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Environmental security and climate change: analysing the discourse

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Abstract *This article analyses the emerging discourse on 'climate security' and investigates whether and how attempts to consider environmental problems as security issues are transforming security practices. Attempts to broaden the security agenda have been deemed as spreading the confrontational logic of security—which, within international relations, is traditionally associated with the exceptional decision that brings into existence the logic of war—into sectors from which it had been excluded. This problematic development has been described as 'securitization'. This article argues that this perspective does not consider whether and how by securitizing nontraditional sectors, alternative security logics are evoked and practices associated with securitization are challenged and transformed. The securitization of the environment, it is argued, is transforming existing security practices and provisions. This process is part of broader re-articulation of the spaces in which a logic of security based on emergency and contingency is legitimated and those in which a logic of prevention and management prevails. It implies new roles for security actors and different means to provide security.*

Introduction: setting the divide

Appeals to 'climate security' represent a recent and fairly successful attempt to introduce environmental concerns into the security agenda. Despite this momentum, the link between environmental change and security remains a contested topic: not only are environmental problems often silenced by more urgent threats but the very opportunity of considering the environment as a security issue is also challenged.

Since environmental problems began to gain relevance in political discourse in the 1970s, there have been a number of suggestions to consider their security implications (Falk 1971; Brown 1977). However, it was only in the 1980s—with the emergence of global environmental problems such as the depletion of stratospheric ozone or global warming—that the debate on environmental security gained momentum. The publication of *Our common future* by the World Commission on Environment and Development (1987) marked the entry of the phrase 'environmental security' into international debates; the merits of the concept were considered on analytical and normative grounds (Soroos 1994).

¹I would like to thank the four anonymous reviewers for their comments and suggestions.

Environmental security initially appeared to be a good idea, as it was 'meant to alarm traditional security analysts about the issues that "really" matter' (de Wilde 2001, 2) and to increase the relevance of environmental problems in the political agenda. Buzan emphasized that '[e]nvironmental security concerns the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend' (1991, 19–20). Others welcomed the concept since it 'plays down the values traditionally associated with the nation-state—identity, territoriality, sovereignty—and implies a different set of values associated with environmental change—ecology, globality, and governance' (Dyer 2001, 68). Yet others argued that 'environmental security ... is all about solidarity' (Thompson 1999, 137). On analytical grounds, it seemed a way to provide a better account of new typologies of vulnerability as well as the potential for conflict and violence with which these vulnerabilities could be associated.

Opponents were quick to warn that the term 'security' evokes a set of confrontational practices associated with the state and the military which should be kept apart from the environmental debate (Deudney 1990). Concerns included the possibilities of creating new competencies for the military—militarizing the environment rather than greening security (Käkönen 1994)—or the rise of nationalistic attitudes in order to protect the national environment (Deudney 1999, 466–468). Deudney argued that not only are practices and institutions associated with national security inadequate to deal with environmental problems, but security can also introduce a zero-sum rationality to the environmental debate that can create winners and losers, and undermine the cooperative efforts required by environmental problems. Similar objections came from a southern perspective: environmental security was perceived as a discourse about the security of northern countries, their access to resources and the protection of their patterns of consumption (Shiva 1994; Dalby 1999; Barnett 2001). Although the debate waxed and waned, the concept slowly gained popularity. In April 2007 the security implications of climate change were discussed by the United Nations (UN) Security Council but the state representatives remained divided over the opportunity of considering climate change and, more generally, environmental degradation as a security issue (United Nations Security Council 2007).

The divide between those who oppose the use of the term environmental security by arguing that the logic of security is fixed and inflexible and those who support it by suggesting that the logic of security should be changed² distracts attention away from the question of whether practices associated with providing security have been transformed by environmental security discourses. In the literature there is a debate about whether and how security language transforms the method of dealing with an issue—the debate focuses 'on the implications of using security language for the definition and governance of migration and the environment' (Huysmans 2006, 16)—but there is little on the reverse process or on the implications of using environmental language for the definition and

²This is the argument of critical security studies. A similar point has been made by Dalby and Barnett who suggested redefining security and environmental security as human security. See Dalby (1998, 2002) and Barnett (2001).

governance of security.³ This article is an attempt to develop the latter type of analysis by exploring the meaning and function of environmental and climate security. The purpose is to consider how the use of a word in different contexts challenges and transforms the practices and meanings associated with it. It aims to explore 'what the practices of definition and usage *do* to a concept, and what the concept in turn *does* to the world into which it is inscribed' (Bartelson 2000, 182). To undertake this analysis it is necessary to explore how different discourses about environmental and climate security have developed and 'conditioned the possibility of thought and action' (181).

