Conceptual Notes on Energy Security: Total or Banal Security?

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Conceptual Notes on Energy Security: Total or Banal Security?

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Energy security has received remarkably little conceptual attention, despite an abundant literature in which various meanings of the term proliferate, together with a copious proxy terminology. This article attempts to clear this conceptual underbrush and to address the question, in what sense is energy a security issue? Drawing on academic and policy-related sources, the article demonstrates that three distinct logics of energy security are currently in circulation: a logic of war, a logic of subsistence and a 'total' security logic. These distinct logics carry different meanings of energy and security, embed political hierarchies, and have distinct vocabularies, policy vehicles and normative consequences. Yet, affixing energy to security affects not only energy policy but also the manner in which we understand security itself. At least potentially, the ubiquity of energy as a 'prime mover' makes security ubiquitous, thus blurring the boundaries that have made it a domain of specialist knowledge and practice. By making security politically unexceptional and 'total', energy can thus strip security of its precise meaning, rendering it banal and vacuous. Taking a contextual perspective that emphasizes conceptual variation and the participation of lay actors in producing the meaning of security, the article rejects the banalization of security, and discusses the normative and political problems inherent in any totalizing view of the kind latent in energy security.

Keywords energy • security concepts • context • banal security • total security

Introduction

RARE IS THE OCCASION when a topic is equally fashionable academically and politically. Energy security is currently at the top of the agendas of states, international organizations and NGOs alike.[1] Lawyers, bankers, brokers, economists, geographers, geologists, engineers

[1] An Internet search produces predictable links to organizations such as the Institute for 21st Century Energy, the Energy Security Council, the London Business School Energy Club and the Collegiate Energy Association. The topic is covered in two dedicated journals – *Energy Security* and *Journal of Energy Security*, plus the more general *Energy Policy*.

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and journalists speak of energy security with the same confidence as generals, development workers, defence analysts or environmental activists. However, energy security has been an inauspicious terrain for security theory. Abundant analyses of pipeline politics stand in stark contrast to the very few attempts to make sense of energy security conceptually, unlike other issues that have been under constant scrutiny, such as the environment, HIV/AIDS or migration. Paradoxically, the proliferation of energy security discourses has, on the one hand, established the legitimate association of energy and security and, on the other, prevented a closer conceptual and normative attention to energy security.

Given past debates regarding, for example, environmental security, it makes little sense to ask whether energy is 'really' a security issue: even a cursory survey shows that the domain of energy is already saturated with the language of security. Those who survey the literature on energy security would be tempted to conclude that there simply is no need to debate what energy security is, because we know both *that* energy is a security issue and *what* security is.[2] Yet, the relationship between the two is profoundly problematic and warrants close conceptual and theoretical scrutiny. This is not only because bringing energy into the security domain is likely to affect the manner in which energy policies are pursued. Energy itself has the potential to affect substantially the way actors and theorists think about security in general. Three factors shape the relationship between energy and security, and each raises significant questions.

First, energy is a special thing: a prime mover, a complex category, a *total* field. Nothing exists that is not energy, or not affected by energy. Energy security is therefore a homologous field, which means that *security* ceases to be a bounded domain of meaning and practice. The totality of energy has thus the potential to normalize security and render it politically unexceptional. The first question, therefore, concerns the effect of the *totality* of energy on the concept and practice of security.

Second, references to energy security carry different connotations in different contexts. In policy and analysis alike, the convergence of energy and security is far from uniform (CIEP, 2004; Correljé & Van der Linde, 2006). What is the significance of this variation? Is it proof that theorists and practitioners alike have now embraced the multiplicity and constructedness of security concepts, so their coexistence and interchangeability does not surprise or anguish anymore? In this sense, energy security may be symptomatic of the spillover of theoretical debates concerning the broadening of security into the space of security policy, an effect considered at once inevitable and undesirable by critics of the moves to broaden the security agenda (Walt, 1991). If situated actors proliferate divergent concepts of security, the second question

[2] In a general reference text, the glossary provides a definition for 'futures market' but not for security (Kohl, 2004).

raised by energy security concerns the *liminality* of security as an in-between category of theory and practice.

