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NON-TRADITIONAL SECURITY STUDIES

非传统安全研究

浙江大学非传统安全与和平发展研究中心
塔里木大学非传统安全与边疆民族发展研究中心 编

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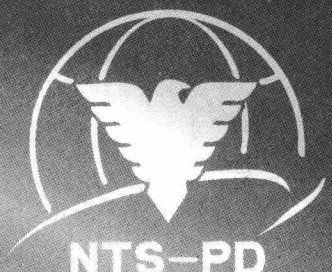

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FEICHUANTONG ANQUAN YANJIU

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学术争鸣

《非传统安全与当代世界》译丛书评

非传统安全相关学科研究综述

编 者 按

余潇枫　甘均先

2011 年 11 月在北京召开的“中国与跨大西洋国家：应对全球安全挑战”慕尼黑安全政策会议核心小组会议，把“能源、资源与环境：新安全标准?”设为重要议题之一。本期的海外专稿《在“人类世”中转变能源思想》是对能源安全议题的重要反思。该文第一作者梅飞虎（Maximilian Mayer）曾参加浙江大学非传统安全与和平发展研究中心于 2011 年 10 月召开的“第四届海峡两岸能源经济学术研讨会”，现文是在会议发言《在“人类世”中反思能源安全》的基础上的拓展。作者通过对“人类世”概念的讨论，试图阐明环境安全的观念对于人类世纪的作用，并尝试用“人类世”这个概念来重新理解能源安全，以超越对于安全概念传统论述的困局。

对于非传统安全威胁而言，重要的不仅仅在于发现，更重要的还在于如何应对与治理。非传统安全治理可以分为三个层次。从宏观的国际层次来看，非传统安全治理需要国际社会的协作；从中观的国内层次来看，非传统安全治理需要中央政府的政策权衡；从微观的社会民众层面上看，非传统安全治理需要包括个体、非政府组织等在内的共同参与。同时，治理不仅需要行为体的参与，还需要考察治理的绩效，以决定是否执行后续政策。本期主要选编了四篇关于非传统安全治理的论文，他们分别从不同角度探讨了非传统安全治理。

崔顺姬的《东亚非传统安全问题新趋势与治理新思路》，回顾了 2011 年发生在东亚的重大非传统安全事件。她给出了三种解决途径：综合性路径，利用多种手段组合解决问题；可持续性路径，为安全治理提供可持续的操作平台；以人为本的路径，重视对弱势群体安全的保护。

李开盛的《国际非政府组织与非传统安全治理》，分析了国际非政府组织在救灾、减贫、环保等方面的重要作用。他指出了非政府组织天然的优势与劣势——优势在于非政府组织投入非传统安全治理的意愿和动力强烈，劣势在于非政府组织可以使用的资源很少。

甘均先、毛艳的《中国的非传统安全合作与外交能力建设》，分析了 2011 年与中国有关的国际非传统安全合作的新特征，以及中国应对非传统安全问题的新思维。他认为中国应该在国际非传统安全合作上继续转变思维，注重议题操作、沟通言说和信息传播三方面的外交能力建设。

胡税根、徐元帅的《中国政府非传统安全应对能力评估研究》，对中国政府在“5 · 12”大地震中的

应对进行了评估。他借鉴了企业管理的方法，建立了一个由 7 大指标和 25 个二级指标组成的评估模型。他的论文从管理学的角度来分析非传统安全治理，给我们带来了有益的启示。非传统安全治理也亟需更多的学科外智力支持。

作为中国与非传统安全为主题的理论思考，原华荣、王凌艳的《人口数量与中国发展安全》一文值得一读。该文分析了人口规模对于中国可持续发展的重要意义。他们将“生态环境安全”“资源安全”“社会安全”“国土安全”等作为中国“发展安全”的主题，并认为“人口数量安全”是“发展安全”的核心。由于人口数量影响到“种际平等”“代际平等”“种内平等”，如何控制人口数量就成了人口安全的核心。基于人口与资源的比重大小，他们认为，未来的世界强权将是那些“较少人口享受较多资源”的国家，如美国、俄罗斯、加拿大、澳大利亚和巴西等，尤其是俄罗斯具有最大的发展潜力。从人口数量与资源分配的角度来分析国家发展的潜力是本文主要的特征，但是一个国家的文化底蕴、科技实力也是国家发展的重要变量。本文的结论是否正确，需要读者自主作出判断。