The article is presented in three parts. The first explores why the environment has been excluded from security considerations. By adopting a perspective that is attentive to the social construction of security issues and its implications, the article assesses the potential of a discursive approach in transforming existing security practices. The analysis draws on the theory of securitization elaborated by the Copenhagen School (inter alia Buzan and Waever 1998) and integrates it with elements borrowed from Beck's work (inter alia 1992, 1999, 2006) on risk society to provide a framework that accounts for transformation. It argues that the securitization of environmental issues can reorient security logics and practices. The second and third parts apply this framework to explore the development of environmental security and climate security discourses respectively.

Securitization and the logic of security

The two main arguments against considering the environment as a security issue come from Realists, and from those who warn against the problematic implications the word security brings with it.

Realism—traditionally the mainstream approach in security (or rather strategic studies)—adopts a narrow definition of security that has the state as referent and takes security to be achieved through the menace or use of force. Realists tend to consider environmental problems as belonging to the realm of 'low' politics rather than an issue of 'high' politics, such as security. In this way, as Lacy (2005) has outlined, realists tend to create a hierarchy of threats, distinguishing between threats that can be legitimately included in the security agenda and those that cannot.⁴

Constructivists and poststructuralists have challenged the narrow realist perspective, suggesting instead that threats are socially constructed. The most innovative and thoughtful attempt to conceptualize the social construction of security issues is the theory of securitization as elaborated by the Copenhagen School, a body of research mainly associated with the work of Barry Buzan and Ole Waever. The work of the Copenhagen School is relevant to the ongoing

³ An exception is Dalby (1998). However, Dalby focused on alternative visions of security based on ecological principles rather than exploring the implications of a specific usage in a particular context.

⁴ During the Cold War this approach was initially challenged by peace studies and the subsequent emergence of new issues in the economic and environmental field. Nevertheless the intellectual space for a different understanding of security was only opened up by the end of the Cold War. Security, the claim goes, has to be broadened not only to include new threats such as environmental ones, but also to consider other referents below and above the state (Rothschild 1995; Krause and Williams 1996).

analysis because it considers the implications of broadening the security agenda and deals specifically with environmental problems. Moreover it has been influential in the political and academic debate with its warning about the risk of framing environmental problems in security terms.

The theory of securitization argues that there are no objective threats, waiting to be discovered. Instead, various issues can be transformed into security issues if a political community constructs them as such through a successful speech act that transforms the way of dealing with them. Security in this perspective is not a value or a condition but a form of social practice. That is to say, if an issue succeeds in being labelled as a security issue, the method of handling it will be transformed.

The consideration of the discursive formation of security issues provides a new perspective to analyse the environmental security discourse. First, it allows an investigation of the political process behind the selections of threats, exploring why some of them are considered more relevant and urgent than others. Second, it suggests that the awareness of environmental issues can have a relevant role in defining and transforming political communities and their identities, since the process creates new ideas about who deserves to be protected and by whom. Finally, as Behnke (2000, 91) points out, securitization can open the space for a 'genuinely political' constitutive and formative struggle through which political structures (including the practices associated with security) are contested and re-established.

However, for the Copenhagen School, securitization has problematic consequences. The label security brings with it a set of practices and a way of dealing with a problem that characterizes an issue as a security issue. The word security entails a specific logic or rationality, independent of the context or the intentions of the speakers. Security is about survival, urgency and emergency. It allows for exceptional measures, the breaking of otherwise binding rules and governance by decrees rather than by democratic decisions. Moreover security implies a 'decisionist' attitude which emphasizes the importance of reactive, emergency measures. This set of practices is not necessarily codified nor can it be identified by specific rules. Instead it is more a form of rationality, a way of framing and dealing with an issue, or 'a generic structure of meaning which organizes dispositions, social relations, and politics according to a rationality of security' (Huysmans 2006, 24–25). This mindset, once activated, is not open to negotiation. Although it is possible to decide whether or not to securitize an issue—and securitization, as a social process, is determined by a political community rather than by individuals—once an issue is securitized the logic of security necessarily follows.

This logic is borrowed from the Schmittian understanding of the political.⁵ For Carl Schmitt (1996 [1932], 37) the political is about the friend-enemy distinction and successfully evoking security brings about that distinction. The logic of security is the logic of war; this suggests an extreme form of antagonism and a zero-sum understanding of security. With the codification and institutionalization of a national security discourse this rationality has been narrowed down to a specific context. Attempts to broaden the security agenda result in the spreading

⁵ See Williams (2003) and Huysmans (1999).

of this rationality to other contexts from which it had been excluded (Buzan and Waever 1998).

The Copenhagen School warns about the risk of securitization and distinguishes between securitization—‘meaning the issue is presented as an existential threat, requiring emergency measures and justifying actions outside the normal bounds of political procedure’—and politicization—‘meaning the issue is part of public policy, requiring government decision and resource allocations’ (Buzan et al 1998, 23–24). The School warns that ‘when considering securitizing moves such as “environmental security” ... one has to weigh the always problematic side effects of applying a mind-set of security against the possible advantages of focus, attention, and mobilization’ (29) and Waever’s normative suggestion is: ‘less security, more politics!’ (Waever 1995, 56).

