysfunctional Southern communities. It hence deflects attention away from problematic behaviour at home – e.g. in the case of Germany the increasingly disappointing climate mitigation record in the second half of the 2010s (Geden and Tils 2013; Geden 2013; Dröge 2016; Dröge and Geden 2016) or in the US the failure to implement any progressive federal mitigation legislation. Instead, it constructs climate change as a problem that can be cured by scaling up – or merely rename (Ayers and Huq 2009; CCCD 2009: 12) – existing development aid or by short-term interventions without investing too much into tackling the root causes in industrialised countries (Methmann and Oels forthcoming; Methmann and Oels 2015; Barrera and Schwarze 2004).

Additionally, these normation qualities of the disciplinary discourse are the starting point for measures that are disciplinary in the original sense, such as increased monitoring

activities and attempts to transform behaviour deemed inappropriate for the broader goal of climate protection. The German case study provides several examples for this development. Likewise, the implementation of a range of public awareness and educational campaigns aimed at transforming individual behaviour towards the desired direction in Mexico reinforces this argument. Compared with direct interventions by sovereign institutions such as the military, this is a more subtle way of exercising power but nevertheless can have far reaching and partly problematic consequences. As it relies on concrete conceptions as to what is appropriate behaviour or what the best solutions for the climate problem are, it can overlook regional expertise as well as spark resistance and eventually fail to convince others about climate protection measures. The problems of Germany but also of the EU to convince others to follow suit when it comes to significantly reducing GHG emissions or setting definitive targets for renewable energies exemplify this argument (Davis Cross 2017; Ahrens 2017).

A disciplinary representation of climate change hence contributes to legitimising climate and development measures in developing countries under the leadership of industrialised countries that partly go against the priorities of the people living there (Lewis 2003). Especially when it comes to mitigation measures, including the shift to renewable energies that has been so popular in Germany, there is often a conflict of goals – and justice dilemma between distributional and intergenerational justice (Okereke and Coventry 2016) – between the aims of industrialised countries such as Germany and developing countries and their populations. On the one hand, the former try to abate climate change by changing energy production, economies and behaviour of people abroad, which to a certain extent is an excuse for not changing anything too fundamental at home (McMichael 2009). On the other hand, particularly poor people in developing countries often first of all strive for fast economic growth to escape poverty and improve their living conditions (OECD 2010: 82), which often runs contrary to mitigating climate change. In addition, large scale renewable energy projects (e.g. dams, wind power projects, energy crop cultivation) can be hugely problematic for local populations and meet fierce resistance, as examples from around the world (McMichael 2009: 254; Arungu-Olende 2007) and from Mexico indicate (Interview 2014e; Burnett 2016). Thus, even though a human security focused securitisation directs the attention to the needs of individuals, it nevertheless primarily empowers actors from the Global North and legitimises far reaching policies that directly affect Southern populations without granting the affected people much control over their scope and content (Lewis 2003; Boas 2014; von Lucke 2016; Oels and von Lucke 2015).

In addition to the problems of normation, the US case provides some examples of the capacities of different discourses to link up and to transform each other. Several authors have criticised that the human security framework has long ceased to live up to its emancipatory ideals and instead increasingly has been reconfigured to support imperialist and interventionist Western agendas (McCormack 2010; Duffield 2007; Duffield and Waddell 2006; Chandler 2004; Oels and von Lucke 2015; Christie 2010). Industrialised countries increasingly understand the concern with problems in developing countries as their own ‘enlightened self-interest’ and have urged to ‘[...] help the poor for the sake of our own security [...]’ (Ziai 2010: 157). While the German case has already exemplified how some of these criticisms are connected to the concept of normation, the specific articulation of the disciplinary discourse in the US illustrates this even further. Alongside the dominant construction of climate change as national security threat, human security considerations were repeatedly invoked to strengthen the sovereign narrative. This argumentation constructed vulnerable groups in the Global South as potentially dangerous (Methmann and Oels forthcoming; Oels 2012a) because a deterioration of their living conditions was seen as a first step towards instability, conflict, terrorism, mass migration and hence ultimately threats to US national security. This strengthened the exclusionary sovereign discourse and at the same time furthered the ‘security-development nexus’ (Pospisil 2009; Duffield 2007; Tschirgi *et al.* 2010; Molier and Nieuwenhuys 2009; Stern and Öjendal 2010). Examples are the alleged need to plan for ‘complex emergencies’ or catchphrases such as ‘networked security’, which have been criticised as complicating the work of development agencies (Scheithauer 2010; Tschirgi *et al.* 2010). Although the cooperation between the military and aid organisations can contribute to human security, it can also undermine the legitimacy of civilian operations and organisations and function as a door opener for more robust military interventions (Christie 2010; Stern and Öjendal 2010; Hartmann 2010).

As these examples demonstrate, the disciplinary discourse and human security conceptions securitise climate change in an entirely different manner. In contrast to the sovereign discourse, it highlights different aspects and can help to legitimise measures that benefit the emancipation of individuals and facilitate progressive climate policies. However, it also has problematic aspects and has contributed to controlling and victimising Southern populations as well as to deflecting attention away from the responsibility of industrialised countries. Moreover, the discussion of the US case exemplifies how it can be linked to and

transformed by a prevailing sovereign securitisation to in the end strengthen national security representations of climate security.

The Governmental Discourse

Refiguring the Sovereign and Disciplinary Discourses

The governmental discourse never became the prevailing securitisation of climate change in any of my empirical cases but mostly acted as an addition to the other discourses. Partly, this might be due to choices concerning my empirical material. I did not on a broader scale look at reports of insurance companies or scientific texts on the security implications of climate change, which might have articulated risk conceptions more centrally. However, it also can be explained with a look at the original theory and the concept of the governmentalisation of security, which mainly presumes a transformation of existing forms of power or security discourses and not a complete substitution of them by governmental power.

In Germany and Mexico, climate risk articulations were closely linked to the respective prevailing construction of climate change as threat to human security. Thus, long-term projections of a range of different climate induced risks played an important role in both countries. Yet, instead of remaining the only way to constitute climate change as issue of political relevance, they were discussed as a potential background condition, which over time would create a range of more concrete problems for individuals. In a way, the governmental discourse helped to create a low key or potential state of exception – though never as extreme as described by Agamben (2005) –, which helped to sustain the attention for climate change without yet crossing the threshold to a full-blown CS-like securitisation and the legitimisation of extraordinary measures. Nevertheless, it still reserved the possibility to turn the ‘inert power’ that was created within this permanent risk construction into action and to push for more immediate and concrete measures to cope with the human security implications of climate change. In contrast, in the US, apart from the early 1990s where risk conceptions occasionally played a role as a standalone representation, conceptualisations of climate risk and resilience were mostly linked to the prevailing sovereign discourse and to defence policy (see also Aradau and van Munster 2007; Walker and Cooper 2011: 152–154).

The existing literature on risk (see *chapter 2*), has identified at least two different characteristics that are relevant for the case of climate change and the analysis of the governmental discourse. On the one hand, risks are conceptualised as more diffuse and long-term than threats, yet still as more or less calculable. On the other hand, several authors have begun to understand risks as complex, non-linear and hence seemingly unpredictable. Although I originally conceptualised the governmental discourse as mainly leaning towards calculable risks, the empirical analysis underlined that both variants have played a role in the governmental securitisation of climate change.

In the 1990s, in all of my country cases, climate risk conceptions especially played a role in connection to the perceived uncertainties when it comes to long-term climate projections. While there already was a scientific consensus that climate change was real at that time, the exact temporal impact and scope were still under debate and despite their severity the projected effects seemed to lie in the far future. Thus, climate change was mainly securitised as an overarching long-term risk. This highlighted the relevance of the issue but at the same time made it possible to avoid specific predictions about its actual effects or to single out definitive and immediate counter strategies. Notwithstanding the realisation of scientific uncertainties, the early risk constructions still portrayed climate change as a largely controllable risk (Oels 2011). Many debates resembled the metaphor of the ‘spaceship earth’ (Fuller and Snyder 2015) that, although somewhat inert, can be steered into the right direction by appropriate policy decisions. Thus, at that time, most recommendations in the respective debates in my empirical cases revolved around mitigation measures in order to limit GHGs and the future risks of climate change to non-dangerous levels, which is also the tenor of the 1992 UNFCCC.

However, based on more severe scientific predictions, from the 2000s on, this ‘traditional risk management’ (Oels 2011) was increasingly accompanied by more radical articulations of the governmental discourse. They highlighted the possibility of various feedback loops, tipping points and cascading effects in the immensely complex global climate system and hence constructed climate change as non-linear, chaotic and largely unpredictable risk (Mayer 2012). The goal now became to somehow cope with and control this seemingly unpredictable future and to prevent climate risks from spiralling out of control. This had two seemingly contradictory effects. On the one hand, some argued that now more than ever was the time for radical mitigation to prevent any of these unknown risks from materialising. On

the other hand, the unpredictability of the adverse future effects of climate change and the realisation that these risks cannot be eradicated entirely, strengthened the calls for resilience, which would help to prepare high-risk groups against any kind of event but neglects mitigation.

Normalisation, Degrees of Risk and Disposable Outliers

In all three country cases, one strategy to square the circle of envisioning and controlling unpredictable future risks was to break down the overall risk of climate change into smaller and hence better controllable parts. Based on the concept of 'normalisation' inherent to governmental power this led to attempts to differentiate between the average risk for the 'Foucauldian population' and certain high-risk groups and areas. In Mexico, which itself was constructed as highly vulnerable towards climate change, this primarily led to spatial and social differentiations within the country. Examples were the construction of different degrees of risk for the dry north vs. the wet south or low lying coastal areas, rural vs. urban or and wealthy vs. poor or sick parts of the population. Climate change hence was to be governed by curtailing the overall risk through mitigation policies – e.g. the General Law on Climate Change – but also by developing risk management strategies concerning natural disasters and civil protection. This is illustrated, for instance, by various federal- and state-level risk atlases as well as vulnerability assessments. In the US and Germany, the concept of normalisation reinforced the already discussed differentiation between the industrialised and the developing world. Unquestionably, climate risk representations did also differentiate between diverse zones of risk within these countries. For example, in Germany, the coastal areas or the east was believed to be at higher risk and in the US, the hurricane Katrina in New Orleans had exemplified the linkages between socio-economic status, racial segregation and the vulnerability towards natural disasters (Giroux 2006). However, in most cases, the overall population mainly consisted of citizens from Northern countries whereas Southern regions and people were constructed as problematic outliers.

Governing Behind the Scenes: Cost-Efficiency and the Management of Circulation

To a certain extent, this overlaps with the disciplinary representation of climate, which, especially in Germany and the US, also primarily located the threats for human security in the Global South. In contrast, however, from the governmental perspective the aim is not to prevent negative events from happening in any case i.e. to protect the human security of individuals regardless the costs. Rather, due to the more long-term perspective and the idea that risks can

never be abolished entirely, the emphasis is on keeping the risk for the average member of the population at a tolerable level, preferably by indirect and cost-efficient interventions. In Germany and Mexico ‘Plan A’ in this respect was still decisive mitigation e.g. regulating GHG emissions through international agreements and domestic policies, which especially after publication of the Stern report, was believed to be less expensive than large-scale adaptation in the future. On the one hand, the aim was to limit or at least to filter ‘bad’ circulation, which included the reduction of GHG emissions as well as the prevention of mass migration. On the other hand, this entailed to enable ‘good’ circulation, i.e. keeping commodity flows, business travellers, tourism, and economic growth at the current levels. In practice, concepts such as ecological modernisation or green growth, which were highly popular in Germany and Mexico, exemplify this approach. In addition, especially in Germany, the increasing importance of the governmental discourse and the success of the above-described concepts contributed to a gradual acceptance of market instruments such as emission trading schemes or Kyoto’s flexible mechanisms in the mid-2000s. The overarching goal of all these approaches was to limit climate change as cheaply and indirectly as possible to a controllable degree while still allowing the economy to grow.