Third, the pervasiveness of energy security has already lead to scepticism regarding the usefulness (Clawson, 1998) and meaningfulness of the term (Mallaby, 2006). At its most dramatic, this normalization, taken-for-grantedness and unreflectivity could be a sign of the banalization of security. If indeed energy security is, as one practitioner claimed, 'an empty concept' (Clawson, 1998: 1), then security itself is 'nothing more than a hollow reference', as Albert (2000: 77) put it. The third question is therefore whether energy makes security *banal* – whether, in other words, it still makes sense to talk of *security* given how wildly diverse its meanings, objects and subjects have become with the addition of energy.

The task of this article is both to clear this conceptual underbrush and to provide a platform for further theoretical discussion concerning the meaning of energy security and the consequences of its emergence. The starting point is to identify the distinct logics of security that already structure the understandings of energy security in different (and at times the same) contexts. An extensive survey of formulations by states, international institutions, think-tanks and academic authors shows that it is possible to discern a logic of war for energy security, a logic of subsistence and a logic of 'total' energy security. These logics are at times simultaneously present in policy documents, academic analyses and business briefs, and their coexistence is marked by a perpetual politics that organizes them hierarchically. Their distinctiveness is produced by the different modulations of energy and security, which produce distinct vocabularies, normative consequences and policy vehicles.

On the basis of these three distinct logics, the central argument of the article is one for the contextuality and liminality of security: the study of energy security suggests that categories and practices of security cluster contextually according to different meanings produced by situated actors. An argument that has gained increasing theoretical purchase recently, this is a call for conceptual and contextual multiplicity that challenges both traditional security studies and securitization theory (Balzacq, 2005; Ciută, 2009; Doty, 1998; Fierke, 1997; Hansen, 2000; McDonald, 2008; McSweeney, 1999). In the study of energy security, 'geopolitical' approaches can be useful in illustrating the logic of interaction that shapes the behaviour of some actors. Securitization theory can also shed some light on the combinations of securitizing actors or on the linkages between referent objects, existential threats, target audiences and the policies designed to secure energy (key texts are Wæver, 1995, 1996; Buzan, Wæver & de Wilde, 1998). Essentially, however, both approaches have fixed definitions of security; as a result, they afford only a limited understanding of the effects security and energy exercise on each other, and in particular of the fact that the domain of energy produces mutations and multiplications of the meaning of *security*, not just the multiplication of threats, subjects and objects of security policy.

The exercise of conceptual clarification undertaken in this article has potentially significant consequences for security theory in general and opens further areas of research. Three issues stand out in particular. The first concerns the potential contradiction between a contextual approach to security and the totalizing effect of energy on security. Circumscribing this dilemma is one of the quintessential questions of our discipline, regarding whether an intransient essence of security can or should be established, for both analytical and normative purposes. Key here is that, as I will argue below, the 'total' logic of security latent in the energy sector does not imply that security means the same thing everywhere: it means that it permeates all sectors of activity and draws in actors from all levels, *within* a context. This leads to the second issue, one that is latent in the ubiquity and totality of energy (security), which adumbrates what is perhaps the most deep-seated anxiety of our discipline: the 'death' of security as a meaningful category of theory and practice, caused by the unrestricted proliferation of 'security' without precise meanings or referents (Ciută, 2009). My argument here is that energy security does not imply a hollowing out of security; it just demonstrates the need for its contextualization. The final outstanding issue concerns the political and normative consequences of these divergent logics of energy security, which can only be determined through the study of their mechanisms of diffusion, contestation and legitimation.[3] This area in particular constitutes a fertile ground for further contributions that enrich our theoretical and normative grasp of energy security, which makes all the more necessary the conceptual clarification and contextual perspective developed in this article.

A Short Story About Energy Security

The story of energy security is relatively straightforward. As an 'umbrella term', energy security 'covers many concerns linking energy, economic growth and political power' (Westminster Energy Forum, 2006a: 9). More narrowly, energy security is defined as the 'reliable and adequate supply of energy at reasonable prices' (Bielecki, 2002: 237), or as 'securing adequate energy supplies at reasonable and stable prices in order to sustain economic performance and growth' (APERC, 2003: 4). Energy *in*security is the product of the contradiction between a general trend of increasing energy consumption and a contradictory trend of decreasing energy reserves, and it acquires policy salience at the intersection of three dimensions connected by multiple and multidirectional links: growth, sustenance and the environment. An enormous literature tells this story, with different mixes of the three dimensions, different perspectives (local, national, regional or global) and different thematic emphases.