In the case of the environment this suggestion is problematic. It can lead to the depoliticization and marginalization of urgent and serious issues, while leaving the practices associated with security unchallenged. Many appeals to environmental security have been made not only with the intent of prioritizing issues but also with that of transforming the logic of security and the practices associated with it.

And yet, when applied to environmental issues, the process of securitization does not seem to be analytically accurate. The Copenhagen School, in its empirically driven analysis of various sectors in *Security: a new framework for analysis*, has identified several peculiarities in the environmental sector (Buzan et al 1998, 71–94). Amongst these peculiarities the most noticeable is that few appeals to environmental security have mobilized exceptional measures or inscribed enemies in any context. The Copenhagen School has suggested that when the environment is involved, “‘emergency measures” are still designed and developed in the realm of ordinary policy debates’ (83). This suggests that issues can be politicized through an appeal to security, a problematic development for the Copenhagen School, which argues that ‘transcending a security problem by politicising it cannot happen through thematization in security terms, only away from such terms’ (Waever 1995, 56). Even if the School tends to dismiss these as failed securitizations, this seems to show that the transformation of an issue into a security issue can follow different modalities and different logics, which eschew the confrontational logic of the national security model suggested by the School. Through the appeal to security, other logics, which characterize different contexts, can be brought into existence and new actors can gain relevance in security policies.

Securitization, as de Wilde has argued, ‘triggers two debates: one about the underlying risk assessment, one about the strategic answer to it’ (2008, 596). Successful appeals to security require developing security policies, identifying appropriate strategies and means to deal with the problem. These developments are largely sector dependent and reflect different values, priorities and practices. As Williams has noted, ‘[s]peech-act theory entails the possibility of argument, of dialogue, and thereby holds out the potential for the transformation of security perceptions both within and between states’ (2003, 523).

The emergence of new threats such as environmental problems has suggested that reactive measures and an antagonist understanding of security are not the best ways to deal with these issues. Instead preventive measures appear to be more effective and new means are required. In this context, the growing awareness of the complexity and uncertainty of contemporary threats has

suggested to some scholars and policy makers the use of the concept of risk to conceptualize contemporary security dynamics. Themes like risk management and preventive approaches have become more relevant in security discussions.

In this context, Beck's analysis of risk society has been used as 'a means to conceptualise and understand the transformation of Western security policies' (Rasmussen 2001, 285). Beck's analysis of risk society, which has been largely inspired by his analysis of environmental problems and ecological catastrophes, suggests that what he defines as 'risk society' is characterized by a greater number of risks (such as those produced by more complex and dangerous technologies) with new characteristics. Contemporary risks are unbounded and potentially catastrophic. They may affect parts of the globe distant from the place where they originated. For example, nuclear, chemical and genetic technologies have the potential to bring destruction on such a large scale that no remedial action or insurance can be appropriate to compensate for them.

The security dream of first modernity was based on the scientific utopia of making the unsafe consequences and dangers of decisions ever more controllable; accidents could occur, as long as and because they were considered as compensable. (Beck 2006, 334)

In a risk society instead 'the logic of compensation breaks down and is replaced by the principle of *precaution through prevention*' (334).

According to Beck, a risk society undermines the credibility of institutions and practices dedicated to security provision. First, Beck suggests that it is impossible to disentangle oneself from a web of risk. Contemporary risks affect everybody and it is impossible to create barriers and distance oneself from them—the enemy. For the Copenhagen School security is about the inscription of enemies and the logic of war. On the other hand, Beck points out that '[t]he concept of "enemy" is the strongest possible antithesis to the concept of security' since 'enemy stereotypes empower' as they create 'the relationships and the behavioural logic of attack and defence, pro and contra, which first kill the question and then the people' (1997, 82). Second, Beck challenges the very possibility of having a security logic based on evoking and governing through emergencies. Beck is suggesting that contemporary threats are beyond insurability and '[m]aybe the time has come to work towards the prevention of disorder and catastrophe, and not merely towards their control. Today, there are plans for all kinds of emergencies (ecological, medical, military), but there is no politics to prevent them' (Agamben 2002, 24).

The first consideration targets the antagonistic understanding of security described by the Copenhagen School, whereas the second challenges the neoliberal discourse of risk. This discourse relies on more sophisticated techniques to try to insure even catastrophic risk by shifting it to the capital market. In the case of the environment this discourse is problematic because it can also paradoxically contribute 'to continually generate the condition of emergent catastrophe, in order to profit from it' (Cooper 2004, 8).