Keeping the Risk at a Tolerable Level: Facilitating Resilience and Insurance Schemes

The construction of climate change in terms of risk partly helped to legitimise mitigation measures aimed at the root causes of the problem. However, the gradual discursive shift towards more radical variants of risk and the focus on largely unpredictable futures also facilitated responses that mainly try to hedge against all possible futures through resilience and insurance schemes while accepting climate change as given. The concept of resilience, meaning the ability of systems or societies to bounce back to their original state after external shocks (Walker and Salt 2006), has become a central concept in academic and political (climate) security debates alike (Dunn Cavelti *et al.* 2015; Walker and Cooper 2011; Pospisil 2013). Although there is no consensus on its exact meaning or wider political implications, the majority of scholars has been critical of the concept (Chandler 2014; Bourbeau and Vuori 2016; Neocleous 2013). Based on the above definition, resilience is mainly a reaction to the idea of incalculable future risks that make it much harder to come to a suitable political response. It can be seen either as welcome shift towards adequately preparing endangered referent objects against all possible futures or as a form of capitulation and neoliberal governmentality that absolves political actors from doing anything substantial about the root causes of those risks (Corry 2014; Lentzos and Rose 2009; Bourbeau and Ryan 2017; Schmidt 2014a).

Particularly in the US, resilience thinking was a popular approach in dealing with climate risks as it was compatible with denying (decisive) human agency while still accepting (natural) climate change as real and investing in reactive counter measures to control the risks. Coupled with the Foucauldian concept of normalisation and the focus on the welfare of the overall population, the wellbeing of people in high-risk groups can become obsolete as long as the overall risk for the population is bearable. An impressive and extreme example for this is the by now almost certain extinction of many small island states, which despite its dramatic consequences for some, has not led to any radical counter measures (Barnett and Campbell 2015; Zellentin 2015a). Thus, a risk approach can become highly problematic as it reinforces the naturalisation of climate change and its security implications and adds to the broader sentiment that climate change – or rather the associated risks – could be kept at bay without radical changes at home. Given the fact that most reports and parliamentary debates claimed that climate risks would first and foremost pertain to the periphery (the Global South) whereas the core (industrialised countries) was relatively safe due to sufficient coping capacities, this was another way to deflect attention away from decisive action of Northern countries. In the end, this as well contributes to a de-politicisation of climate mitigation and a privatisation of climate adaptation (Swyngedouw 2010).

Due to the close interlinkages with the disciplinary discourse, in Germany and Mexico, this thinking translated into measures that were supposed to monitor and possibly predict future risks for especially vulnerable groups and areas. The key aim was to prevent things from spiralling out of control. In Mexico, it facilitated the integration of climate change into various risk atlases, vulnerability assessments and disaster management plans, all specifically aimed at high-risk groups and areas. In Germany, it helped to further anchor climate change in development policy but also to push its foreign policy components. The aim was to prevent climate risks from materialising or at least to keep them under control by preventive peacekeeping approaches and the strengthening of local communities. Examples were the installation of early warning systems for natural disasters as well as concrete financial and technical support to reduce ‘contextual vulnerability’ (O’Brien *et al.* 2007: 75) of local populations. In the US, the growing thinking in risk categories in the mid-2000s particularly strengthened the role of the military and the defence sector (Walker and Cooper 2011: 152–154), which were believed to have the most experience in dealing with unknown futures, particularly due to its experiences in dealing with terrorist risks (Aradau and van Munster 2007). The aim was to increase military resilience, to make the military fit for a largely unknown, but

definitely more hostile, future environment. This could be accompanied by punctual interventions in high-risk areas to suppress growing risks or to control situations already threatening to spiral out of control and hence to prevent the vulnerable from becoming dangerous for the overall population.

Apart from these measures, a further common instrument to hedge against unknown futures was the propagation of weather or climate (micro) insurance schemes, which played an important role in all country cases and gained more and more importance particularly from the 2010s on. Insuring against climate risks instead of preventing them from happening in the first place is an example par excellence for a governmental rationality that aims at controlling for risks while shying away from too far reaching direct interventions. While it certainly can help to alleviate some hardships by, for instance, compensating farmers decreased crop yields, it is also hugely problematic. It constructs human lives as well as biological and cultural diversity tradable commodities and hence fails to address that not everything can be compensated for in financial terms but might be destroyed forever by a drastically changed climate (Tsosie 2007; Page 1999: 62–63; Ikeme 2003).

The different articulations in the empirical cases and the interconnections with the other two discourses show the internal diversity of the governmental discourse and climate risk conceptions. While on the one hand, it has constructed climate change as long-term yet controllable risk to be tackled with mitigation measures, on the other hand, it also contributed to the naturalisation of climate change and a refocusing on resilience and adaptation measures. Within this mind-set, severe climate change is accepted as already happening, as inevitable and as a constant looming risk and the only chance is to prepare for its worst impacts (see also Oels and von Lucke 2015: 61). Climate risk discourses create a ‘future perfect’ and hence can be particularly powerful concerning the construction of a very specific truth (Krasmann 2012: 127), however can also fail to incite necessary mitigation action. As Dalby puts it:

Treating extreme-weather-related disasters as either a technical exercise or one that is susceptible to management by financial means, insurance, catastrophe bonds and related instruments fails to address the politics of their causation and as such remains a palliative measure that doesn’t address the root causes of insecurity (Dalby 2014: 7).

In this regard, it is not anymore about stopping climate change and the associated risks altogether, but merely about keeping them at a controllable level for the overall population.

Thus, although avoiding some of the problematic aspects of the sovereign discourse, representing climate change as a risk comes with its own set of problems.

7.2 Differentiating the (Powerful) Political Consequences of Securitisation

The existing literature provides us with different frameworks for the political consequences of securitisation, ranging from the CS and its focus on extraordinariness to the Paris School and the emphasis on long-term processes, practices, and small-scale everyday life consequences. The previous section has exemplified the diversity of securitisations and their consequences. It hence has shown that a securitisation can have both fairly extraordinary and less noticed everyday consequences as well as pertain to very different policy sectors depending on which security discourses dominate the debate. In this section, I go beyond the properties of specific climate security discourses and instead discuss what my empirical findings can tell us about securitisation and its consequences in general.

As elaborated in more detail in the theory chapter, I understand securitisation as a way of exercising political power but also as being deeply intertwined with pre-existing relations of power that make specific forms of securitisation possible in the first place and constitute certain actors as more central than others. From the Foucauldian perspective, power does not stem from material capabilities or the structural positioning and actions of certain actors but primarily lies in broader (in my case security) discourses (Foucault 1980: 133). Power and discourse in this sense are ‘productive’ (see Barnett and Duvall 2005: 55), they constitute specific actors as legitimate as well as allow for certain political measures and policies to be presented as logical solutions whereas discouraging others, thereby creating what Burgess has termed specific ‘security truths’ (Burgess 2011: 39). Thus, from a governmentality point of view, securitising an issue is primarily a way to render it governable from a specific perspective and to produce a specific truth about the issue at stake. This has several interlinked and mutually reinforcing power effects, which in one way or another apply to each of the three climate security discourses. Securitisation hence acts as a *catalyst* for the political debate but also *narrows down* what the involved parties perceive as appropriate understandings and countermeasures in a given situation. Furthermore, it *constitutes specific actors* as legitimate and powerful while excluding others from the debate or framing them as victims/objects, and it can *legitimise and influence* concrete policies. In the following, I discuss how these properties relate to the different stages of securitisation processes.

7.2.1 The Preconditions and Context of Securitisation

Security discourses do not originate out of the void or can be brought into being by securitising actors at will but heavily depend on the broader enabling context they develop in (Ciuta 2009; Salter 2011; Oels and von Lucke 2015: 55; Diez *et al.* 2016: 148). The attention generating speech acts, or as I would conceptualise them, the concrete articulations of specific discourses in reports, debates or speeches, are only the ‘tip of the iceberg’ (Bigo 2009: 126). As my empirical cases show, an important part of the larger bottom of the iceberg consists of deep rooted historical traditions and past experiences, political cultures, institutional setups, functions of civil society, the socio-economic situation, and ‘counter-securitisations’ (von Lucke *et al.* 2016: 21). Beyond the domestic context, the international level as well plays a role, particularly in connection to global issues such as climate change (see Buzan and Wæver 2009).

All these contextual preconditions are significant when it comes to the question why, how and when specific security discourses become influential or dominant in the first place and to what extent the prevailing form of securitisation can have an impact on political debates and policies. However, it is not always possible to clearly separate these preconditions from security discourses and the relationship is best described as mutually constitutive. Thus, being deeply embedded in long lasting historical and cultural developments, many of the described preconditions are relatively stable over a longer period. Yet, this does not exclude that dynamic security discourses, policy decisions or changed practices eventually have a feedback effect on the very preconditions that enabled them in the first place. This is especially true for the international context. While scientific or political debates on the global level within the framework of the IPCC or the COPs can influence domestic debates, they are themselves heavily dependent on the input from the national level.

The Domestic Context

Looking at my empirical cases, in the US, the domestic preconditions were heavily in favour of the sovereign discourse and empowered actors from the national security establishment. In Germany, the long lasting success of environmentalist positions and the problematic experiences of the past facilitated the disciplinary discourse and a much broader spectrum of actors. Naturally, these contextual preconditions are never deterministic and leave room for agency and contingency. Thus, in both countries, alternative discourses and actors were not entirely absent, however, due to the specific preconditions and later also due to the progressing

influence of specific discourses, they were not able to generate sufficient public attention to supersede the dominant construction of climate dangers. In Mexico – and presumably in other countries of the Global South as well (von Lucke 2016; Boas 2014) –, a lack of strong domestic civil society actors and past experience with environmental security argumentations as well as the existence of seemingly more immediate counter securitisations made it hard for any form of securitisation to gain ground.

The International Context

In all three countries, the international context played a role as well. The most important aspect was certainly the scientific debate on climate change, which from early on provided the factual basis for securitising articulations. It became particularly influential with the founding of the IPCC in 1988 and the subsequent periodical synthesis reports that brought together formerly more scattered research on climate change. Especially the fourth report published in 2007 (IPCC 2007b) and its findings about the severity and urgency of climate change provided ample evidence for climate threat constructions (Oels and von Lucke 2015: 48). Together with growing academic research on the climate security nexus at that time, it reinforced the debates in all three countries. Yet, due to their relatively smaller size and more pronounced multilateral traditions Germany and Mexico were in general more receptive, whereas the US was less inclined to react to international influences. The academic debates on climate change and environmental conflicts and to a certain extent also the international negotiations surrounding the adoption of the UNFCCC significantly affected climate security discourses in the US in the 1990s, not least because US foreign policy at that time was more international/interventionist than in later periods. However, with the devaluation of scientific knowledge, the rise of the think tank driven debate, and the election of George W. Bush in the 2000s, this influence decreased noticeably.

In contrast, in Germany and Mexico the international level was important throughout the whole study period. Thus, discursive interventions of scientists, international organisations such as the World Bank or local branches of international NGOs played a key role in both countries. In Mexico, it was not until a range of foreign actors had organised events and published reports on climate security that the issue became more common in parliamentary debates in the mid-2000s. In Germany, the debates about the security implications of climate change in the UNSC in 2007, 2011 and 2013, the discussions surrounding COP 15 in

Copenhagen and the reports and actions of the EU on climate security considerably intensified climate security debates.

What is Normal?

Another important aspect is that securitisation in a specific context sets the baseline for what is ‘normal’ when it comes to political interventions to deal with the respective problem (Ciuta 2009: 313; Hansen 2012; McDonald 2011). Even if one rejects the problematic dichotomy between normal and extraordinary measures as put forward by the CS (Stritzel 2007; McDonald 2008) and instead relies on Trombetta’s counterfactual definition of success of securitisation (Trombetta 2011b), a view on the context is necessary. In the US, given its resistance against any binding commitments to reduce GHG emissions and the lack of federal laws to govern climate change, the partial bridging of the political divide by constituting climate change as national security issue and the integration of adaptation measures in the defence sector was an enormous step forward. Likewise, the progressive take of Mexico concerning climate change was surprising given its more problematic socio-economic preconditions and only recent democratisation. In contrast, keeping in mind the long environmentalist tradition, a mere integration of climate adaptation measures in the defence sector, would not have qualified as a success in Germany. Thus, a view on the broader context matters in securitisation analysis. Firstly, because it makes specific discourses possible and more likely, secondly because it helps us to determine whether a securitisation was successful, and thirdly because a contextual perspective enables us to make an informed consequentialist normative assessment of securitisation, as *section 7.3* explores in detail.