本期的“学术争鸣”摘引了王逸舟、王义桅和陈世瑞的最新研究成果。王逸舟认为中国外交应该从“无为”走向“有为”，他提供了一种“创造性的介入”的视角，即温和地、渐进地修正国际体系的规则和规范。王义桅对中国崛起提出了一种新的观念——“包容性崛起”，即西方与中国等发展中国家相互包容的发展观。包容性崛起要求中国与西方国家“利益共赢”“权利共享”“责任共担”“价值共享”。陈世瑞从“混沌理论”的角度分析了非传统安全治理。他将非传统安全问题呈现出的特征如复杂性、扩散性、动态性、跨国性视为混沌现象的非线性特征，由此他提出“混沌管理”，介入非传统安全的自组织过程，控制非传统安全威胁“混沌发生”的条件和规模，改变其动态行为来化解危机。

本期还选刊了一组《非传统安全与当代世界》译丛的书评。朱锋分析评论了布赞的《国际安全研究的演化》，他探讨了布赞安全研究的特色，并认为中国应该建立自己的多元化安全研究议程。余潇枫对阿查亚的《人的安全：概念与应用》和《安全化困境：亚洲的视角》进行了评论，针对前一本著作，他认为以人为本是非传统安全研究的基本价值观；对于后一本著作，他认为安全化理论的亚洲视角深化和超越了安全化的传统路径。

海外专题

Attuning Concepts of Energy Security to the Anthropocene*

Maximilian Mayer and Peer Schouten

Abstract: This article draws on the notion of the Anthropocene in order to ask what it means for conceptions of security that the environment is an effect of human agency. Accepting that the Anthropocene is not only a geological era, but also a concept that carries an urgent normative connotation, we explore two of its implications for our understanding of energy security. Firstly, we cannot leave the externalities of pursuing energy security out of the picture. Most attempts to rethink energy security for the 21st century do not live up to this criterion. Because fundamental insecurity persists despite successful attainment of traditional energy security, we reconsider the premises upon which energy security is based. The first implication is that the factuality of the 'modern' separation between mankind and nature is breaking down, such breaking down uncover a contested web of relations, which, however, is not reflected in the ontology underpinning energy security. Second, we need to take one step beyond discursive understandings of security. To conceptualize security as discourse and, subsequently, energy security as a discursive political agenda, is to adopt the language of 'radical constructivism' and to treat energy and climate security as 'merely' socially constructed. Poststructural views comfortably remove from sight the many externalities. The implication of taking the Anthropocene condition seriously is then also methodical: we must treat security not associally constructed but rather as also built up from—and threatened by—the very material elements and collective actions that are mobilized and assembled in its pursuit. An adequate conception of energy security needs to incorporate the material processes by which we attain that security. To move beyond the discursive we consider energy security as an *assemblage*, constituted by and dependent on both hybrid elements that are both 'social' and 'material' at the same time—rather than being a social construct divorced from 'nature'.

Key Words: Anthropocene, Energy Security, Environment Security

This article draws on the notion of the Anthropocene in order to ask what it means for conceptions of security that the environment is an effect of human agency. While an increasing part of humanity enjoys the fossil fuel-based improvement of living standards, such internationally renowned bodies as the Intergovernmental Panel on Climate Change (IPCC) have called attention to the challenge those emissions from consumption of natural resources present to global ecosystem (Lubchenco, 1998). Another manifestation of the same dilemma is the 2010 Gulf Coast oil spill, which President Barack Obama called 'the worst environmental disaster America has ever faced' (The White House, 2010). It resulted directly from that

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* This is a shortened and revised version of Maximilian Mayer and Peer Schouten: "Energy Security and Climate Security under Conditions of the Anthropocene", a chapter from *Energy Security in the Era of Climate Change* edited by Luca Anceschi and Jonathan Symons (Palgrave Macmillan, 2012); reproduced with permission of Palgrave Macmillan.

nation's hunger for affordable mineral resources. We ask, therefore, how is it possible that the security of nations depends on oil consumption on the one hand (Litfin, 2003), while Politicians speaks of 'waging a battle' against an 'oil spill that is assaulting our shores and our citizens' on the other? Or, in more general terms, how can we come to terms with the fact that the pursuit of energy security causes widespread *in*securities?