Risk society challenges the logic of violence, antagonism and war suggested by securitization. This suggests a set of security practices—based on risk management and on prevention—which are rather different from those suggested by the Copenhagen School. Are appeals to security stuck in fixed problematic practices that the latter suggests? This article claims that through the securitization of

nontraditional sectors like the environment, different logics of security can be brought into being. Securitization—broadly understood as the social construction of an issue as a security issue—can be considered as a reflexive process that is not only ‘rule-directed’ but also ‘rule altering’ (Beck 1997, 134). Securitization is not about applying a fixed meaning of security as exceptionality that inscribes enemies in a context. Rather, it is ‘an always (situated and iterative) process of *generating* meaning’ (Stritzel 2007, 366). By securitizing nontraditional issues, the incongruence of a specific logic of security appears while different practices are applied. In this framework, the construction of both threats and rules by which security is carried out are open to a process of social construction and transformation. The following sections explore this process, analysing the development of environmental security and climate security discourses.

Evolving perspectives on environmental and climate security

The emergence of global environmental problems, such as global warming and ozone depletion, resulted in one of the first attempts to securitize the environment on a global scale. The Brandt Report (1980) suggested that ‘few threats to peace and survival of the human community are greater than those posed by the prospects of cumulative and irreversible degradation of the biosphere on which human life depends’ (quoted in Brauch 2003, 81). These new threats suggested the need to redefine the nature of security in an interdependent world facing new challenges.

In the post-Cold War era, the environmental security discourse opened the window for debating a common approach to security affairs. For instance, at the United Nations General Assembly in December 1988, Gorbachev stressed: ‘The relationship between man and the environment has become menacing ... [t]he threat from the sky is no longer missiles but global warming’ (quoted in Norman Myers 1993, 11). He also promoted the creation of an Ecological Security Council.⁶ As a result of these appeals to security, several initiatives were launched during the early post-Cold War era. Alarming concerns for the hole in the ozone layer transformed the problem into a threat to human health and promoted fairly successful agreements to deal with the issue at an international level. Concerns for climate change not only led to the creation of the Intergovernmental Panel on Climate Change (IPCC)⁷ to assess scientific, technical and socio-economic aspects of human impact on climate change but also to the signing of the UN Framework Convention on Climate Change in Rio in 1992 (United Nations 1992). However, negotiations on climate change proved to be more problematic than those on the ozone because acting on climate change would require the transformation of much of the existing economic structure and way of life. Hence climate change was marginalized in the environmental security discourse.

⁶ The then USSR Foreign Minister Eduard Shevardnadze, at the 43rd UNGA, proposed ‘a discussion on how to turn the United Nations Environment Programme into an Environmental Council capable of taking effective decisions to ensure ecological security’ (quoted in Nico Schrijver 1989, 118).

⁷ The IPCC was established in 1988 by the World Meteorological Organization and by the United Nations Environment Programme.

Despite the initial momentum and the broad scope of environmental security discourses, the debate was captured by discussions about environmentally induced conflicts. This helped both to frame environmental threats in more familiar terms to national security experts and to consider the environment as a legitimate threat. The academic discussion was largely shaped by the work of Thomas Homer-Dixon and a series of well-funded research projects, which aimed to study the relationships between environmental degradation and violent conflicts (Homer-Dixon 1991, 1994). Although Homer-Dixon was cautious in suggesting a straightforward connection between environmental degradation and conflict, his argument was popularized by Kaplan's article 'The coming anarchy' (1994), which drew a grim picture of a future of human misery, migrations and violent conflict, suggesting that the environment would be the 'national-security issue of the early twenty-first century' (58).

The debate about environmentally induced conflicts has since evolved. Research suggests that conflicts are likely to be subnational and low intensity. These results have been corroborated by the projects undertaken by Spillman and Bächler (Bächler et al 1996; Bächler 1999). These projects identified the circumstances conflicts are likely to occur in and emphasized the conflictual dimension of the development process, suggesting that when people face the rapid changes and challenges imposed by the process of development conflicts can follow. Violence is unlikely to occur along the fault-lines between developed and developing countries but it tends to be localized. More pertinently, conflicts were seen as part of the dynamic that draws groups together rather than a disturbance of an otherwise stable society. This suggests that it is not possible to simply condemn conflicts as such (and intervene to restore order), but more emphasis has to be placed on the analysis of when and why different groups decide to resort to violence, and on how to prevent these developments. These results have largely been used by the study 'Environment and Security in an International Context', launched in 1995 by the NATO Committee on the Challenges of Modern Society (CCMS) and carried out by research teams in Germany and in the US (Lietzmann and Vest 1999). The project identified a number of 'syndromes'—sets of complex, pathological relationships between environmental and other social, demographical and political factors—that might help monitoring problematic situations and providing early warning systems for potential conflicts.