[3] I thank one of the anonymous reviewers for drawing my attention to this issue.

What strikes immediately any reader of this literature is its terminological profusion and ambiguity. Energy security clearly means many different things to different authors and actors, and even at times to the same author or actor. A comprehensive enumeration of all the meanings associated with energy security in policy and academic documents would take considerable space and would not be significant in itself. It is not surprising that lay actors use academic concepts such as 'security' very loosely. It is also not uncommon to find that the meaning of these concepts mutates, multiplies or remains perpetually indefinite, yet they still retain explanatory and practical purchase in the contexts in which they operate. Such diversity is analytically significant because it points out the lack of precise categorical and political boundaries to delineate energy security. Frequent terminological substitutions – oil instead of energy, geopolitics instead of security – further undermine these boundaries, and thus the meaning of energy security is never explicated by the definitions provided above. Major pieces of legislation fail to provide any definition,[4] as do many interventions dedicated to answering the question, what does energy security mean? (Egenhofer et al., 2006; Gallis, 2006; Luft, 2007; Mallaby, 2006; Noël, 2008; Shell USA, 2008a; Yergin, 2006b). Instead, energy security acquires meaning through a series of assumptions regarding the linkage between growth, sustenance and the environment.

To explicate this, attention must be drawn to several nodal points in the literature on energy security. These nodal points reflect categorical controversies – for example, concerning which resources and activities are included in energy security – and political and normative disputes regarding the 'essence' of international politics, the hierarchy of the three central dimensions of energy security, and desirable or optimal policies.

Naturally, Table I simplifies this complex literature, because not all combinations are possible, and there are many instances where political and analytical perspectives bridge between options that appear exclusive in the table – as illustrated, for example, by the argument that energy security has both economic and 'geopolitical' dimensions (Monaghan, 2005: 2; Lieber, 1992).

Yet, the most striking result of this survey is how little it actually tells us about energy security itself as a category of politics and analysis. We can see that energy security reflects the constant and multifaceted interaction between the domestic and the international. However, the apparently straightforward definition of energy security is constantly disintegrated and reconstituted in alternative forms that occupy only particular niches (e.g. security of supply, oil security) and render different geographies of security: global or national, and resource-rich or resource-barren. Thus, the definition of energy security can be shaped by different assumptions concerning the logics of international politics or global trade, leading to significantly different policies focused on

[4] See, for example, the USA's Energy Independence and Security Act of 2007 and its Food and Energy Security Act of the same year.

Table I: Energy Security – Key Debates

Node	Key debate	Story
Focus	Oil (gas)	Energy security means dependable access to cheap oil – and, only recently, gas.
	Energy sector	Includes oil, gas, coal, nuclear power and renewable resources; extraction, distribution; infrastructure, markets.
Availability thesis	Depletion	Oil and gas are running out. Depletion is not compensated by the discovery of new deposits.
	Sufficiency	Existing resources are sufficient; technological innovation will optimize extraction, the discovery of new deposits and the development of alternative sources.
Historical trend	Continuity	An ongoing, accelerating and worsening trend. States cope in familiar ways.
	Radical shift	Demand for energy is growing at an unprecedented rate, which requires radical new measures.
Context	States	Energy affects state capacity and relations between states.
	Global environment	Existing patterns of energy consumption affect negatively the environment and global economic cycles.
Framework	Geopolitics	Energy is vital for state survival and can be used to hurt other states.
	Economics	The politicization of energy leads to suboptimal solutions and worsens scarcity.
Economic logic	Resource nationalism	Scarcity induces resource nationalism.
	Market liberalization	Market failure produces resource scarcity; functioning energy markets attenuate scarcity and vulnerability.
Outcome	Confrontation	Resource scarcity will lead to conflicts over energy sources, transportation corridors and infrastructures.
	Cooperation	Energy problems require cooperative solutions for managing existing resources, discovering new ones and developing alternative sources.
Optimal solution	Independence	Potential disruptions of energy supply create economic, political and security vulnerabilities. Energy independence is the only way to avoid them.
	Interdependence	Energy independence is impossible. Interdependence is the underlying condition of the energy sector: producer–producer, consumer–producer and consumer–consumer.

global markets, national sufficiency or control of supply. At the same time, however, different takes on energy can be similar in their understanding of security, which suggests that energy either demands or is modulated by 'resident' concepts of security. For example, the relationship between energy security and resource nationalism is the product of a particular definition of security – statist, survivalist, exclusionary – that need not be explained, because resource nationalism is a contextual derivative of a certain understanding of anarchy: conflictual, non-cooperative and dangerous.