Tackling this dilemma in an insightful way, Simon Dalby (2009) has hailed the notion of the Anthropocene as a new paradigm for global politics. The Anthropocene, a term imported from earth sciences, refers to a new geological period in which human actions have such an impact that we need to fundamentally rethink our relationship to the environment (Crutzen & Stroemer, 2000). Taking the work surrounding this notion as a starting point, this article offers a contribution to the unfolding debate on energy security in an era of climate change.

Accepting that the Anthropocene is not only a geological era, but also a concept that carries an urgent normative connotation, we here explore two of its implications for our understanding of energy security. Firstly, in light of the Anthropocene means we cannot leave the externalities of pursuingenergy security out of the picture. Most attempts to rethink energy security for the 21st century (Yergin, 2006; Bradshaw, 2009; Verrastro & Sarah Ladislaw, 2007) do not live up to this criterion. Because fundamental insecurity persists despite successful attainment of traditional energy security, we reconsider the premises upon which thinking about energy security is based. The first implication then is that under the Anthropocene, the factuality of the 'modern' separation between mankind and nature is breaking down, uncovering a contested web of relations, not reflected in the confident ontology underpinning energy security.

Second and related, we need to take one step beyond discursive understandings of (energy) security. To conceptualise security as discourse and, subsequently, energy security as a discursive political agenda, is to adopt the language of 'radical constructivism' and to treat energy and climate security as 'merely' socially constructed. This comfortably removes from sight the many externalities of their pursuit. The second implication of taking the Anthropocenecondition seriously is then methodical: we must treat security not as merely socially constructed but rather as also built up from—and threatened by—the very material elements that are mobilised and assembled in its pursuit. An adequate conception of energy security needs to incorporate the material processes by which we attain that security, and to conceptualise climate concerns 'as a reality at the intersection of its physical and social history' (Byrne & Glover, 2005). To move beyond the discursive we consider energy security as an *assemblage*, constituted by and dependent on both 'social' and 'material' elements, which in turn directly 'impacts' upon both—rather than being a social construct divorced from 'nature'. Concluding, we argue that by considering the agendas of energy security and climate change as political agencies working on the same elements in different ways, it becomes possible to pin down the shortcomings of energy security. We identify a series of focal points that must be addressed if the debate is to move further and argue that the principles of inclusiveness and symmetry enable us to unsettle our narrow understanding of security and open up space for a broader range of concerns.

Conceptualizations of Security in the Anthropocene Era

Within critical security studies, security is accepted to be an 'essentially contested concept', with 'securitisation' referring to the discursive process by which an issue gets elevated from normal politics and constituted as an issue that warrants extraordinary policies (Huysmans, 2006; Wæver, 1995). In this understanding, security is thus 'more socially constructed than objectively determined' (Barnett, 2001). Whereas this approach sheds important light on the contested and shifting nature of security politics, it also delinks 'discursive' security politics from an 'objectively determined' realm to which nature belongs as we show throughout the following discussion on alternate securitizations of nature.

Securitising National Consumption

Energy security is commonly understood as a po-

litical agenda concerned with the governance of energy production and consumption in service of national economies. Securitising an issue like energy provision takes it out of the domain of normal politics to constitute it as an exceptional concern. Yet, importantly, elevating energy consumption to a security issue dwarfs and silences other concerns. Firmly rooted in the realist framework that perceives the world beyond one's national borders as anarchic and relations among states as antagonistic, energy security has been concerned with national referent objects with pre-given interests. Consequently, the imposed relationship between nature and security is quintessentially biased towards concerns stemming from a national interest, conflicting not only with other national interests but also with security conceptions foregrounding subnational or global interests (cf. Lubeck, Watts & Lipschutz, 2007). Additionally, the national energy security paradigm frames the preservation of a fixed supply of natural resources to feed a national economy in a manner that leaves ecology out of the picture. With energy security successfully securitised, only a very limited aspect of the relation between human agency and the natural environment receives political (and analytical) attention.