Research on environmental conflicts has produced an intense academic debate concerning the empirical validity of the claims, their analytical relevance, methodology and normative implications. The argument that environmental scarcity induces conflicts has been challenged by empirical research showing how environmental degradation often provides an opportunity for cooperation (Hauge and Ellingsen 2001) and, more recently, demonstrating that it is resource abundance rather than scarcity that determines conflicts (Berdal and Malone 2000). Nevertheless this debate is more relevant for the political practices it has determined. During the Clinton administration Homer-Dixon's research was used to promote a more proactive foreign policy (Harris 2001, 121–122). The EU commission, largely influenced by the NATO project, has promoted actions to include environmental considerations into its cooperation for development programmes. The EU has also used environmental concerns to develop and legitimize security capabilities and competencies at the European level.

These capabilities include the creation of a European satellite system for the 'global monitoring for environment and security' (Council of the European Union 2000).

Even if the debate on environmental conflict has been criticized on normative grounds—and some scholars have argued that the debate has represented people in the Third World as 'barbaric Southern Others' (Dalby 1999; Barnett 2001, 67), erased the responsibility of developed countries and tried to frame environmental problems in terms of national security—this debate and the policies it has procured have achieved two things. Firstly, this debate has legitimized new actors and instruments to develop forms of security governance, which downplay the role of the state and of traditional reactive responses. Secondly, it has promoted the development of human security and of a new paradigm of preventive and intervention measures which are often legitimized by the use of the concept.

Duffield and Waddell argued that: '[h]ow conflict has been understood in the post-Cold War period is central to understanding the concept of "security" within human security' (2006, 43).⁸ Human security shifted the focus of security from the state to the individual and 'the legitimate concerns of ordinary people who sought security in their daily life' (United Nations Development Programme [UNDP] 1994, 22). The first major formulation of the concept appeared in the UNDP 1994 annual report, which identified environmental security, together with economic, food, health, personal, community and political security as a relevant component of human security and stressed the 'all-encompassing' and 'integrative' qualities of the concept (24). The debate on environmental conflict has played a relevant role in promoting and legitimating forms of intervention, and the development of the concept of 'responsibility to protect' (Duffield and Waddell 2006, 8–10).

The environmental security debate has shown two tendencies. On one hand, the influence of the national security discourse has emphasized the focus on conflicts, transforming the threat to the environment and to the people that depend on it into a threat to global order and stability. Other aspects, such as the impact on health and problems related to over-consumption have been largely ignored in the environmental security discourse. At the same time this discourse has challenged a set of security practices, which focused on military threats and reactive measures and outlined how military responses and preparation are inadequate to deal with environmental issues. And yet it has contributed to shifting the attention to different kinds of vulnerabilities, suggesting that the instruments to provide stability require effort to promote both mitigation and adaptation to environmental impact and change, and that the best results are associated with early intervention and preventive measures.

This is echoed by Duffield and Waddell (2006), who have pointed out the existence of two discourses. The first emphasizes the importance of circulation—it suggests that disasters or conflict in one region have the ability, through population displacement to affect other regions and countries. The second focuses on local consolidation, increasing the resilience of the local population (10). It emphasizes the promotion of diversity and choice and supports the existence of

⁸ Even Barnett, who is relatively critical of the environmental conflict thesis, argues that the 'subversive message of Homer-Dixon's work' is that 'environmental problems only have a meaning for security if security is understood in *human* terms' (2001, 64–65).

relationships and institutions able to govern populations. This discourse reflects environmental values and considerations such as diversity and resilience, which are threatened by unsustainable development. This suggests 'a more holistic and ecological view of the security problem, one which sees external threats as a piece of a larger security ecology' (de Lint and Virta 2004, 472). This is not to deny the relationships of power that are deployed in a process of securitization. Instead it suggests that other forms of power—like the discursive and symbolic ones incorporated in the environmental discourse—have played a role in determining a less confrontational approach to security.

These two aspects—one informed by reactive, defensive measures, the other inspired by precautionary ones—have largely been balanced in the environmental security discourse in western countries, even if the balance depended on the different capabilities of the actors involved in the construction of the security discourse. The EU, for instance, has traditionally emphasized a preventive approach over a reactive one. As a result various securitizations of environmental issues have brought about security practices largely inspired by the practices developed within the environmental sector to ensure safety, adaptation and resilience. In this context the 'emergency measures' determined by the appeal to environmental security have been 'designed and developed in the realm of ordinary policy debates' (Buzan et al 1998, 83). Is this development going to be implemented in the recent securitization of climate change, even if it is occurring in the context of the war on terror, which has renewed a confrontational approach to security? To answer this question, it is necessary to consider how the climate security discourse has been framed.

The challenge of climate security

The debate about environmental security has been marginalized in the shadow of the war on terror. The latter has made other threats appear more urgent and serious than the environmental ones. However, over the last few years, concerns over climate changes have gained momentum. Several factors have contributed to this new development: on one hand, there has been a growing consensus on the dimensions of the anthropogenic impact on climate; on the other hand, since the withdrawal of the US from the Kyoto protocol, there have been several 'securitizing moves' aimed at promoting action to counter climate change and its consequences, on both sides of the Atlantic.