7.2.2 Agenda Setting and Politicisation

Contrary to what the CS originally claimed (Buzan *et al.* 1998: 23–24), securitisation is not necessarily the opposite or a failure of (normal) politics but on the contrary can be an essential part of it (Diez *et al.* 2016: 151). Until a certain degree of intensity and depending on specific security discourses, rendering something governable as security is ‘productive’ and can have several politicising effects. Securitisation acts as a ‘catalyst’ for the political debate, it can generate attention (in the public, the media or in specific policy sectors), bring an issue on the agenda in the first place (see Bachrach and Baratz 1962), and hence push actors to debate issues they did not consider important or immediate beforehand. It hence opens the debate to less noticed expert panels and accelerates political procedures, without automatically circumventing

democratic procedures. In this process, it can also transform an issue from a low-key, e.g. environmental or social justice concern, towards a more attention generating ‘high politics’ issue. All these qualities are the reason why so many environmental activists in the past have tried to securitise climate change (Floyd 2013: 287–288).

Particularly in the US and Germany and to a lesser extent also in Mexico, climate security discourses were crucial in generating attention in the media and general public and in putting climate change onto the agenda of national parliaments. Referring to the manifold security implications of climate change raised the political stakes, highlighted the importance of the issue and pushed actors on all sides of the political spectrum to take a stance on climate change. Thus, it was an important impetus for the beginning of the domestic climate debates and beyond that played a considerable part in launching the international negotiations in the late 1980s and early 90s. In addition, the securitisation of climate change in the US contributed to overcoming the political standstill during the Bush Jr. administration and led to a noticeable surge in Congressional attempts for climate legislation between 2006 and 2010. In Germany, it helped to keep climate change on the agenda from 2005 on despite the recall from office of the environmentalist Red-Green coalition government. Finally, in Mexico, the specific securitisation as human security threat and long-term risk in combination with the general politicisation accelerated political debates that eventually resulted in several progressive policies and widespread civil protection measures. The Mexican case also exemplifies the ambiguous relationship between politicisation and securitisation. On the one hand, it underlined how politicisation and securitisation can reinforce each other. On the other hand, it also highlighted how a successful politicisation can eventually hinder or override (specific forms of) securitisation.

The cases have also exemplified how, depending on the broader context, different discursive representations can have different effects concerning politicisation and agenda setting. In the US the national security framing that gained dominance in the 2000s was able to revive the political debate and convince new audiences, something which a mainly human security focused securitisation would not have achieved. At the same time, a cautious science based construction of climate change as long-term risk, which had been fairly successful in the 1990s, ceased to be of any help in this respect because it lacked the immediacy and concreteness of the sovereign discourse. In contrast, in Germany and Mexico, such a sovereign representation

was largely rejected, and instead human security and risk construction were able to politicise climate change.

Nevertheless, in none of my cases securitisation was the only driver behind debates and actual measures on climate change. Thus, social movements in Germany, debates about climate change as environmental and global justice issue in Mexico and pressure from the state level in the US also played their part. Moreover, new scientific evidence (e.g. the IPCC reports), external shocks such as particularly intense weather events (e.g. hurricanes Katrina and Sandy in the US) or catastrophes such as the reactor meltdown after the Tsunami in Fukushima have undoubtedly contributed to the political discussion on climate change. This does not mean, however, that these alternative drivers always exerted influence entirely independently from climate security discourses. Instead, as the above-mentioned hurricanes and the Fukushima disaster exemplify, in many cases they only became meaningful as a part of specific security discourses, i.e. when individual data or events were integrated into a broader climate security narrative.

7.2.3 The Constitutive Power of Securitisation

As the CS has correctly claimed, constructing something as a threat or ‘security issue’ is not only a change of words but has tangible political effects. The CS locates this performative quality of securitisation in Austin’s speech act theory, an approach which has been expanded by Balzacq and his more detailed analysis of the illocutionary and perlocutionary qualities of securitisation (Balzacq 2011a, 2011b). I argue that linking securitisation to an analysis of power gives us an even better understanding of these constitutive effects. Based on the productive characteristics of power in the Foucauldian understanding, security discourses constitute issues in the first place i.e. they render them governable from a specific perspective or create them as ‘objects of governance’ (Methmann 2014b: 10; Corry 2010). They transform and compress the political meaning of issues such as climate change, in order to make them better amenable for political actors. Security discourses hence create the issue and the appropriate solution but at the same time also tend to condense and ‘narrow down’ the political debate (Opitz 2008b: 216–217).

Reconstituting something as security issue reduces complexity, for instance by hiding the environmental and economic implications of climate change as well as deflecting attention away from the root causes. At the same time, it refocuses the attention on a limited set of qualities – a specific ‘security truth’ (Burgess 2011: 39) – which can be more easily targeted by specific political measures. This quality of securitisation resembles the key effects of power in discourse, namely to establish a specific understanding of reality as ‘true’, an effect which is reinforced by securitisation. With increasing strength, security discourses present their particular meaning as objective, their representation becomes reality, or in Gramsci’s and Laclau and Mouffes’s conceptualisation, hegemonic (Cox 1981: 137–138, 1983: 169; Laclau and Mouffe 2001). Focusing on this very specific truth and set of characteristics makes it much easier to discuss the political handling of the issue than trying to grasp it in its entire complexity and also can suppress political opposition to a certain extent. In the case of climate change, this has contributed to establishing a specific understanding of climate change be it as national security threat, human security issue or long-term risk – or a specific combination of all three – as almost hegemonic and without feasibly alternatives – at least for a certain amount of time and in a specific context.

In practice, this constitutive process begins when security discourses bring something on the political agenda and help to politicise it. It is precisely the redefinition and constriction of the political meaning, for example from ‘soft’ towards ‘hard’ politics or from ‘environmental’ to ‘human security issue’ that is one of the drivers behind increased attention, urgency and novel political solutions. The resonance for the issue broadens significantly, new actors play a role and new audiences are drawn to listen. Both in the US and Germany, the securitisation of climate change in the early 1990s helped to transform climate change from an environmental expert topic towards an important policy issue. This process was even more pronounced in the 2000s when, depending on the discourses and context, climate change became firmly established as key environmental, development but also foreign and defence priority. Particularly in the US, the increasingly dominant understanding of climate change as direct threat to national security made it much easier to handle the issue politically across both isles of the political spectrum. At the same time, it excluded environmentalist or genuinely human security focused alternatives.

This last point demonstrates the contradictory effect of securitisation that although the reconstitution of issues as security related can revive and politicise the debate, at the same time it narrows it down, which eventually can depoliticise if taken too far. The discursive claims for objectivity and urgency that come with securitisation, can make it very difficult for alternative discourses and actors to keep playing a role in the debate. While certainly finding its theoretical endpoint in the extraordinary measures described by the CS, these exclusionary tendencies also play a role below this threshold. One example is the absence of environmental groups and discursive alternatives in the US, which during the rise of the sovereign discourse were increasingly framed as naïve, left wing ‘tree huggers’ while the military and defence establishment’s view was constituted as neutral voice of reason. The emphasis on national security, which often comes with an increase in secrecy and seriously restricts what solutions can even be discussed in the public debate, reinforced this process even further. In stark contrast, in Germany and Mexico, the armed forces or more unilateral conceptions of national security never had a real chance to play a larger role in the human security and risk dominated debate. At the same time, in both countries the climate security debate was broader (concerning discussed topics as well as actors) than in the US, indicating that the disciplinary and governmental discourse are less exclusionary and better compatible with politicising the debate than the sovereign discourse.

Finally, security discourses focus the attention on rather concrete dangers. While this can be a driver for the political debate, it can also contribute to its closure by largely highlighting measures to defend against or adapt to this danger without wasting time with discussing its root causes. In the case of climate change, although the growing scientific prove of the already happening effects of climate change and different strategies by climate activists as well played a role, the construction of climate change as security issue certainly reinforced a move from tackling the root causes towards adaption and resilience.

Transforming Conceptions of Security

The above discussed narrowing down or burning glass qualities of securitisation as well pertain to the three power forms that are at the core of the governmentality approach. Thus, pointing to an existential threat contributes to transform these power forms and associated security conceptions into a specific direction and ultimately can drive them towards their theoretical extreme. Consequently, in a securitisation context, sovereign power does not merely mean to take matters into the hand of the sovereign for example by issuing climate laws or taxing GHGs.

Instead, it is often directly linked to one-dimensional national security conceptions that are firmly rooted in defence and security policy. The very narrow understanding of national security in the US climate security debate in the mid-2000s exemplifies these qualities of securitisation.

At the same token, as the US and German case have exemplified, human security is not only empowering or emancipating individuals, or protecting them from state arbitrariness as the proponents of the broadening and deepening debates and the political practitioners who developed the political concept had originally hoped for. Instead, in its extreme securitised variants, it can contribute to exert strict behavioural control over people and can entail problematic paternalistic notions that constitute actors from the Global North as champions of climate protection while victimizing poor people in the Global South and robbing them of any meaningful agency.

Likewise, in a securitisation context governmental power and associated conceptions of risk can go beyond the *laissez faire*, indirect governance originally imagined by Foucault and can legitimise drastic preventive approaches to gain control over seemingly existential risks that in the end can come very close to traditional conceptions of security (see Methmann and Rothe 2012). The debates about ‘black swan’ events in the US and associated military planning to control for any possible future serves as an example. The focus on unlikely yet possibly catastrophic future scenarios such as abrupt climate change (e.g. a discontinuation of the Gulf Stream) led to counter strategies that were very similar to what had been recommended within the sovereign discourse. Thus, in the face of radical uncertainty, diffuse climate risks can again become almost certain threats.

The Bidirectional Qualities of Securitisation

Whereas linking non-traditional issues such as climate change to security conceptions under specific circumstances can lead to a militarisation or to a constriction of the political meaning of this issue, it also has the reverse effect. A finding of my analysis is that securitisation is not a one-way street but has bidirectional effects, which Oels and Elbe have already described respectively as ‘climatisation’ or ‘medicalisation’ (Oels 2012a; Elbe 2011). It is not only the to be securitised issue that changes its meaning (e.g. from soft to hard or from civilian to military) but the very concept of security itself and the governance practices in the security and defence sector transform as well in the course of the securitisation process (see also Duncanson 2009 who makes a similar argument concerning masculinity). This is not necessarily confined to the

traditional security sector. If the securitisation primarily rests on non-traditional conceptions of security such as human security or risk, it can also have a considerable influence on the sectors that are usually associated with these alternative forms of security, e.g. the development or insurance sector. In general, the bidirectional effects of securitising are part of the already discussed broader process of the governmentalisation of security, in which the concept of security is expanded and infused by alternative forms of power or specific conduct, which also blurs the boundaries between ‘normal’ and ‘security’ to a certain extent. However, the effects of this process also directly depend on the specific issue that is rendered governable as security issue and as Trombetta claims, environmental issues are particularly influential in this respect (Trombetta 2011b).

In the case of climate change, on the one hand, my cases show how securitisation transformed what people understood under the label climate change. It legitimised new security related policies and directly affected climate research by increasing the demand for security related ‘actionable’ knowledge. On the other hand, this also had profound consequences for the policy sector that now became a part of climate governance. In Mexico, ‘seguridad nacional’ meant something quite different in relation to climate change than it did in connection to the drug trade. Moreover, the civil protection sector increasingly was restructured in response to the specific securitisation of climate change. In the US, even the most traditional defence policy think tanks highlighted the multifaceted security challenges posed by climate change, which necessitated entirely new (security) practices. They hence recognised that ensuring US national security was increasingly also about different forms of risk management, about coping with disasters, poverty and humanitarian problems abroad as well as associated with ‘greening’ the military (see *section 7.1.2*) (see Oels 2011: 26, 2012a: 198–199). Moreover, the specific securitisation in Germany, which increasingly emphasised the foreign policy components of climate and national security, facilitated entirely new concepts such as ‘climate foreign policy’ and ‘climate diplomacy’. Finally, in both the US and Germany, the securitisation of climate change accelerated the merging of defence and development policy. It hence contributed to the spread of concepts such as ‘networked security’ and underlined the political mantra that there is no development without security but also no security without development (Merkel 2010; Pospisil 2009; Tschirgi *et al.* 2010).

The common denominator ‘security’ and the associated forms of power help to merge or at least bring closer together formerly separate policy fields (e.g. environment and defence,

environment and development, development and security). During this process, this gradually changes what these policy fields and its actors stand for in the first place and introduces new governance practices, which actors adopt as natural and necessary for the proper functioning of the respective field. This is exactly what several scholars have conceptualised as one of the core effects of governmentality – often in a climate context – and which becomes particularly powerful through the ‘catalyst qualities’ of securitisation (Lemke 2002: 52; Methmann 2011; Bäckstrand and Lövbrand 2006, 2016).