Environmental and Climate Security

This narrow understanding of energy security—while still in broad use—has come under heavy scrutiny, as is reflected in the broad debate about environmental security. Ironically, energy security's continued and effective purchase has given rise to even bigger threats to national security such as abrupt climate shifts (Barnett, 2001a; Dalby, 2002; Liotta, 2005).

Subsequently, these externalities also became securitised (Floyd, 2008; Trombetta, 2008). Since the mid-90s, climate concerns increasingly appear in national security strategies, framed as threats to national wellbeing (Dalby, 2009). Recent efforts by various international institutions to separate out climate change into different measurable security issues (Brauch, 2009; Brauch & Zundel, 2008) can also be seen as applications of the same principle, in which the relationship between mankind and the environment is again framed through securitisation—environmental security becomes constructed 'in terms of technological and modernist managerial assertions of control within a geopolitical imaginary of states and territorial entities' (Dalby, 2002). The environmental and climate security discourses, while securitizing a widening number of aspects of the relationship between human agency and the natural environment, again constitute the latter as a limited, stable and apprehensible object in service of, or threatening, the former. In this process, the reverse dynamic—by which human agency affects the natural environment—is by and large silenced.

Environmental and climate security are based on the same kind of reductionism as the energy security agenda—a reductionism made evident by the lack of clear evidence, despite almost 30 years of research, for straight forward pathways between environmental change and conflict; between fossil resources and interstate wars; or between climate change and societal collapse (Mcab & Bailey, 2007; Dalby 2009). We thus witness the same principle at work both in energy security and in alternate securitisations that challenge it by incorporating more matters of concern. Both energy security and climate security are thus contested securitisations, each with a limited and conflicting scope of matters of concern. To explore why Anthropogenic insecurity persists despite the efforts mobilised and concerns addressed by these agendas, we need to uncover what these dominant securitisations of energy and climate change share.

Opening the Black-box of Nature

The different agendas—energy security, environmental security and climate security—all present us with a reductionist account of the natural environment and how it is related to human agency. All three agendas are premised upon a modern western, anthropocentric, ontological separation of nature and society, in which nature is a 'black box', a mechanical, factual entity that requires mastery.[1] Society, instead, is

[1] This argument has often been voiced as a (postmodern) analysis or critique against modern social sciences, cf. (Beck, 1995; Latour, 1993, 2004, 2005).

more fluid and determines what counts as a matter of concern that requires us to act upon nature in a certain way. Indeed, it is the concern of a social subject that drives the shifting securitisations of natural objects. Energy security reduces nature to a factual amount of barrels of oil per day, which is of importance to the demands set by a human referent object. While climate security broadens the concern to the social repercussions of this process, it is premised upon the same ontological divide and foregrounds the same, social, concerns. The content of both securitisations is social and disembedded from nature, which merely forms a passive context to be acted upon.

The anthropocentric understanding underpinning the aforementioned securitisations is challenged by insights from climate scientists; foregrounding the notion of the Anthropocene, they emphasise not human control over, but human influence on the environment (Hulme 2010). Recognising the central role of humankind in shaping geological and ecological dynamicssince the Industrial Revolution, Nobel laureate Paul J. Crutzen proposed to call the period characterised by that influence the 'Anthropocene'. Crutzen and others have subsequently advocated a re-embedding of mankind in the environment as the point of departure for feasible social science (Clark & Munn, 1986; Crutzen & Stoermer, 2000). They advocate a shift in focus from concerns such as building pipelines, ever-deeper off shore drilling, the calculation of arable land for food production, and incentivising other nations to reduce emissions, to shifting climate patterns, rapidly decreasing water resources, and the use of the atmosphere as a gigantic emissions dump. In other words, when global economic and consumption dynamics are considered asagencies working upon nature, security becomes linked to different matters of concern.