The point, however, is not to dismiss particular ways of framing energy security as conceptually inaccurate or politically fuzzy. Energy security poses a different kind of challenge to security theory. The multiple, ambiguous and contradictory formulations of energy security highlight dramatically the problematic relationship between the theory and practice of security, calling into question both their separation and the usually assumed primacy of theoretical constructs over colloquial usage (Ciută, 2009). Asking policymakers to use the 'right' concept is both impractical and pointless, because, as will be demonstrated below, they already use concepts of energy security in some form – often imported from academic vocabulary – and the selection of the 'right' concept of security appears a normative rather than an analytical choice. The task is therefore to distinguish between different concepts and logics of energy security, and to investigate their potent political and normative consequences.

Energy, Geopolitics and the Logic of War

Even casual observers will be familiar with the argument that energy is a security issue because it is either a cause or an instrument of war or conflict. Two different strands converge in this logic of energy security. The first strand focuses on energy as an instrument: energy is what states fight their current wars *with*. We can find here arguments regarding the use of the 'energy weapon' by supplier states (Belkin, 2007: 4; Lugar, 2006: 3; Winstone, Bolton & Gore, 2007: 1; Yergin, 2006a: 75); direct substitutions in which energy is viewed as the 'equivalent of nuclear weapons' (Morse & Richard, 2002: 2); and rhetorical associations that establish policy associations, as exemplified by the panel 'Guns and Gas' during the Transatlantic Conference of the Bucharest NATO Summit.[5] The second strand comes from the literature on resource wars, defined as 'hot conflicts triggered by a struggle to grab valuable resources' (Victor, 2007: 1). Energy is seen as a primary cause of great-power conflicts over scarce energy resources (Hamon & Dupuy, 2008; Klare, 2001, 2008). Alternatively, energy is seen as a secondary cause of conflict; here, research has focused on the dynamics through which resource scarcity in general and energy scarcity in particular generate socio-economic, political and environmental conditions such as population movements, internal strife, secessionism and desertification, which cause or accelerate both interstate and intrastate conflict (Homer-Dixon, 1991, 1994, 2008; Solana, 2008; see also Dalby, 2004).

As is immediately apparent, this logic draws on a classic formulation that

[5] For details, see http://www.gmfus.org/bucharestconference/session_gunsandgas.html (accessed 10 December 2009).

states that 'a nation is secure to the extent to which it is not in danger of having to sacrifice core values, if it wishes to avoid war, and is able . . . to maintain them by victory in such a war' (Lippmann, 1943: 51). The underlying principle of this security logic is *survival*: not only surviving war, but also a generalized quasi-Darwinian logic of survival that produces wars *over* energy that are fought *with* 'energy weapons'. At work in this framing of the energy domain is therefore a definition of security as 'the absence of threat to acquired values' (Wolfers, 1952: 485), more recently reformulated as 'survival in the face of existential threats' (Buzan, Wæver & de Wilde, 1998: 27). The defining parameters of this traditional security logic are therefore: (1) an understanding of security focused on the use of force, war and conflict (Walt, 1991: 212; Freedman, 1998: 48); and (2) a focus on states as the subjects and objects of energy security.

In the war logic, energy security is derivative of patterns of international politics – often captured under the label 'geopolitics' (Aalto & Westphal, 2007: 3) – that lend their supposedly perennial attributes to the domain of energy (Barnes, Jaffe & Morse, 2004; Jaffe & Manning, 1998). The struggle for energy is thus subsumed under the 'normal' competition for power, survival, land, valuable materials or markets (Leverett & Noël, 2007). A key effect of this logic is to 'arrest' issues usually not associated with war, and thus erase their distinctive characteristics. Even the significance of energy qua energy is abolished by the implacable grammar of conflict: energy becomes a resource like any other, which matters insofar as it affects the distribution of capabilities in the international system. As a result, a series of transpositions affect most of the issues ranked high on the energy security agenda. For example, in the European context, the problem is not necessarily energy (or, more precisely, gas, to avoid the typical reduction performed by such accounts). The problem lies in the 'geopolitical interests' of Russia and other supplier states, whose strength becomes inherently threatening (Burrows & Treverton, 2007; Horsley, 2006). Energy security policies become entirely euphemistic, as illustrated for example by statements that equate 'avoiding energy isolation' with 'beating Russia' (Baran, 2007).