7.2.4 Constructing Security Subject Positions

Closely related to both its catalyst and narrowing down qualities, securitising an issue becomes an exercise of political power by constituting who counts as legitimate actor, by considerably constraining the choices these actors can successfully make (see Hansen 2000), and also by denying any form of relevant agency to others. In all countries, rendering climate change governable as security issue went hand in hand with new actors becoming important while others lost their influence. The productive power of securitisation hence constructs different subject positions (Bröckling *et al.* 2012a: 14–15) for what the CS has described as securitising actors, referent objects and audiences alike. This point relates to the broader debate in IR about structure vs. agency and more specifically to the question whether it is the overarching discourse or its ‘discursive entrepreneurs’ (Diez *et al.* 2016: 147–148) that mainly drive the political debate. I do not deny any form of agency of the involved actors in securitisation processes and acknowledge that they have specific motives and intentions as all my empirical cases underline (Bröckling *et al.* 2012a: 14; Mckee 2009: 474). However, I argue that individual actors are limited in what they can achieve alone and heavily depend on broader discourses when it comes to how others perceive them and what role they can play in securitisation processes. If they want to substantively initiate or influence securitisation processes, they at least need a quite broad coalition of actors that articulates a similar version of in this case climate security. The US case is such an example, in which a range of experienced and well-networked actors – at its centre Sherry Goodman and the MAB of the CNA – was able to significantly influence how climate change was debated as security issue (see also Diez *et al.* 2016: 51–53). At the same time, the Mexican case showed that a lack of such a coalition of actors – in this case most actors were foreign to Mexico and lacked long lasting networks – can quickly diminish any chance of successfully driving the discourse in a desired direction.

Having said that, these actors even if they are able to form larger discourse coalitions (see also Hajer 1997) are far from free in their choice of arguments or in which direction they can influence the debate. Rather, the subjects of security discourses cannot freely use the power that comes with securitisation (and the power does not just flow from these actors) but relations of power precede and constitute these subjects themselves (Burgess 2011: 40; Foucault 1980: 133; Hansen 2000: 303). Thus, in the US case it is highly doubtful whether the mentioned think tanks would have come as far by taking up an environmentalist or human security framing of climate change that probably would not have resonated well with key audiences. In fact, the failure of Gore to significantly sway larger audiences with such a framing exemplifies this to a certain extent. The think tanks essentially drew their power from their long-lasting expertise in national security matters – which in general have a very high standing in the US political debate – and from engaging in the sovereign climate security discourse. For the above-described reasons, this discourse resonated well with the US public and key political actors at that point in time and empowered these think tanks even further. In contrast, in Germany the environmental and scientific actors that the dominant discursive representation constituted as central to the debate would have had serious problems to establish climate change as narrow national security issue. Consequently, the broader societal, cultural and political context, the characteristics of the actors themselves and the already dominant discourses play a key role in determining how actors can influence political debates and broader discourses. Eventually, these factors define their actorness and how they can exert power in the first place.

The same is true for specific forms of knowledge that are often inextricably linked to specific actor positions. Thus, when the national security representation of climate change gained momentum in the US, it quickly devalued the knowledge and actorness of formerly key proponents of the climate (security) debate. This went so far that parliamentary debates repeatedly emphasised that the assessment about the security implications of climate change came from the military itself or from think tanks specialised on defence policy and not from scientists or environmentalist politicians and organisations. Consequently, important victims of this re-evaluation of knowledge and actorness were Gore, scientists and several well-established environmental organisations, which in the past had primarily articulated the disciplinary and governmental discourse and lacking any knowledge and credibility in questions of national security now had serious problems to uphold their position in the debate. At the same time, the knowledge of think tanks specialised in security policy was instantly valorised and they soon became the key actors in the climate security debate. Eventually, the

specific representation of climate change as a national security threat and the associated recommendations in many central reports of the now dominant actors increased the demand for specific forms of ‘actionable’ knowledge mostly related to traditional security and defence strategies that again perpetuated a specific security discourse.

Apart from the role of the securitising actors themselves, the referent objects and audiences of securitisation and their capabilities to play a significant political role heavily depend on specific security discourses (see also Hansen 2000: 303). As all my cases have shown, there are no pre-existing audiences waiting to be convinced by securitising actors of the severity of the threat. Instead, the broader discourse and the reinforcing discursive articulations of key actors create specific audiences, for instance conservative people with a military background, environmentalists or human rights activists. At the same time, as particularly the discussion of normation and normalisation has shown, securitisation discourses create very different identities for the referent objects of securitisation. These range from helpless victims, dangerous high-risk groups, to noble saviours, all of which come with very different degrees of power to influence the subsequent debates and political solutions.

7.2.5 Securitisation and Concrete Policies

A major criticism that pertains to both the governmentality and the securitisation literature is that only a few studies go beyond an abstract analysis or exemplary cases studies. They hence allegedly fail to show whether discursive changes or forms of governmentality have actual consequences for policies (Milliken 1999: 240; van Dyk and Angermüller 2010: 13; Bröckling and Krasmann 2010: 25; Methmann 2011: 7). Thus, a core aim of the detailed empirical case studies in this thesis was to go beyond the study of discursive changes and to look at the actual political implementation consequences for actual policy-making processes (Mayntz and Scharpf 1975). This does not mean that climate security discourses determine or are the only reason for the adoption of policies but rather that a specific representation can open up new spaces of possibility and make new solutions thinkable. Securitisation hence is a means to stabilise and reinforce political rule. It expands the reach of power – be it sovereign, disciplinary or governmental power – makes it more efficient and effective and hence helps to advance a specific political agenda. Thus, climate security discourses actively contribute to the legitimisation, content and enactment of policies.

Legitimising Policies and Rationalising New Ways of Thinking

The analysis of parliamentary debate in my empirical cases has highlighted how engaging in the climate security discourses has served as a legitimisation strategy for a range of different policies, although, naturally, securitisation rarely has been the sole driver behind those policies. In the US, securitising climate change as national security helped to convince new, formerly very sceptical audiences (mostly conservatives, Republicans), that climate change was a real problem and hence was able to bridge the polarised political debate to a certain extent. Indications are the repeated appearances of climate threat constructions in countless parliamentary debates about key policies, the rise of climate (security) legislation attempts in general, and of bipartisan bills in particular. Eventually, the sovereign discourse had a tangible impact on defence policy indicated in a range of new planning schemes.

In Germany and Mexico, references to climate threats in parliamentary debates increased and facilitated a range of progressive climate and development policies that without bringing up the security dimension of climate change would not have made much sense. In addition, even though such policies were not adopted at the federal level in the US, climate security discourses increased the attempts for legislation considerably and most likely paved the ground for successful bills at the state level. Engaging in security discourses can furthermore emphasise the scope and immediacy of problems and contribute to rationalising previously not discussed counter measures. In the US, it transformed a beforehand predominantly left wing or liberal issue into a matter of debate for the defence sector and hence made entirely new solutions possible. Examples are the usage of military technology for climate research, the greening of the military, changed mission plans, climate related humanitarian interventions or extensive military-civilian cooperation efforts. In Mexico, the continuous construction of climate change as a serious risk to its people enabled a whole range of civil protection and disaster management schemes that without a human security focused securitisation would not have seemed reasonable. Lastly, in the German debate, the parallel construction of climate change as threat to human security and long-term risk enabled a range of solutions in the foreign and development sector but also the gradual acceptance of market solutions.

Influencing the Content of Policies

Beyond helping to legitimise policies, securitisation also has an impact on the content of policies. As all three cases have exemplified, independently from whether a specific form of

securitisation may or may not be an important – or the defining driver of a policy –, specific climate security conceptions and catchphrases eventually can end up in policies regardless.

In the US, even though climate change was not their main driver, most National Security Strategies and key defence policies such as the QDR adopted various depictions of climate change as a threat. Concepts such as climate change as ‘threat to US national security’, ‘threat multiplier’ or the conviction that the military had to adapt to climate change, which originally appeared in the narrow national security discourse and in think tank reports, gradually appeared in several parliamentary debates and ultimately also in key policy documents. The same is true for various risk management schemes, and concepts such as ‘networked security’, which gradually turned up in parliamentary debates and defence documents. Moreover, even though they were eventually unsuccessful, many climate policies were termed as security related. In Germany key pieces of policy – for instance the reports of the Enquete Commission, the German National Climate Protection Programme or various development aid strategies –, which not necessarily were primarily legitimised by climate security discourses, contained substantial references to the dominant climate security discourses at that time. They depicted climate change as a ‘global threat’ to all of humankind or as a key danger to the human security of poor individuals in the Global South. Moreover, they repeatedly highlighted the importance of preventive approaches when it comes to managing the global implications of climate change for poor populations and like the US called for a closer cooperation of civilian and military actors. Likewise, in Mexico, even though securitisation played only a supporting role in their legitimisation, key policies such as the National Development Plan, the ENACC or the General Law on Climate Change increasingly adopted concepts stressed in the prevailing human security and risk centred discourses. Examples are a focus on the vulnerability of (poor) Mexicans, disaster risk management schemes such as the National Risk Atlas, climate change as ‘strategic national security issue’ and problem of food security as well as several civil protection measures.

Thus, even though climate security discourses might not always directly legitimise policies, they can gradually change the frame of reference and hence indirectly influence how climate, development, foreign or defence policy understand and try to cope with pressing problems. In the long run, this gradual change in how problems are described, even if it is only a few sentences, paves the way for the actual adoption of key policies on the issue.

Helping to Enact Existing Policies or International Commitments

Adopting a new policy does not always mean that it will have an immediate effect or that government agencies as well as private actors will enact it in the way its sponsors originally intended to. Instead, policies often are broad, leave considerable room for political and legal interpretation and are selectively enforced (Sabatier and Mazmanian 1980; McLaughlin 1987). Increasing and sustaining attention for an issue by pointing to its security implications can help to overcome this problem in several ways. It establishes a specific understanding of the situation as seemingly without alternatives and logical and hence makes it more difficult to act against associated political action. Beyond that, it bolsters media coverage, public scrutiny and provides non-governmental watchdog organisations with argumentative leverage to pressure government agencies or private companies to actually comply with the law or to interpret it in a more narrow fashion. Moreover, it can help politicians or members of the executive to pursue formerly controversial decisions within the range of existing regulations. This can be important in the field of environmental and climate politics, which often has problems to hold its ground vis-à-vis other seemingly more important or immediate issues and in many cases is anchored in non-binding international regimes. The UNFCCC, to a certain extent Kyoto, but especially the 2015 Paris Agreement, with its focus on bottom up and largely non-binding INDCs that leave much room for national reinterpretation, illustrate this problem.

In the US debate, the construction of climate change as national security threat has provided individual politicians with considerable political cover because it made it difficult for the political opponents to instantly ridicule their support for progressive climate policies (Interview 2014g, 2014p). This enabled several (moderate) Republicans to publicly talk about climate policy without immediately fearing for their political survival. It also enabled several members of the executive, for instance the Secretaries of Defense and State but also the leadership level of the Department of Defense to more actively pursue climate policies and enforce existing environmental and climate regulations. For example, the DOD for some time had a range of environmental regulations, but the increasing representation of climate change as national security threat made it much more likely to actually enforce those regulations in a strict manner (Interview 2014r, 2014j). Moreover, only the designation as ‘threat to US national security’ enabled the armed forces to actually spend money on climate related activities (Interview 2014o). Likewise, the EPA and President Obama issued a range of new environmental regulations and executive orders, which appeared much more legitimate in the wake of the strengthening climate security debate at that time. Under a decisively climate

sceptical President such as Donald Trump, this effect can become even more important and can also shield existing policies or regulations stemming from the Obama era to be instantly discarded. The popularity of several ‘rogue’ or ‘alternative’ divisions of existing environmental agencies (e.g. the Alt National Park Service or the Alt EPA) or the existence and influence of an alternative US delegation (consisting of governors, majors and business representatives) to the 2017 Bonn COP exemplify this to a certain extent (Watts 2017; Alt National Park Service 2017).