But ultimately, the challenge goes further: it requires the reinterpretation of what security means in light of a different interpretation of modernity (cf. Litfin, 2003). Starting with the Industrial Revolution, mankind has gained unprecedented control over nature. Yet with increased control came unprecedented influence— 'we', indeed, 'now live on a human-dominated planet' (Lubchenco, 1998). Ironically, due to human agency, nature has come to constitute a severe threat to livelihoods and whole nations, as illustrated by the small island states that are already beginning to move their citizens to secure lands. Furthermore, it is recognised that global and local feedback loops between nature and human interventions therein, as well as non-linear irreversible dynamics, could lead to unforeseen disasters eventually destabilising the global ecosystem (Hansen, 2005; Solomon & IPCC, 2007). As humans are rapidly transforming global ecosystems—often with unpredictable and threatening outcomes—the modernist understanding that a clear and easily defined difference exists between objective factors and dynamics of nature on the one hand, and the contingent processes of society on the other, is giving way to numerous continuing 'border conflicts' (Tsing, 2005). From this perspective a different picture arises, consisting of intricate interwovenness, perpetual feedback loops, and the essential embeddedness of the human enterprise in nature.

Energy Security Assemblages

This section draws upon insights from science and technology studies in general and actor-network theory in particular. [1] It provides an analysis of how securitisations of energy, environmental, and climate can be understood as distinct 'assemblages': associations both of 'social' and 'material' elements, involving political and economic practices, material flows, infrastructures, and ecological environments as well as human resistance and narratives of national security. Assemblages perform and shape the world, and can be defined conceptually as networks of elements linked by actors or programmatic agencies. Rather than solely constructing security discourses *about* some aspect of nature, actors *involve* the aspects of nature concerned

[1] This section draws heavily on the work of actor – network theory (ANT). See: Callon, 1986; Callon & Latour, 1992; Callon & Law, 1982, 1997; DeLanda, 2006; Latour, 1987, 2005; Law, 1992, 2008, 1991; Law & Callon, 1988; Law & Mol, 2008. For a more in – depth discussion and empirical applications of ANT within international security studies, see Schouten, 2010a, 2010b.

by actively transforming them to fit a particular agenda (Latour, 1993). We thus reconceptualise the contested discourses of energy, environmental and climate security as hybrid agencies consisting of a 'complex blending of social and biophysical factors' (Forsyth, 2001) working upon nature in definite—and finite—ways (Latour, 2004, 2005). In order to act upon such vast assemblages, all elements have to be translated into a language that permits intervention, by separating out and translating what matters into economically or politically apprehensible concerns. The notion of 'translation' is pivotal for actor-network theory. It refers to 'all the negotiations, intrigues, calculations, acts of persuasion and violence thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak or act on behalf of another actor or force' (Callon & Latour, 1992). The notion thus literally captures the transformation of elements through the associations made by actors in a securitization.

In line with the rich body of work surrounding such thinkers as Arne Naess and more recently Bruno Latour, who each in their own way argued for a notion of the 'social' that incorporates both nature and mankind as matters of concern (Asdal, 2008; Barad, 2003; Barry, 2001; Bingham & Hinchliffe, 2008; Callon, 1986; Gammon, 2010; Jasanoff, 2005; Mol, 1998; Morin, 2009), we here summarise our analytical lens as based on the criteria of inclusiveness and symmetry. *Inclusiveness* refers to the scope and breadth of a notion of security in terms of the elements assembled as endogenous matters of concern rather than as exogenous matters of fact. ❶

Secondly, *symmetry* is a criterion that implies equal inclusion of both 'social' and 'natural' agencies and concerns. Thus, neither a notion of security focusing primarily on human concerns (as does energy security), nor privileging environmental concerns (as do radical variants of 'deep ecology') will suffice. Being forced to focusinstead to the hybrid agencies that assemble heterogeneous elements, hopefully avoids the kind bias that inevitably results in detached research endeavours and destructive or infeasible policy agendas, which have helped to bring about the Anthropocene era in the first place.