In 2004 David King, then UK government's chief scientific adviser, claimed that climate change was a far more serious threat than international terrorism (*BBC News Online* 2004). This was not only a European move. The same year an internal report of the US Department of Defense on the impact of 'an abrupt climate change' was leaked to the press. Drawing a comparison with paleoclimatic events, the report forecasted a rapid climate change: after a decade of slow warming, characterized by severe storms, typhoons and floods—bringing destruction in coastal cities and low-lying islands—the alteration of the Gulf Stream would plunge Northern Europe into a Siberian-like climate and transform key areas in Africa, Asia and Australia into deserts by 2020 (Schwartz and Randall 2003). This report seemed to anticipate the destruction caused by hurricanes Rita and Katrina, which struck the US in autumn 2005. Events that had traditionally

been considered as natural disasters were increasingly associated with the growing instability of climate. Moreover they outlined how even the US was not able to protect its own citizens and provide effective disaster relief. Movies like *The day after tomorrow* and *An inconvenient truth* further reinforced the representation of climate change as a threat and a security issue.

These developments followed a typical securitization move by delineating climate change as an urgent, existential threat which demands immediate action. When Margaret Beckett was the UK Foreign Secretary, she promoted an active campaign to prioritize climate change in the international agenda. She was one of the first to employ the term 'climate security' (Beckett 2006). Thus Beckett transformed the debate over climate change into a more dramatic one on climate security, contributing to its securitization, thereby prompting several questions about this securitization and its impact on security practices. Who or what is the object of security in the climate security discourse? Who is supposed to provide security and by what means? What are the implications of the process of securitization of the climate? These questions need to be addressed to analyse the meaning and function of climate security.

Climate security suggests a concern for the security of the climate which is understood as the maintenance of stable climatic conditions as a prerequisite of all human enterprises, rather than the security of the climate itself. Climate security is evoked to secure people and societies that depend on it. As in the case of environmental security, climate security is about 'the maintenance of achieved levels of civilization' (Buzan et al 1998, 76). In this sense, as de Wilde (2008) highlights, climate security captures a paradox because it is the contemporary way of life that is causing environmental problems. Yet to maintain the existing way of life, it is necessary to change many present global structures. The dilemma then becomes one of whether the existing structures should be changed voluntarily or whether it is preferable to wait until 'structural change will be enforced violently and randomly by environmental crises' (595). The problem is even more pressing because action on climate change requires long-term measures: power plants that are built today would last for decades and innovation in the transport system takes time.

This touches the core of the problem and identifies two contrasting approaches to security provisions. The first—the reliance on emergency measures—suggests that it is impossible to be prepared for all potential threats and it is preferable to deal with emergencies as they occur; the second—the development of preventive ones—warns of potential catastrophic impacts. In this sense securitization is about moving from one position to the other. This transformation is evident in the debate on the kind of threats that are posed by climate change and in its recent transformation.

There are two aspects to this transformation. First, much of the debate has been framed in terms of adaptation to climate change, on the assumption that it will be a slow process. This is implicit in the UNFCCC which states that the objective of the Convention is to achieve the

stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened

and to enable economic development to proceed in a sustainable manner. (United Nations 1992, article 2)

This discourse assumes the relative stability of climate systems—ongoing changes will occur in a predictable way—and relies on human ingenuity and adaptation capability. This approach has been challenged by the possibility of catastrophic events. That is, when a complex system reaches a tipping point, it can have nonlinear responses, which result in runaway changes that are very difficult to bring under control again. Examples of such catastrophic events would be the disruption of the Gulf Stream, the weakening of the monsoon systems and the instability of continental ice sheets. The recent securitization move is based on this dramatic reframing of the threat.

The second aspect is the shift of importance between two different and overlapping securitizations. The first one identifies climate change as a threat. The second considers environmental policies as a threat. The latter was evident in the US position at the 1992 Earth Summit, when George Bush stated that ‘the American lifestyle is not up for negotiation’ (quoted in Lerner 1998, 12). The US subsequently withdrew from the Kyoto Protocol, which was considered as a threat to the US economy. This kind of securitization is also evident in the concern expressed by some developing countries, which argued against the imposition of policies aimed at forcing them to reduce their emissions since these policies can threaten their development process. The *Stern review on the economics of climate change* prepared by the economist Nicholas Stern for the British government and published in October 2006 is an intervention in this debate and has contributed to the securitization of climate change instead of that of environmental policy. The *Stern review* focused on the economic consequences of climate change, an aspect that has often been marginalized in the environmental security discourse, and outlined the economic cost of postponing action. In this way the idea that environmental measures can be a threat to economic competitiveness and growth is turned around with a cost-benefit analysis which warned that inaction on climate change could cost the world economy between 5 and 20 per cent of global GDP each year, whereas the cost of reducing greenhouse gas emission to avoid the worst impact of climate change could be limited to around 1 per cent of global GDP annually (Nicholas Stern 2006, vi). The *Stern review* typifies the difference between the European approach—that tends to see environmental policy as an opportunity—and the US one—that sees it as a potential threat.