In Germany, constructing climate change as a far-reaching threat was instrumental in pushing the governments to follow up their ambitious international commitments with actual domestic regulations in the early 1990s. Moreover, the continuous securitisation of climate change in the mid-2000s and early 2010s, played a considerable role in keeping climate change on the agenda and ensuring the commitment to progressive mitigation goals despite the election of the much less environmentally friendly CDU/CSU-FDP government in 2009 (Jänicke 2011: 135). These effects of securitisation on the actual enforcement of policies also have played and probably will play a major role in Mexico. The 2012 elected President Nieto is less dedicated to climate protection than its predecessor Calderón but nevertheless so far has not back stepped on a broader scale on Mexico’s climate commitments (Interview 2014a).

As the last paragraphs have illustrated, linking securitisation to the exercise of political power can help to make sense of the diversity of political effects throughout the entire process of securitisation. Thus, the ‘securitisation-power cycle’ (*figure 7.2*) starts with the context for securitisation where cultural, political and institutional factors as well as existing relations of power constrain which forms of securitisation can emerge in the first place. Thereafter, securitisation helps to bring issues, in a specific form, on the agenda, can act as a catalyst for political debates and hence politicise formerly less noticed issues. Within this process it is able to significantly transform the political debate and governance practices by narrowing them down to a specific security truth and at the same time (re)constitute key subject positions. Finally, this affects the legitimisation, content and enactment of policies, which eventually can feed back into specific security discourses and over longer periods can also alter the contextual preconditions, hence closing the cycle. *Figure 7.2* below illustrates this circular relationship between the different stages of securitisation and power.

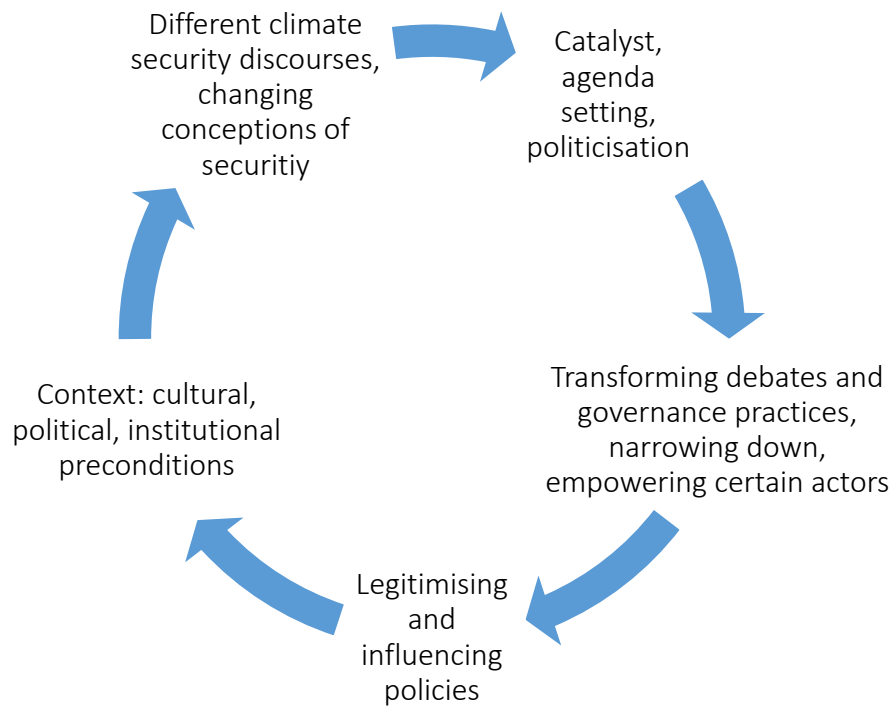


Figure 7.2: The Securitisation-Power Cycle

7.3 Normative Assessment: How and When to Securitise, That is the Question

While it is important to understand the political effects of securitisation theoretically, discussing its wider normative implications is equally relevant. Based on my personal normative perspective, the key question is, whether a securitisation of climate change is conducive to legitimising progressive climate policies (in order to keep the 2-degree goal, IPCC 1995) and to facilitating political interventions to prevent human suffering. This also entails to think about the alternatives to securitisation and to discuss whether no securitisation at all or active de-securitisation would be preferable from a normative standpoint.

Going back to the existing literature, there have been some attempts to grasp the normative or ethical dimension of securitisation. The CS describes successfully securitised situations as undemocratic and exceptional, even mirroring a Schmittian state of exception (Williams 2003: 515). It thus largely dismisses securitisation as normatively problematic and urges us to de-securitise in order to bring back a normal political handling of the situation – although recently this position has been softened somewhat, especially concerning issues such as climate change (Buzan *et al.* 1998: 29; Wæver 1995; Hansen 2012; McDonald 2011; Aradau

2004; Buzan and Wæver 2009). The Welsh or Abreystwyth School of CSS on the other hand sees the security dimension much more positive, at least when it comes to individual conceptions of security (Booth 1991, 2005b). Bridging both of these research agendas (Floyd 2007a), Rita Floyd has emphasised that against the strongly negative normative assessment of successful securitisation by the CS, securitisation should be judged on a consequentialist basis and hence inherently is neither good or bad (Floyd 2007b). From her perspective, it depends on the specific context in which the securitisation takes place, on the associated conceptions of security and on the eventual outcome, whether it should be judged as ethically superior or inferior to a political debate without mentioning any form of threat. Floyd has gone even further and has tried to develop a 'just securitisation theory' (Floyd 2011) that gives us some general guiding principles as to when securitisations could be normatively acceptable. The main criteria she develops are an 'objective threat', 'a morally legitimate referent object' and a 'response that is appropriate' to the threat (Floyd 2011: 427).

While this is a worthwhile endeavour and the specificity of the normative principles can be helpful, I think it is problematic for various reasons. Bringing back essentialist connotations when it comes to threats, in my opinion, is a step backward from the socially constructed conception of security in the CS and ultimately goes against the very theoretical basis of securitisation in the first place. Moreover, Floyd's conceptualisation is too static given the multiplicity and transformability of security discourses and contexts for securitisation, which all have to be accounted for in the normative assessment. For these reasons, I mainly stick to a consequentialist evaluation of securitisation on a case to case basis. Such an approach has been suggested by various researchers (Elbe 2009; Campbell 1993; McDonald 2011; Hansen 2012), amongst them Elbe who, based on Foucault's later writings, specifically focuses on the main dangers and opportunities of certain security discourses (Elbe 2009: 157–158). This perspective also entails to ground such a normative analysis on an ethos to minimise the main dangers particularly for the most vulnerable people that could be affected, which in the case of climate change are poor Southern populations.

Given this pretext and based on Foucault's conceptualisation of power as not something bad in itself (Foucault 1997: 298) yet potentially dangerous (Gutting 2007: 115), in the next paragraphs I discuss the opportunities and pitfalls of securitising climate change.

7.3.1 Should we Securitise Climate Change?

Is securitising climate change a viable strategy to keep the 2-degree goal and prevent human suffering? As countless articles, and political interventions by climate activists have claimed, the existing international agreements and domestic activities of main GHG producing states are merely a drop in the ocean given the magnitude of the challenge and so far do not come close to tackling the problem in a sufficient manner (Gardiner 2004b; Harris 2007; CAT 2015; Caney 2016). The global temperature keeps rising and large parts of the world's poor face deteriorating living conditions, whole island states, vast cultural heritage and entire ecosystems are at the brink of destruction (Tsosie 2007; Zellentin 2015a; Ikeme 2003)¹¹. Despite the recent successful adoption of the Paris Agreement, in this dire situation it seems reasonable to at least discuss, whether a careful securitisation might be justified and worth the risk to incite a meaningful political response.

As the empirical cases have shown, there are a number of positive features that come with (some forms and degree of) securitisation (Floyd 2013: 281; McDonald 2003; Ingram 2010). Most importantly, its catalyst effects, including a politicisation of the issue that comes with increased attention, quicker and more ambitious political decisions and a higher likelihood that policies are actually enforced. In all cases, climate security discourses have contributed to more far reaching climate policies or at least to political attempts for such legislation. In the US, powerful discourses of national security enabled a revitalisation of the polarised and deadlocked debate on climate change. Moreover, especially in the case of Germany and Mexico, pointing to human security has shifted the attention to the problems of the least powerful individuals that will most likely be hit first and hardest by climate change. And, even the defence focused debates in the US to a large extent aimed at preparing the US military for extended humanitarian interventions at home and abroad (Brzoska 2012b; Interview 2014t). So far, the main danger of securitisation i.e. panic politics or 'extraordinary' and undemocratic measures (Buzan *et al.* 1998: 21), hence a de-politicisation or closing down of the debate, has not realised itself in any of these countries to a larger extent. Thus, while clearly making a difference in the political processing of climate change, the securitisation has remained below the CS threshold for successful securitisation. A further reason for the absence of such negative consequences is the issue, climate change, itself. As Trombetta accurately observed (Trombetta

¹¹ I am aware of the slight irony that I partly engage in a form of securitisation myself in order to advance my own normative argument (Huysmans 2002: 42), which of course underlines the previous argument that some degree of securitisation might be necessary in order to problematise or politicise any political concern.

2011b), environmental issues might be particularly suitable to transforming the traditional security logic and hence are less prone to the pitfalls described by the CS than for instance migration or terrorism (Huysmans 2008; Aradau and van Munster 2007; see also Elbe 2006 who makes a similar argument for HIV/Aids).

Nonetheless, my analysis has also highlighted some problematic aspects, primarily exemplified by what I have termed as the narrowing down qualities of securitisation. Thus, especially in the US, a specific construction of climate change as threat to national security has made it harder for alternative framings of climate change and actors without background in defence policy to participate in the debate. Moreover, shifting the discussion towards the defence and security sector, has to a certain extent underscored the criticism of a militarisation of climate change (Wagner 2008; Gilbert 2012; Hartmann 2010) that comes with an increase in secrecy and a limited set of solutions. Most importantly, in all of my cases, the emphasis on the security dimension of climate change, be it national or human security or risk, has shifted the attention towards the symptoms of climate change, thus it has legitimised a stronger focus on adaptation and resilience measures. While such a representation of climate change can help affected populations and hence in the short term be normatively acceptable, in the long run it could weaken the fight against the root causes of climate change. Furthermore, the analysis has also shown, that constructing a dichotomization between poor (Southern) victims and capable (Northern) saviours has its own pitfalls (Oels and von Lucke 2015).

Considering the above discussion, I would still argue that given the alternatives (see 7.3.3) in the specific case of climate change, the securitisation has had its advantages, at least in the short and middle-term. It has incited rather than closed down necessary political debates, has helped to legitimise progressive policies and hence contributed to abating climate change and preventing human suffering. However, to preserve this slightly positive assessment for the long-term handling of climate change, the points of critique have to be taken seriously and political and securitising actors have to find ways to shift more attention towards mitigation.

7.3.2 The Good, the Bad or the Ambiguous?

Another question is whether any climate security discourse is preferable from the above-described normative perspective? As my cases have exemplified, focusing on the sovereign discourse, hence primarily on national security conceptions can greatly increase the attention

for climate change. It can also bridge political divides and draw new audiences that otherwise would not have taken the problems seriously (Dalby 2014: 2). Yet, it also runs the risk of naturalising climate change and only tackling symptoms instead of root causes. This is especially disconcerting since the unrestrained economic growth and the externalisation of environmental costs, which have led to a warming planet in the first place, go largely unchallenged (Cooper 2010; Dalby 2013a: 185). Climate security hence stands the risk of becoming yet another entry in the long list of ‘empty signifiers’ when it comes to climate abatement (Methmann 2010; Swyngedouw 2013). With a view on the US, the problematic aspects of this discourse are clearly visible. So far, the national security discourse has had problems to incite meaningful mitigation policies and limited the political response to a sector that is not at the forefront of initiating any of such measures on a broader scale in the near future. Moreover, it aides traditional forms of geopolitical thinking and ‘drawbridge’ strategies that could in the long run worsen human suffering around the globe (Dalby 2014: 2, 7; Gilbert 2012: 10).