Assembling Energy Security

As discussed before, energy security is commonly understood as 'simply the availability of sufficient supplies at affordable prices', that is, a variable of national economic growth to be secured through markets, political and, if necessary, military action. By extension, political and scholarly concern with energy security is premised on threats to the smooth functioning of national economies arising for instance from sharp increases in prices, instability in oil producing countries or geopolitical tensions. Within this picture, hydrocarbon resources in general, and oil and gas reserves in particular,❷ are the 'lifeblood of civilization'; for this reason they are a central preoccupation of national security agendas that, accordingly, regularly resurface in global politics as a central concern (Amineh & Houweling, 2007; Marquina Barrio, 2008; Moran & Russell, 2009; Zweig & Bi, 2005).

Specific national energy security strategies may diverge: interests of exporting and importingcan differ, and strategic policies compete with market-based approaches—yet the similarities between national energy security agenda's by far outweigh their differences as the basic assumptions have remained constant over time. The current mainstreamunderstanding of energy security does not deviate from the canonical definition offered by the US Department of Energy in 1985 (Hirsch, 1987), and ever since Winston Churchill made oil-dependence a core concern of British strategy, energy policies have shared an emphasis on securing sustained national energy consumption patterns and a supply-side focus. The core concern is thus 'whether there will be sufficient resources to meet the world's energy requirements in the decades ahead' (Yergin, 2006). Politicians—regardless of their political

❶ As with much of the discussion in this section, this distinction between matters of concern and matters of fact derives from Latour (2005); any 'actant' or element can be assembled as a 'black box', that is, a stable building block, or as a capricious concern.

❷ Due to the relative abundance and equal distribution, its material characteristics, and the lack of a global market coal (and biomass) is rarely a concern of energy security.

camp—invoke the 'national' rationale for the inevitable primacy of exploring new oil reserves, as President Obama's (2010) assertion illustrates:

The bottom line is this: given our energy needs, in order to sustain economic growth, produce jobs, and keep our businesses competitive, we're going to need to harness traditional sources of fuel even as we ramp up production of new sources of renewable, homegrown energy.

Security communitiesand energy companies alike present energy security to their respective audiences neatly cleaned up and seemingly consisting of only market efficiency and strategic concerns—while in fact it incorporates natural elements like the resource endowments of national territories and technical infrastructure like pipelines or oil tankers as much as it does 'social' or 'discursive' ones: a successful securitisation of nature that foregrounds secure access to energy (rather than for instance environmental concerns), needs to assemble 'social' actors consisting of oil companies, US congress men, refineries and platforms, deep sea drilling technologies, but also geothermal tendencies, global consumption habits, and the downsides of alternative technologies.

Numerous studies illustrate the multifaceted and continuous assembling efforts that the pursuit of energy security requires to keep the globe-spanning 'energy security assemblage' in place. Chinese and US oil companies work hand in hand with their respective governments—and, in the case of the US, with the armed forces—in order to explore and extract crude oil (Klare, 2004; Mitchell, 2007). The specific materiality of crude oil shapes not only the territorialisations of global production networks, but also the internal political structures of rentier states (Bridge, 2008; Labban, 2008). The picture of the same assemblage further downstream reveals that 'automobility' at any specific place in the world requires global production, distribution and regulation regimes involving multifarious issues to be enrolled and kept in place (Paterson, 2007; Urry, 2007).

It is equally important for our purpose to note what energy security *doesn't* incorporate as a matter of concern, namely, corrupt regimes financed by fossil revenues; plutocratic dictatorships; and corruption in the global petroleum sector at large (McPherson & MacSearraigh, 2007); the resource curse (Collier, 2007); biodiversity surrounding coal mines and drilling platforms; the military as a major environmental polluter (Deudney, 1999; McNeil, 2009); and the consequences of energy consumption on the environment—all elements impacted by the pursuit of energy security. Conflicts over the redistribution of oil revenues sustain civil wars, and can even threaten the subsistence of states where resource revenues reignite conflicts along ethnic fault lines, sustaining the fragmentation of already weak states (Kaldor, Karl, & Said, 2007; Watts, 2009).