As demonstrated hitherto, the identification of threats reveals not only the identities, interests and values that are supposed to be protected, but also the practices and logics associated with security. Hence, it is relevant to explore which specific aspects are identified in the climate security discourse, in order to assess its potential and limits in a process of transformation. The list of threats provided by Margaret Beckett is illustrative. She focused on food security, water issues, security of energy supply, immigration, conflicts and failing states, arguing that ‘a failing climate means more failing states’ (Beckett 2006). In this way, she outlined the complexity of climate change and the variety of people and vulnerabilities involved, and called for a wider and deeper security discourse, which is more attentive to human needs. This approach resonates with the human security discourse and its associated practices. However, what has emerged as the ‘threat’—since it is represented as the root cause—in the recent development of

the climate security discourse is the emission of greenhouse gases, mainly carbon dioxide. This is evident in the British statement about 2006 strategic priorities, one of which includes 'achieving climate security by promoting a faster transition to a sustainable, low-carbon economy' (Foreign and Commonwealth Office 2007, 70).

A focus on emissions has the merit of involving industrialized countries and avoiding the removal of their responsibility suggested by the discourse on environmental conflicts, which focused on the global south, its inadequacy and responsibility. Moreover, it links the discourse on climate security with that on energy security, suggesting that the two issues are interconnected.

This focus however has two problematic implications. First it tends to reduce the problem of sustainability to one of emissions, creating the illusion that it is enough to simply focus on cutting emissions or switching toward nongreenhouse gas energy, such as nuclear or bio-fuel to solve the environmental crisis. This approach downplays the complexity of environmental problems and the impact of the overuse of limited resources. Instead, climate change is only one aspect of a larger human-made environmental change. As humankind pushes the boundaries of the carrying capacity of the planet, the impact of climate change is going to increase especially on those who live in marginal, vulnerable areas. Reducing emissions will not solve all the other environmental problems or increase the resilience of vulnerable population. Returning to the previous example of hurricane Katrina: even though it has been associated with global warming, its devastating impact was also a result of other local problems, such as the draining of the wetlands or the extraction of groundwater; problems of levee design and maintenance standards; the failure of emergency services which had been focused on other security priorities. There is a trade-off between the focus on reducing emissions and that on improving resilience and adaptability. In this sense, the focus on emissions tends to limit the holistic perspective suggested by environmental security.

The second implication is related to the link between climate security and energy security. This link contains an inherent tension since energy security is traditionally associated with national security and its logic, whereas climate security is supposed to promote a cooperative approach to global issues. Agreements on energy supply are generally the result of bilateral agreements between states. The energy sector contributes a substantial portion of states' income and policy—states gain revenues from concessions, transit fees and taxes or are directly involved with national companies. Hence the current situation of tight energy markets characterized by rising demand, high prices and concerns for terrorist attacks against critical infrastructures is particularly challenging for states, which are divided between promoting privatization and being more involved in energy policy. Besides, there are limited multilateral institutions that deal with energy security, resulting in the higher risks of fostering a zero-sum mentality and an antagonistic attitude which can be problematic in dealing with climate issues.

How can these developments be read through the lens of the framework previously elaborated? Can this be considered as a securitization which is transforming security practices? The renewal of the debate on climate change and security appears as an attempt to transform it into an existential threat, requiring urgent measures. It has mobilized political action, emergency measures and even attempts to institutionalize the debate at an international level. So far the