At the same time, the German and Mexican cases give some indication that, *ceteris paribus*, the disciplinary and governmental discourses might be more favourable from a normative standpoint. Human security and risk based threat construction hence come closer to what Simon Dalby has described as ‘new’ or ‘Anthropocene’ geopolitics that take the responsibility of humans for their environment seriously without falling trap to traditional nationalistic and devise forms of foreign policy (Dalby 2014: 7, 2013a: 190). Focusing on human security can help to ‘emancipate’ individuals and hence contribute to end their suffering (Booth 1991, 2005b; Wyn Jones 2005). In fact, in both countries, these discourses have helped to initiate progressive climate policies and facilitated a range of development aid or civil protection measures that eventually have the potential to improve the lives of many people. However, as the German and US case have exemplified, highlighting the vulnerability of individuals can under specific circumstances facilitate paternalistic and eventually even interventionist policies (McCormack 2010; Chandler 2004, 2006). Constructing climate threats in such a way can perpetuate the rift between the stable North and the ‘unruly’ South, which has been criticised time and again by scholars such as Pugh and Duffield (Duffield and Waddell 2006; Pugh 2004). Eventually, this separation stands in opposition to a truly global or humankind based response to climate change.

Focusing on risk conceptions on first sight can be beneficial in terms of mitigation. As the German and Mexican cases have highlighted, such a representation of climate change underscores the central role of the scientific consensus and has been linked to legitimising decisive mitigation measures to prevent the risk from spiralling out of control. At the same time, it seems to be largely compatible to a politicisation of climate change as economic opportunity and avoids the manifold dangers that come with more traditional forms of securitisation (von Lucke *et al.* 2014: 16). However, it can also facilitate a de-politicisation of the climate debate. Since risks can never be eliminated but only be lowered to a tolerable level (Corry 2012), a construction of climate change as such a risk might also run into the problem of accepting the new dangerous world hit by climate change. It facilitates resilience and insurance solutions that lower the risk to a certain extent but again do not approach the underlying root causes (Dillon 2007; Dillon and Lobo-Guerrero 2008). Moreover, many contemporary conceptualisations of (climate) risk increasingly deny any form of calculability (Daase and Kessler 2007). In the end, constructing climate change as a highly contingent but potentially catastrophic risk, is a particularly powerful way of truth production and can pave the way for a latent though permanent state of exception (Bigo and Tsoukala 2008a) or precautionary or pre-emptive responses that can be almost as problematic as national security conceptions (Krasmann 2012: 127–128). At the same time, such an inherently instable and catastrophic vision of the future can facilitate fatalistic inactivity (Methmann and Rothe 2012; Mayer 2012; Swyngedouw 2010), or open up avenues to Naomis Klein’s ‘disaster capitalism’ (Klein 2007).

Despite the above-described pitfalls, however, the evidence from my cases gives some tentative indications that the disciplinary and governmental discourse are better equipped to politicise the debate in a way that incites progressive mitigation policies and prevents human suffering. They have certainly helped to increase the attention for climate change to a considerable extent in both countries without mainly locating solutions in the defence sector, narrowing down the debate or excluding key actors and solutions.

Contextualising the Normative Assessment

Having said that, a normative assessment cannot ignore the broader context (Ciuta 2009) or starting point, which differed considerably in my three country cases. Particularly in Germany and to a lesser extent in Mexico, the political and cultural environment was more favourable towards progressive climate policies than in the US. There were no influential climate sceptical actors, public opinion had been for a long time in favour of climate action and almost all

political parties had adopted environmental issues as important topic. Moreover, in terms of mitigation, Germany has profited enormously from the de-industrialisation of the former German Democratic Republic, which made it much easier for the country to agree to more ambitious reduction targets.

This was very different in the US, especially in the mid-2000s when the sovereign discourse gained in strength. At that time, the US was deeply caught up in the ‘war on terror’, its President (together with many allies in Congress) who did not believe in anthropogenic climate change had just rejected a ratification of the Kyoto protocol, and public opinion considered climate change one of the least important political issues. Beyond that, the climate debate had become increasingly polarised between Republicans and Democrats, which had largely paralysed any Congressional initiative on the issue. In this environment, the sovereign climate security discourse in particular contributed to bridging the political divide (Fletcher 2009: 808), which would most likely not have been possible with a focus on human security or risk. Even the emphasis on the traditional security and defence sector could eventually have some positive repercussions, as the US military – as largest single consumer of energy in the World (Singer and Warner 2009; Karbuz 2013) – has been advised to contribute to climate mitigation and energy preservation measures (Carmen *et al.* 2010: 1). Beyond that, a contextual reading has to consider the entirely different role of the military in US society but also globally. In stark contrast to Germany, the US military has a much more global area of responsibility especially concerning peacekeeping missions and hence often is directly involved in humanitarian missions that emerge due to climatic effects. Consequently, an involvement of the military into questions of climate security was only reasonable and altogether strengthened the climate debate in the US. Under an openly climate sceptical President Trump, who has called climate change a Chinese invention (Trump 2012) and recently announced to withdraw the US from the Paris Agreement, linking climate change to national security could again become crucial in order to keep climate change on the agenda and prevent a rollback of important regulations by the Obama administration.

7.3.3 The Concept of the Political, De-Securitisation and Counter-Narratives

Notwithstanding the fact that I see the securitisation of climate change as slightly positive – at least in my cases and under the discussed limitations –, it is worthwhile to explore possible alternative ways to incite meaningful climate abatement action.

The most obvious one would be a de-securitisation of climate change, which in the eyes of the original CS always should be the priority in order to bring an issue back towards ‘normal’ political deliberation. However, as I argued before, I do not see climate change as successfully securitised in the CS terms, thus it has never crossed the threshold towards problematic ‘panic’ politics. Moreover, several authors have questioned the dogmatic call for de-securitisation of the CS. McDonald for instance, has argued that the CS’s concept of ‘normal’ political deliberation – which largely mirrors a Habermasian, relatively unrestrained exchange of arguments (Diez and Higashino 2004) – is too unspecific as to take it as normative yardstick. Furthermore, he questions the clear-cut distinction to ‘extraordinariness’ and claims that even an open political debate can become problematic, as debates about the problem of hate speech or abandoning ‘political correctness’ exemplify (McDonald 2011: 282, 290-292). In this vein, a governmentality lens can be of particular value because it transcends an a priori moral juxtaposition of representing issues as security related versus constructing them as ‘normal’ political issues (Mckee 2009: 471). Instead, it helps us to problematise the specific political and normative consequences of either form of representation.

Even in relatively free and stable democracies such as the US, Germany and to a lesser extent Mexico, the political debate certainly is far from an ideal typical Habermasian discourse. Relations of power always precede any political debate and hence can make it necessary draw on powerful discourses to pursue a progressive political agenda. Moreover, an ‘open deliberation’ can in the end lead to decisively non-progressive decisions as McDonald shows in relation to anti-migration policies in Australia (McDonald 2011) but also exemplified by recent political developments in the US (the election of Trump) or the UK (Brexit). Thus, a certain degree and form of securitisation might be necessary in order to focus political momentum and successfully politicise any issue and especially those that otherwise do not get sufficient attention (Diez *et al.* 2016: 19).

An even more fine-grained analysis of de-securitisation delivers Lene Hansen in a 2012 article. She claims that the concept of the political in the CS is much more complex than claimed and has linkages to Carl Schmitt, Jürgen Habermas, Hannah Arendt, Jacques Derrida and even Michel Foucault (Hansen 2012: 527). Based on her more nuanced reading, she distinguishes between four different forms of de-securitisation (Hansen 2012: 529). Firstly, ‘change through stabilisation’ means casting an issue in other terms than security even though the larger conflict

has not disappeared (Hansen 2012: 539). Secondly, ‘replacement’ means that another counter-securitisation takes over (Hansen 2012: 541). Thirdly, a ‘rearticulation’ takes place when a political solution has been found to the original threats thereby moving the issue back into normal politics (Hansen 2012: 542). Finally, ‘silencing’ describes a de-securitisation that mainly depoliticises the issue and hence also marginalises potentially threatened subjects (Hansen 2012: 544).

Considering McDonald’s and Hansen’s points, de-securitising climate change in any form, would have been problematic in most cases. Avoiding any form of threat construction or actively denouncing discursive interventions that highlight the manifold dangers of climate change – which is close to what Hansen describes as changer through stabilisation – would most likely have meant less attention for the problem, less constructive political debate and eventually led to fewer progressive policies. Especially in the US, it also would have strengthened climate sceptical actors by giving them arguments to question progressive climate policies. Interestingly, one of these climate sceptical organisations, the Marshall Institute, has already tried to de-securitise the debate in the US, by questioning the climate security nexus (Kueter 2012; Interview 2014n). While its critique of the existing form of securitisation is worthwhile, its ultimate goal of questioning the validity of anthropogenic climate change or any meaningful counteraction is hugely problematic. Hansen’s third and fourth strategies to de-securitise as well come with a range of problems. A re-articulation clearly does not apply because the climate problem is far from solved and a silencing cannot be the goal from a normative perspective either.

Thus, while a complete de-securitisation in any form does not seem to be desirable concerning climate change, this does not mean that the normative equation will always stay in favour of a (cautious) securitisation. As particularly the examples of migration/asylum (Huysmans 2008) and terrorism (Aradau and van Munster 2007; Aradau 2008), but also to a certain extent the US climate debate have shown, taken too far, securitisation certainly can become very problematic – even if it stays below the threshold of extraordinary measures as described by the CS (Oels and von Lucke 2015). In the case of migration and terror, a de-securitisation hence might be the preferred way to go. Yet, as the US debate demonstrates, concerning climate change, instead of a full-blown de-securitisation a partial one that aims particularly at the national security conception could be desirable. It would not so much be a de-securitisation, but a counter-securitisation – or in Hansen’s terms ‘replacement’ – based on

the strengthening of human security and science based risk discourses to refocus the attention on the suffering of human beings and on mitigation measures and avoiding a naturalisation of climate change and an emphasis on symptoms. Yet, as argued above, in the end such a strategy could be incompatible with the specific US political context and hence ultimately too weak to incite decisive political action.

Alternatives to Securitisation

There are of course other alternatives to politicise climate change without referring to threat constructions, which to a certain extent resembles Hansen's change through stabilisation form of de-securitisation. One common strategy is to highlight the adverse economic repercussions of climate change and to link progressive climate action to economic opportunities. Under the catchphrase of the 'green economy', this strategy has been fairly successful in both Germany and Mexico and even in the US the opinions in the business sector have gradually shifted towards considering the economic opportunities of climate action (Tabuchi and Fountain 2017). However, firstly, even such a framing will not work entirely without referring to threat constructions, as the combination with human security and risk conceptions in Germany and Mexico show. Secondly, it has its own serious normative downsides. It represents climate change and its associated adverse effects as mere financial equations, which can as well naturalise climate change or suggest that lost lives or cultural heritage is in some way financially compensable. Moreover, as past debates have highlighted, such an economic logic runs counter to decisive abatement measures because unrestrained economic growth has led to climate change in the first place and it would require far more substantial transformations of the world economy to actually reverse this process (Methmann 2010; Cooper 2010; McMichael 2009).

Another possible alternative would be to focus on climate justice considerations. In fact, there already exists an extensive academic (Caney 2010; Gardiner 2004a; Caney 2016; Okereke and Coventry 2016; von Lucke 2017) and political debate (EcoEquity 2012; Quinn-Thibodeau and Wu 2016) that discusses climate change from the perspective of global justice. Moreover, the German and Mexican cases contain several linkages to climate justice considerations. While this to a certain extent shows the importance and utility of the justice dimension, it also again underlines that such a debate cannot exist without evoking threat constructions, even more so than the economic framing. Beyond that, the climate justice debate has its own problems in terms of translating its often convincing, yet theoretical and abstract climate justice principles into meaningful political action. On the one hand, this has to do with an augmented emphasis

on substantial forms of climate justice, which neglects the procedural dimension and the difficult political environment such principles would have to be implemented in (von Lucke 2017; Zellentin 2015b, 2017). On the other hand, there is a complex conflict of goals especially between intra-generational or distributive justice and future oriented inter-generational justice goals, which both play key roles in relation to a global and long-term problem such as climate change (Sachs 2014; Okereke and Coventry 2016; Page 1999; Meyer and Roser 2013).

These elaborations illustrate that there is no ‘correct’ or ‘right’ form of representing climate change. There are only different ways to construct it as a political issue (Pettenger 2016), which all come with specific advantages or disadvantages. While securitisation certainly is not the silver bullet that solves the climate problem once and for all, given the above-described advantages and the problems of de-securitisation and alternative framings, a careful construction of climate change as a threat that takes into account the specific political context and is vigilant of the dangers, seems to be worth the risk.