Another example of how specific agencies consciously silence such externalities out of the energy security assemblage, is that in the United States, the Global Climate Coalition organised by the fossil industries successfully undermined a widening of public and scientific concerns on the greenhouse effect throughout the 1990s (Levy & Egan, 1998, p. 343; Antilla, 2005). Similarly, influential International Relations scholars, invoking a supposedly established hierarchy of security issues, actively silence environmental concerns (Lacey, 2005). Through these seemingly disparate assembling agencies, energy security, with its restricted scope of concern, has managed to hold much of such elements stable as 'passive' matters of fact that are merely reacting to interventions stemming from our energy desires and form no cause for controversy. By translating all elements into the economic terms of 'supply' and 'demand', the energy security assemblage produces a parsimonious—social—matter of concern. At the same time, this translation process silences and hides many elements and concerns that respond differently to petro-politics (cf. Çalişkan & Callon, 2010). While these social and material 'effects' are very much linked into the network of elements constituting the energy security assemblage, they are not represented as matters of concern and as such remain largely invisible 'border conflicts'—to be addressed by other actors.

Assembling Environmental Security

Environmental security is qualitatively different from energy security in so far as it does not represent a single parsimonious global assemblage. Instead, it

points to the competition between interest groups that are differently affected by energy production processes such as mining, drilling, or energy related development projects (Peluso & Watts, 2001). The many instances of environmental securitisation thus present us with a more diffuse and confused array of matters of concern, ranging from local and transnational competing interest groups to wildlife diversity and the preservation of the 'Gold Coast' of California. They dissolve the rational language of resource supply and demand into a wider array of affected contradicting interests of humans, animals, and whole ecosystems to be protected.

The US reactions to the huge underwater oil spill in the Gulf of Mexico in May 2010 perfectly illustrate how energy security and environmental security are at once linked and at odds. First, in the direct aftermath of the spill, a draft climate bill, which was to encourage oil drilling in US territory, was hastily revised to take the opposing position (Broder, 2010b). Second, Governor Schwarzenegger halted oil exploration projects along the Californian Coast stating his most pressing concerns on television:

All of you have seen when you turn on the television the devastation in the Gulf. And I'm sure that they also were assured that it is safe to drill. I see on TV the birds drenched in oil, the fishermen out of work, the massive oil spill, oil slick destroying our precious ecosystem. It will not happen here in California. (Rothfeld, 2010)

The sort of environmental security Schwarzenegger evokes here is also about oil, but it assembles it differently and alongside a lot more elements than energy security does—including for instance birds, fisherman, and the Californian ecosystem. Instead of aggregate national concerns, it brings to the fore many of the consequences of oil production that are otherwise silenced. As such, it assembles matters of fact silent in the energy security agenda and translates them into matters of concern. Whereas the environmental security agenda is often treated as a concern utterly separated from the energy security agenda, this example shows how environmental security is literally attached to the same assemblage of drilling platforms and submarine ecologies as energy security—an assemblage that is differently enrolled by invoking environmental concerns. To put it differently, the oilrig off the Gulf Coast, which had previously been a smooth-functioning technical element in an energy security assemblage, was revealed to be itself an unstable network of elements that could not simply be transposed to the Californian coast without possibly unacceptable environmental costs.

Where environmental securitisations gain in inclusiveness and symmetry *vis-à-vis* energy securitisations of related assemblages of elements, they hardly point to straightforward policy agendas. The notion of 'security' underpinning environmental security is much less wedded to the policy-ready state-centrism underpinning energy security. For instance, an environmental securitisation of the Arctic region extends the perspective from that of a single state to that of a hybrid referent object—consisting of biodiversity, indigenous people, and mankind through potentially rising sea levels—threatened by both crude oil production, industrial pollution and rising local temperatures (Kristoffersen & Young, 2010; Martello, 2008).