securitization of climate has succeeded in persuading even the reluctant Bush administration to undertake discussion on emissions reduction. It has also contributed to the formulation of the Bali Roadmap to set a strategy for the post-Kyoto period. The UN Security Council, at the initiative of the UK, discussed the potential impact of climate change on peace and security for the first time ever (UK Mission to the UN 2007). The most impressive results have been within the EU, since it has contributed to the EU developing a common energy policy—an issue that has previously been delayed for decades. Traditionally energy issues have been considered a prerogative of member states and security of supply has been considered a national security issue. The EU Commission is promoting a nonantagonistic approach that relies on liberalization and cooperation to promote a common energy policy and to secure energy supply and climate stability. The impact of this strategy is evident in the reaction to the Ukrainian gas crisis in 2006. When Russia cut the gas supply to Ukraine, due to their dispute over gas prices, the amount of gas transiting through Ukraine and destined for European countries fell dramatically (Jon Stern 2006). Despite the rapid solution of the crisis it was considered a wakeup call which prompted a significant debate on energy security. Within NATO the point was discussed in terms of new roles for the alliance, including the possibility of military involvement to patrol the supply routes, suggesting an antagonistic approach (Shea 2006), but within the EU the crisis provided an opportunity to expedite the development of a common energy policy. The common energy policy set ambitious targets, mobilizing consensus through the double lever of climate security and energy security. In January 2007 the Commission presented the 'Energy and Climate package' (Commission of the European Communities 2007). It included a Strategic Energy Review which focused on both internal and external aspects of EU energy policy. In March 2007, EU leaders approved the plan, agreeing on a binding target of 20 per cent reduction of greenhouse gas emissions by the EU by 2020, compared to 1990 levels. Central to the agreement was the recognition that energy and environment should go hand in hand. The plan committed member states to raising the European share of renewable energy to 20 per cent, increasing energy efficiency, completing the internal market for electricity and gas, and the development of a common external energy policy. Although the focus is on the EU interest and security, the means to achieve them are market mechanisms, promotion of liberal order and multilateralism.

Thus far appeals to climate security have mobilized actions even if the emergency measures have not exceeded the ordinary policy debate. Hence these appeals can be considered as proper securitization rather than failed securitizing moves.⁹ The securitization of climate change has avoided the identification of enemies and has involved actors other than states, both in the securitizing moves and in the security provisions.

The other relevant aspect of climate security discourse is the securitization of threats that are uncertain, widespread and whose impact is difficult to quantify. The appeal to security is intended to develop precautionary measures, as

⁹ The Copenhagen School distinguishes between a securitizing move—a discourse that presents something as an existential threat to a referent object—and securitization—if the audience accepts the discourse (Buzan et al 1998, 25).

Margaret Beckett stated: 'I am in no doubt that today being a credible foreign minister means being serious about climate security because the question for foreign policy is not just about dealing with each crisis as it hits us' (2006). She continued that it is necessary to put 'in place the condition for our future security and prosperity in a crowded and interdependent world'. This is an application of the 'precaution through prevention' approach to security and reflects Beck's argument on risk society (Beck 2006, 334).

The possibility of transforming into a threat something that has not yet materialized and allowing it to bring about the practices suggested by the Copenhagen School in the case of securitization presents a grim perspective. The possible adoption of a precautionary approach to security issues has been criticized on the grounds that it can justify preventive military actions, extensive surveillance measures, the inversion of the burden of proof or actions decided on the worst case scenario (Aradau and van Munster 2007). In the case of the environment, it is possible that the securitization of climate change would result in confrontational politics, with states adopting politics to protect their territory against sea-level rising and immigration; with the Security Council adopting resolutions to impose emission targets, and even military action against polluting factories; and surveillance systems to monitor individual emissions. This possibility, however, depends on taking for granted a security logic based on enemies and extraordinary measures.

What is at stake in the climate security discourse is the possibility of introducing mechanisms to prevent emergencies within a system that tends to rely, on the one hand, on governing through emergencies and, on the other hand, on insurance and compensation. The securitization of climate is an attempt to evoke the symbolic power of an environmental discourse based on interdependence and prevention to establish a framework for security and energy governance at the global level. It is about renegotiating the spaces in which risk management and market mechanisms prevail, and those in which intervention and regulations are legitimated. Securitization remains a very political moment. Its implications largely depend on what is securitized and what means are employed to provide security.

Conclusion

The recognition and constitution of a problem as a threat implies the identification of the political community that deserves protection, the legitimization of the means to provide security and eventually their institutionalization. Some of these aspects are more settled and consolidated than others, as are the different logics of security, such as the antagonistic, emergency-based one evoked by the Copenhagen School. These developed because, within a particular context, they were the most effective response against a specific representation of threats. This, however, does not mean that they are not open to negotiation when challenged by a new environment and threats.

Climate change poses threats that are largely uncertain, diffuse, difficult to quantify and yet potentially catastrophic. This reflects the logic of a risk society portrayed by Beck. This article has explored how the practices associated with security are challenged by the attempts to transform environmental crises and

climate change into a security issue, and has shown how appeals to security have emphasized the relevance of preventive, nonconfrontational measures and the importance of other actors than states in providing security. A potentially nonessentialist approach like securitization, which focuses on the social process that specifies threats, can be relevant in studying how various environmental issues gain priority and mobilize social action. However, the Copenhagen School identifies the 'securityness' of security with a specific logic determined by the realist tradition. In this way the School has imposed a problematic fixity that tends to essentialize an historical- and sector-specific understanding of security and the practices legitimized by it. Even if this logic is still relevant, the analysis of environmental security discourses and the securitization of climate change have shown that transforming an issue like climate change into a security issue is not about applying a fixed meaning of security and the practices associated with it. Rather, it is a reflexive and contextualized process that generates meanings and practices.

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