8. Conclusion: Summary and Further Research

Based on Foucault's ideas on governmentality and several extensions to it (Dean 2010; Elbe 2009), the theoretical core of this thesis is a tripartite reconceptualisation of securitisation as being embedded in sovereign, disciplinary and governmental power. This theoretical move has enabled me to come to a more thorough understanding of securitisation and its political consequences, as well as to shed light on the ever-changing concept of security itself. The main finding is that securitisation is a much more dynamic process than the CS and the Paris School or risk approaches suggest and conceptualising it as a specific though diverse form of governance can help to understand this dynamic process and its manifold political effects. Moreover, the theoretical reconceptualisation has also given me an analytical framework to study the actual securitisation of climate change in different domestic contexts. It has hence enabled me to account for and compare the multiplicity of climate security discourses and to carefully analyse and understand the associated political and normative consequences of securitising climate change in the US, Germany and Mexico. The previous chapter has already thoroughly discussed my theoretical and empirical findings. Thus, the focus of this brief conclusion is more a critical reflection of my theoretical concept, methodological choices and empirical findings (8.1), as well as a short outlook for further research (8.2).

8.1 The Limits of a Governmentality Perspective on Securitisation

While I claim that my specific power sensitive governmentality perspective adds to our understanding of securitisation, this does not mean that it is without its own shortcomings and blind spots, which the general literature but also various discussions about parts of my thesis at conferences, colloquia and with colleagues have revealed. My analysis has validated some of these criticisms but has also refuted others.

8.1.1 Governmentality and Discourse as Self-Fulfilling Prophecy

A first common critique of Foucauldian governmentality or discursive approaches in general, which in parts applies to my thesis as well, is that they over-specify different forms of governmentality or discourses or base their studies on overly abstract or ideal-typical forms of governance. Some critics claim that this leads to a 'structuralist bias' (Rothe 2011a: 3), a disregard for the empirical reality (Mckee 2009: 473) and eventually can blind the research for

empirical counter findings and the ‘messy actualities of government’ (O'Malley *et al.* 2006: 504). The analysis runs the risk of becoming a self-fulfilling prophecy (Rothe 2011a: 4) that only finds what the researcher has been looking for since the beginning (Bröckling *et al.* 2012a: 16). Closely associated is the argument that focusing on broader governmentalities or discourses can blind the analysis for local resistance or a failure of governmentality (van Dyk and Angermüller 2010: 13; Bröckling and Krasmann 2010: 25; Methmann 2011: 7; Milliken 1999: 240; Joseph 2010a; Milchman and Rosenberg 2009; Zanotti 2014; Mckee 2009).

To a certain extent, these critics are valid and I cannot entirely dismiss their arguments. Developing specific climate security discourses and associating them with conceptions of security has certainly pre-structured my empirical analysis, blinded me to less obvious subaltern or dissident discourses and eventually shaped my findings. This being said, it is impossible and also not advisable to conduct a purely inductive discourse analysis without beforehand specifying what these discourses and associated political consequences should look like. Instead, I think it is central to anchor those discourses in a coherent theoretical approach – something, which some previous studies on the securitisation of climate change have not done sufficiently. Naturally, my findings do not represent some form of unbiased analysis of the ‘true’ representation of climate change but they are a very specific glimpse on a multitude of different discursive constructions of climate change. Disclosing the theoretical foundations and the specific characteristics of my discourses is supposed to reveal this unavoidable and in fact partly desirable – because it anchors the analysis in a coherent theoretical framework – theoretical bias but also allows others to criticise my findings.

Beyond that, going back to Foucault’s original conceptualisation of the governmentalisation of the state and hence drawing on a dynamic power triangle (Collier 2009; Larrinaga and Doucet 2008; Butler 2004), enabled me to avoid some of the other criticisms against governmentality studies that mainly identify a one-sided move towards a specific form of (global) neoliberal governmentality (Bröckling *et al.* 2012a: 12; Joseph 2010a). Moreover, by comparing the securitisation of climate change in different political and cultural contexts and by tracing the actual political consequences, I have gone beyond exemplary or explorative cases studies (Rothe 2011a: 7) and a superficial glimpse on political programs. Thus, based on a dynamic theoretical framework, my detailed empirical analysis has shown that even though some discourses were more dominant than others, in none of my empirical cases were they able to entirely suppress different representations of climate security. Instead, dominant discursive

constructions changed over time and different conceptualisations of climate change as security issue often were directly linked together and transformed each other. Furthermore, all of my cases but especially the Mexican one, exemplified how and why specific representations of climate security failed to generate any meaningful political support, hence illustrating that resistance and alternatives to governmentalised security practices are always possible.

8.1.2 Linking Power Forms and Security Conceptions

Another often raised critique focuses on the differentiation between different forms of power within the Foucauldian governmentality concept and their linkages to specific conceptions of danger. Thus, whereas I distinguish between sovereign, disciplinary, and governmental power, others emphasise different power forms such as pastoral or biopower (Larrinaga and Doucet 2008; Mühlhoff 2015), or have added new forms of governmentality such as ‘neoliberalism’ (Dean 2010) or ‘advanced liberal government’ (Oels 2011, 2012a). Moreover, in the context of securitisation, some authors have linked the different power forms to other conceptions of security than I have. Oels for example questions the clear-cut distinction between disciplinary and governmental power and associates both with human security (Oels 2013) and others have argued for a human security reading of sovereign power (Larrinaga and Doucet 2008). Closely connected, while I largely treat risk as one coherent conception and link it to governmental power, the theoretical literature but also the empirical analysis have revealed more fine-grained differentiations within the concept of risk. Thus, one can differentiate between at least two different types of risk, one traditional, calculable form associated with known unknowns and a more radical version that is largely incalculable and tries to somehow cope with unknown unknowns (Daase and Kessler 2007). This also makes a difference in terms of proposed counter measures. The traditional type of risk is often tied to moderate preventive measures, for instance climate mitigation, whereas radical uncertainty leads to pre-emption and resilience (Krasmann 2012: 128).

Again, these are all valid points of criticism. Yet, given the often rather unstructured and non-prescriptive writings of Foucault it is not surprising that different scholars have used his original ideas in diverse and sometimes contradictory ways (Dean 2010: 24, 28, 48; Walters and Haahr 2005: 289; Bröckling and Krasmann 2010: 32; Bröckling *et al.* 2012b: 11, 2012a; Mckee 2009: 465). Having said that, the critique on the distinction between disciplinary and governmental power and human security and risk conceptions cannot be entirely denied. Thus,

even though I still maintain that, theoretically, these are very different forms of power and security – especially the distinction between normation and normalisation as well as between a concrete or diffuse referent object make a big difference – in my empirical cases they often overlapped substantively in constructing poor Southern populations as mainly at risk by climate change. Consequently, more empirical work in different contexts and concerning different issues would be necessary to ascertain whether this is always the case, or whether it was something unique to my specific country cases or to the issue of climate change. Moreover, a more differentiated conceptualisation of risk certainly is in order. I have already discussed different types of risk in the empirical case studies and in *chapter 7*, and hence tried to address the conceptual diversity to a certain extent. Nevertheless, I could have gone deeper into this discussion and I think more theoretical work on this issue certainly is necessary. Ultimately, however, the close interlinkages between different forms of power and more differentiated conceptions of security or risk are not surprising from a governmentality perspective. By conceptualising these three power forms as a constantly changing triangle with a tendency towards transforming the two older power forms towards governmental power, Foucault certainly allowed for ‘hybrid’ forms of power or security (Bröckling *et al.* 2012a: 16).

Closely connected, some have called into question the overly negative discussion of human security by Duffield and others (Duffield and Waddell 2006; Duffield 2007; McCormack 2010), but also the sweeping criticism of resilience concepts (Bourbeau and Ryan 2017; Bourbeau and Vuori 2016; Corry 2014), which I have partly adopted. In fact, human security with its roots in an emancipatory conception of individual security and originally composed of the idea of freeing human beings from fear and want (UNDP 1994; Booth 1991, 1997; Wyn Jones 2005), is not always as problematic as its critics suppose. However, just like sovereign power, in a securitisation context, its original characteristics can become blurred. Thus, my cases have uncovered an ambiguous picture. The US case to a large extent underlined some of the criticism because human security often was directly tied militaristic and interventionist policies. Even in the more nuanced debate in Germany, pointing to human security in some instances facilitated a construction of people in the Global South as helpless, powerless victims and legitimised paternalistic climate solutions. On the other hand, parts of the German discourse but especially the Mexican case illustrated how constructing climate change as a direct threat to individuals can incite progressive climate policies that particularly benefit poor individuals. Similarly, given the already manifesting effects of climate change, the promotion of resiliency and climate insurance schemes should not in all instances be dismissed

as problematic (Krüger 2017; Corry 2014) but can in fact contribute to prevent human suffering. Thus, a more differentiated problematisation of diverse concepts of resilience in connection to different climate risk constructions would be a worthwhile research agenda.

8.1.3 The Centrality of Discourse and Security

A further point of criticism is connected to my theoretical and methodological choice of focusing on climate security *discourses* within a governmentality framework, which usually is associated with primarily studying non-linguistic practices, (self-)technologies and the like (Dean 2010: 40, 42; Walters and Haahr 2005: 290; Bröckling *et al.* 2012a: 11). Some authors have generally criticised the dominance of ‘discursive governmentality’ studies that overlook non-textual material practices or the agency of matter itself (Mckee 2009: 473; Aradau *et al.* 2014a: 58, 62; Law 2016; Rothe 2011a: 4). I have briefly discussed this point in the methodological chapter (*section 3.3*) and have partly refuted the general argument by pointing to the communalities between discourse and governmental practices (van Dyk and Angermüller 2010: 9; Bröckling and Krasmann 2010: 39). This especially concerns the focus on power as productive (Mckee 2009: 471) and the desire to understand the production of specific ‘security truths’ (Bröckling and Krasmann 2010: 24, 26, 29; Burgess 2011; Bröckling *et al.* 2012a: 12; Krasmann 2012: 127). As Susanne Krasmann puts it:

Analyses of governmentality center on how ways of thinking shape the perception of problems, how appropriate definitions for solving problems are attached to their definition, and how tied to this, in turn, are certain techniques and procedures that for their part produce entirely new objects and subjects (Krasmann 2012: 120).

As *chapters 3 and 7* point out in more detail, this to a considerable extent complies with a broad conception of discourse (Aradau *et al.* 2014a: 58; Milliken 1999) – that understands discourses as not only textual but encompassing non-linguistic practices and institutions as well – and is exactly what my analysis has been mainly about. Moreover, in my empirical cases I have looked at how climate security discourses have restructured the political debate and legitimised policies as well as on how they contributed to a transformation of governance practices in specific policy fields in general (see also *section 7.2.3* on the bidirectional qualities of securitisation). Yet, just as it is difficult to demarcate discourse and governmentality, it is often impossible to clearly distinguish between practices and policies. For instance, the securitisation of climate change has led to the regular integration of climate change into the planning schemes of the US defence

sector (e.g. NSS, QDR). It has thus had a direct effect on specific policies. At the same time, the integration in such policies, the announcement at press conferences or in speeches, and the eventual implementation in the political work of the institutions in the defence sector are themselves practices. The same is true for the effects of climate security discourses on the German development sector or foreign policy, which have led to new policy concepts such as ‘climate foreign policy’ or ‘climate diplomacy’, which have a very practical dimension themselves.

Thus, while I would fend off some of the criticism, parts of it, especially when it comes to my empirical research methods, still stand. For instance, I could have focused more on the micro-practices of governance and the role of technology in the analysed policy fields and their part in changing how climate change is understood and handled (Bröckling *et al.* 2012a: 12). Furthermore, in order to escape the primacy and bias of written documents, or as some have provocatively put it ‘armchair analysis’ (Neumann 2002: 628), ethnographic research methods such as participant observation certainly would be very promising. They could help to uncover hidden micro practices that have led to the securitisation of climate change and shaped the political responses (Mckee 2009: 473) but also contribute to uncovering changes in practices as a result of linking climate change to security, which do not appear in written documents. Yet, naturally, the rather broad comparative scope of my analysis and the general constraints of a PhD thesis have limited my capacity to go into these directions, hence leaving room for further research.