Importantly, as discussed above, environmental security and climate concerns push and pull the same elements that make up energy security assemblages, albeit in different directions. Each element is part of alternativeand competing assemblages—as shown, an oilrig off the Louisiana coast, while constructed as an element in securing energy supplies, can also be mobilised as part of an environmental security assemblage; and climate concerns can be mobilised to fortify the militarisation of an energy security agenda (Mayer 2012). Whereas climate security foregrounds human and natural concerns more or less on an equal level and includes more elements than either energy or environmental security assemblages do, it has proven more difficult to assemble the political agencies necessary to implement agendas of climate mitigation.

In sum, by symmetrically including the technical and natural elements and the social concerns assembled under the headers of the various agendas in our discussion, this sections makes explicit how each agenda links them differently and to what effect. Beyond mere securitisations, these distinct renderings actively transform the assembled elements to different, and competing, effects—yet the strategic agencies of those spearheading an energy security assemblage always appear dominant.

Conclusion

We urgently need to balance the pursuit of energy security with broader social and ecological concerns. While various studies made important inroads in investigating the conditions enabling such a multidimensional balancing act, this chapter has argued that a tenacious issue remains— existing conceptions of security do not accommodate broader environmental concerns. By revisiting the underpinnings of energy security in light of the*problématique* of the Anthropocene, we argue that it is only by considering both the consumption of hydrocarbon resources and the consequences of their extraction and usage as endogenous matters of concern that redefinitions of energy security will enjoy any success in unsettling unsustainable and treacherous patterns.

The main theoretical contribution of this chapter lies in conceptualising agendas pursuing energy, environmental, and climate security not as social constructs but rather as assemblages. Drawing on insights from actor-network theory, this chapter entails three main points. Firstly, in conceptualising security as assemblages embedded in and linked to the very natural 'objects' they concern, it becomes apparent how competing programmatic efforts working upon nature in fact constitute it as an object amenable to intervention. They are not mere discursive narratives by politically organised groups of humans *about* nature, but rather transformations of nature. As an effect, as Dalby (2002, p. 194) puts it, we have learnt to represent nature 'as an unproblematic object, knowable via classification and experiment, and above all infinitely manipulable in the service of human purpose'.

Secondly, actor-network theory allows us to narrate the effects of competing discourses in a distinct way. The concurrent existence of competing definitions of the relationship between nature and security (that assemble from the same heterogeneous variety of elements but differently), points to the jostling inherent in politics in an inherently unstable world (Callon & Latour, 1992). A move in one node of these vast and complex assemblages reverberates all over because of the different feedback loops and interdependencies between elements: one 'human' intervention mediated by technology impacts on the environment, which in turn 'responds', leading to constrained human acts which modify the assemblages as a whole. By bringing the effects of these assembling efforts into the picture as matters of concern, the condition of the Anthropocene becomes apparent. Rather than critically lamenting capitalist social constructs or abstract but dangerous dominant discourses, we have shown how assemblages of energy, environmental or climate security only persist because of the active assembling efforts of actors and programmatic agencies. Highlighting these efforts is an essential part of actor-network theory and has the advantage of revealing concretely the specific political agencies that, geared at sustaining energy security, impact on nature in complex and varied ways.

Finally, through the notions of inclusiveness and symmetry, our approach uncovers the paradoxes of energy security by bringing the material back into analysis of energy security. Inclusiveness brought to the fore the externalities silenced by energy security, and symmetry showed material and natural elements are as much a part of securitisations of energy as are discursive elements. We were thus able to shed a different light on the question how is it possible that we might successfully attain energy security (e. g. successfully securitize the environment in a particular way) and yet deepen global insecurities.

Energy securityis the most powerful among the securitisation of nature we discussed. It forms an assemblage that holds stable uncountable associations between huge material and financial flows, globally enrolling a wide array of actors and agencies and reaching parsimony ona global scale. Under its header, the use of fossil fuels, national political legitimacy, and the structure of the international system have become deeply intertwined. By analysing how the agencies upholding energy security assemblages neatly separate out its concerns in a language consisting of market efficiency and strategic tools, as well as how material linkages to such externalities as pollution, climate change, and other environmental concerns become silenced, it becomes possible to assess the success of energy security. Energy security, with its restricted scope of concern, is anchored in an anthropocentric