Apart from that, some have also questioned whether my analysis is still about securitisation at all or why I need securitisation theory in the first place. This partly ties in with a general argument made time and again by proponents of the CS that one of the advantages of securitisation theory is its relatively leanness and specificity when it comes to the grammar of securitisation (Buzan *et al.* 1998; Buzan and Wæver 2009; Wæver 2015, 2012b, 2011). While I can see this point, especially regarding the original aims of the CS as positioning itself in between the wideners and traditionalist of security, I still find it a problematic argument. First of all, the majority of studies that has looked at securitisation processes outside the military sector has had problems to apply the original concept of securitisation and to identify a clear-cut threshold between normal and extraordinary politics. Furthermore, many works on the securitisation of climate change, including my own study, have illustrated that representing climate change as security issue does make a big difference even though in a different and more

nuanced way than the CS would suggest. This is directly connected to the debates about the transformation of conceptions of security themselves, which my theoretical framework can capture much better than a lean CS approach. Hence, I think the question whether I need securitisation theory at all is misplaced. I certainly do not need a clear-cut threshold but nevertheless have shown that a construction of climate change as a danger, be it to nations, humans or as a diffuse risk does make a pivotal difference concerning political debates and procedures. As my cases and the discussion in *chapter 7* show, there are several distinct effects that come with evoking the dangers of climate change, which I would not have been able to identify by merely looking at climate change discourses without any reference to securitisation theory. Furthermore, Foucault's power forms themselves become distorted through securitisation processes, exemplifying what securitisation theory can add to our understanding of political power and governmentality in general.

Ultimately, I would argue that with a view on empirically applying securitisation theory, we should not limit our analysis too strictly simply for the sake of a more elegant theory. At the same time, I do not think it is a good idea to entirely separate different ways of securitising an issue, for example by developing a separate theory of 'riskification' (Corry 2012). Because in the end, the core idea of securitisation that is about a transformation of political processes by constructing something as a threat, remains the same and still is a very useful approach, even if the precise conceptions of security and the political consequences differ.

8.1.4 Empirical and Methodological Matters of Debate

There are also some criticisms that directly point to my empirical findings. Some have pointed out that particularly in the US case I seem to always diagnose a primacy of the sovereign discourse as soon as the military is involved. Directly connected, others have noted that my understanding of sovereign power is too narrowly focused on national security and associated traditional sectors of security. I have already discussed the latter argument in *chapter 7* in the section about the governmentalisation of security and the narrowing down qualities of securitisation. Thus, I claim that in a securitisation context, sovereign power – and other forms of power as well – tends to divert from its original broader conception towards focusing on more traditional conceptions and sectors of security. Another explanation for the rather narrow understanding of sovereign power in the US case is the dominance of think tank reports in my empirical sample. Naturally, these think tanks, which mostly work on defense policy, have a

more narrow understanding of security. Having said that, I do not see this selection as a real problem because it merely represents the dominant discourse at a certain point in time in the US, as several expert interviews, the secondary literature, an analysis of media coverage and the resonance of these reports in Congressional debates underline. Moreover, in the empirical analysis, especially in the US case, I also address the gradual transformation of traditional forms of national security and the growing importance of governmental power and risk conceptions in this section.

Another frequently raised critique is that I overlook the many different representations of climate change outside security discourses and hence overstate the centrality of climate security discourses. This is certainly true. Since my analysis specifically tries to understand how a representation of climate change has changed political debates, practices and policies, I was not able to discuss alternative representations of climate change, for instance as economic problem or issue of global justice (Stern 2006; Caney 2016), in any detail (see *section 7.3* for a brief discussion of some alternatives). However, I do not see this as a problem because apart from the fact that I would question whether a politicisation without any reference to the dangers of climate change is possible in the first place (see *section 7.3*), naturally every scholarly work has to narrow down its scope in order to be able to produce a coherent analysis and manage the endless empirical material. I can only reiterate my above argument that the construction of climate change as security issue is by no means the only relevant representation, albeit an important one, and that my analysis should not be mistaken as uncovering the one and only true understanding of climate change.

Apart from the narrow focus on security, the emphasis of my analysis concerning discursive representations and political consequences has been mainly on the federal level. Thus, I could only very briefly elaborate on the role of the state or local level in constructing climate security discourses and implementing political counter-measures. Especially the US case has illustrated the importance of state and city level initiatives when it comes to climate (security) policy – which have become even more central after the Trump administration's decision to withdraw the US from the Paris Agreement –, which underlines that it would be worthwhile to include sub-national politics in further studies. Similarly, the Mexican case study has provided some tentative indications that in countries of the Global South, the existence of progressive climate policies or the influence of climate security discourses on the federal level cannot be easily transferred to the local level. Besides the sub-national level, it was beyond the

scope of this thesis to look at interconnections between the domestic climate security discourses and the international level or global climate security discourses i.e. ‘macro securitisations’ (Buzan and Wæver 2009) in any depth (see *section 7.2.1* for a brief discussion). While these two levels certainly have influenced each other, I still argue that ultimately the domestic level is more relevant when it comes to concrete political actions. Moreover, there are already a number of studies on the global climate security debate, which I did not want to replicate.

Finally, one could challenge the selection and focus of my empirical material in general. Firstly, I have not in any detail looked at the media discourse, which certainly plays an important role in constructing climate change as security issue especially in the public debate (Pansegrau *et al.* 2003; Weingart *et al.* 2000, 2002; Leiserowitz 2005; Neverla and Schäfer 2012; Schäfer *et al.* 2015) but can also create the necessary discursive environment for changes on the political level. Moreover, my analysis has not primarily focused on climate science itself, even though it constitutes the basis for all climate security discourses. While this criticism is not unsubstantiated, I still think that the reports and parliamentary debates that I have analysed – which undoubtedly draw on climate science and media reports – are more important to understand the securitisation of climate change. This is particularly true with a view on tangible political consequences, which to a considerable extent are tied to a specific translation of scientific facts and media reporting in those reports. Secondly, I have not on a broader scale included material from the insurance or financial sector, which undoubtedly would have been interesting especially with a view on the growing importance of risk conceptions. On the one hand, this was due to necessary limitations concerning the empirical analysis. On the other hand, these reports simply have not played the same central role in political climate debates so far as have reports from think tanks, NGOs, scientific organisations and advisory councils. Nevertheless, future works on the securitisation of climate change should undeniably include more material from these sectors.

8.3 Further Research: Technology, Networks, the South and Resistance

While the previous paragraphs have already pointed to several areas that I could have looked more into, here I want to discuss a few other research avenues that I think are particularly promising when it comes to understanding securitisation in general and climate threat constructions in particular.

Especially with a view on governmentalised security conceptions, the most promising research area in my opinion would be to look into the technological construction of climate change as security issue, including works on ‘big data’ (Leese 2016, 2014; Aradau and Blanke 2016; Chandler 2015; Bröckling *et al.* 2012a: 11–12). In fact, a few scholars already have begun to look into how, for instance, satellite data or climate modelling contributes to convey a specific imagery and understanding of the dangers of climate change (Rothe 2017; DeLoughrey 2014) or on how climate refugees have been depicted (Methmann and Rothe 2014; Methmann 2014a). Closely connected, new research areas such as science and technology studies (STS) (Hackett and Amsterdamska 2007), new materialism (Jasanoff 2010; Salter 2015; Bennett 2010; Daston 2008) or actor-network theory (ANT) (Latour 2009; Latour and Woolgar 2013; Law 2016) certainly can contribute immensely to such a research agenda and some have already studied climate change through such a lens (Jasanoff and Long Martello 2004). In this vein, the works on visual securitisation (Williams 2003; Hansen 2011; Andersen 2013; Heck and Schlag 2012; Andersen *et al.* 2014) are of particular interest as climate change certainly lends itself well to being captured in dramatic images, as Hollywood movies such as *The Day After Tomorrow* have already exemplified (Leiserowitz 2004; Methmann and Rothe 2012). Moreover, focusing on technology and visuals can contribute to going beyond textual articulations of discourse and governmentality and hence enhance our understanding of security practices. Methodologically, on way of bringing together some of these research areas and theoretical approaches could be to study securitisation processes in the context of a dispositive or assemblage framework (Rothe 2011a: 4; Aradau *et al.* 2014b: 7; Aradau *et al.* 2014a). In this vein, an integration of media studies as well as research on the cognitive processing of visuals or emotions could as well be very interesting (Gaufman 2017).

A closely connected research area that has become much more influential recently is the work that looks at climate security within the concept of the Anthropocene (Steffen *et al.* 2011; Zalasiewicz *et al.* 2010; Dalby 2013a, 2014), which also includes a view on the (discursive) effects of technological fixes for the climate problem such as geoengineering (Brzoska *et al.* 2012; Maas and Scheffran 2012; Dalby 2013b; The Royal Society 2009). This would unquestionably draw the research emphasis to the already extensively covered global level. Nevertheless, it could be particularly interesting because on the one hand it emphasises the decisive human agency and the role of technology but on the other hand also the radical uncertainty when it comes to understanding anthropogenic meddling with the global ecosystem. Moreover, it can bring back an emphasis on questions of geopolitics or better on how the this

concept has to be rethought in the era of the Anthropocene (Dalby 2014, 2013a). A governmentality lens with its focus on processes of governance vis-à-vis the Foucauldian population could be of particular relevance in this respect.

Beyond that, whereas my focus was on the broader discourse and how it constituted specific subject and objects of governance it could be worthwhile to take a closer look at the actors or subject positions in climate security discourses and here also on networks and financing relationships between different (groups of) actors. My case studies in this thesis and previous closely connected works (Diez *et al.* 2016; von Lucke 2016; Léonard and Kaunert 2011) already have given some tentative insights how specific actors (or their absence) have played an important role in securitisation processes. In this vein, it is also promising to specifically look at voices that were not able to establish their version of climate security in the political debate i.e. what Hansen called silent security dilemmas (Hansen 2000) – for example environmental NGOs in the US – as well as to inquire into the role of climate sceptics in climate security debates. Closely connected, more research on failed securitisations (Salter 2011; McDonald 2012), practices of resistance against governmentalised security discourses, or other forms of subaltern security discourses would certainly be a very fruitful research area (Bröckling *et al.* 2012a: 17–19; Mckee 2009: 474, 476; Rothe 2011a: 5). Explicitly focusing on the limits of governmentality and tactics of resistance would not only be interesting in its own right and would address some of the criticism on governmentality as overlooking the difference between ‘what is attempted and what is accomplished’ (Mckee 2009: 479) but could also lead to a better understanding of processes of de-securitisation (Hansen 2012). Undoubtedly, ethnographic research methods again would lend themselves particularly well for this endeavour.

As my Mexican case and also other works have illustrated (Boas 2014; Bilgin 2010; von Lucke 2016), a closer look on the Global South in connection to the securitisation of climate change undoubtedly would be an important area for future research. Due to a direct affectedness by climate change but also because of very different technological and financial capabilities as well as cultural or political preconditions, climate security discourses can develop differently in a Southern context. Moreover, this would also be a chance to enquire further into the problematic (or sometimes beneficial) effects of disciplinary power, human security and resilience (Duffield and Waddell 2006; Shani *et al.* 2007; Bourbeau and Vuori 2016; Bourbeau and Ryan 2017) when it comes to implementing large scale climate mitigation projects in the

Global South but also concerning the construction and effects of specific identities of Northern saviours and Southern victims. Here, it would also be central to integrate different theoretical perspectives into the analysis and perhaps combine post-colonial approaches with securitisation and/or governmentality (Sanyal 2014). This could also mean to include new case studies into a comparative framework and for example look at the role of small island states or partially vulnerable countries such as Bangladesh in relation to climate security discourses.

Due to the close interlinkages between climate and energy policy, a closer look on (counter)-securitisations in the energy sector i.e. energy security discourses that often stand in direct opposition to progressive climate policy could also be of interest (Ciuta 2010; Winzer 2012; Nyman 2018). Especially in developing countries or emerging economies such as India, China or Turkey (Diez *et al.* 2016: 143), securing fossil fuel based energy resources often is constructed as crucial component (and as a security imperative) to sustain a rapid and continuous economic development. Thus, looking into how climate and energy security discourses relate to each other could contribute to our understanding not only of these specific policy fields but also of the role of counter securitisations in general.

This long list of fascinating avenues of further research demonstrates that the empirical focus on climate security debates but also a power sensitive governmentality approach to securitisation remain very relevant. Even though I was not able to look into all of the above issues and theoretical directions, I hope that the theoretical and empirical findings of this thesis can help to further encourage and sustain this research agenda.

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