Such 'geopolitical' understanding of international politics also habituates a distinct vocabulary. Public documents, media reports and academic analyses of energy security are suffused with references to weapons, battles, attack, fear, ransom, blackmail, dominance, superpowers, victims and losers. It is therefore unsurprising that this logic is coterminous with the widely circulating narrative of the 'new' Cold War.[6] This lexicon of conflict encourages modulations, reductions and transpositions in the meanings of both energy and security. This is evident at the most fundamental level, structuring encyclopaedic

[6] See Ciută & Klinke (n.d.). Interestingly, during the Cold War, the vulnerability of NATO allies to potential disruptions of energy supply from the Soviet Union (Nye, 1982: 129) did not lead to calls for an 'energy Article 5' in the way that it did recently (Lugar, 2006).

entries (Kohl, 2004) and key policy documents (White House, 2007), where energy security becomes oil security (security modulates energy into oil), which becomes oil geopolitics (oil modulates security into geopolitics). Once security is understood in the grammar of conflict, the complexity of energy is abolished and reduced to the possession of oilfields or gas pipelines.

The effect of this modulation is to habituate the war logic of security, and also to create a hierarchy between the three constitutive dimensions of energy security (growth, sustenance and the environment). This hierarchy reflects and at the same time embeds the dominant effect of the war logic, which is the militarization of energy (Russell & Moran, 2008), an argument reminiscent of the debates surrounding the securitization of the environment (Deudney, 1990). It is of course debatable whether this is a new phenomenon. Talk of oil wars has been the subject of prestigious conferences and conspiracy theories alike, and makes the headlines of newspapers around the world. A significant literature has long focused on the relationship between US foreign policy, oil and war (Stokes, 2007; in contrast, see Nye, 1982). The pertinence of this argument cannot be evaluated in this short space, but it is worth noting that it too reduces energy to oil, and in/security to war.

The key point is that this logic changes not only the vocabulary of energy security but also its political rationality. As Victor (2008: 9) puts it, this signals 'the arrival of military planning to the problem of natural resources' and inspires 'a logic of hardening, securing and protecting' in the entire domain of energy. There is, it must be underlined, some resistance to the pull of the logic of war, as attested for example by NATO's insistence that its focus on energy security 'will not trigger a classical military response' (De Hoop Scheffer, 2008: 2). Yet, the same NATO official claims that 'the global competition for energy and natural resources will re-define the relationship between security and economics', which hints not only at the potential militarization of energy security policy but also at the hierarchies this will inevitably create.[7] New geographies of insecurity will thus emerge if the relationship between the environment, sustenance and growth is structured by the militarized pursuit of energy (Campbell, 2005: 952; Christophe Paillard in Luft & Paillard, 2007).

Energy Security and the Logic of Subsistence

Although the power and pull of the war logic cannot be underestimated, the definition quoted above – 'reliable and adequate supply of energy at reasonable prices' – enables an alternative understanding of energy security. Key to this understanding is the fact that energy is required for the running of all societies, states, armies and economies. Two dimensions converge towards

[7] The pull of the war logic can be glimpsed in recent EU documents, where normally scrupulous references to 'the security of energy supply' slip into 'geopolitical security' (European Union, 2007: 18).

the defining principle of this paradigm, subsistence: *everyone* needs energy; and 'energy' means different things to different actors. The shift between the two logics is best reflected by the characterization of energy security as a goal of public policy (Bielecki, 2002: 235). The need for energy is not driven by the imperative to survive, but by the functional demands of various sectors of activity, which means that its absence does not lead to extinction, but to dysfunction. Since energy is a public good rather than a multiplier of state capability, its 'securityness' is derived from its exposure to various strong influences (US–China Economic and Security Review Commission, 2008: 186). Such influences – for which the labels 'risk', 'challenge' or 'threat' are used interchangeably – vary from market failures and price volatility to investment risks, network disruptions and import dependency (Bird, 2007; Gault, 2004; Kohl, 2004). In essence, the logic of subsistence has two key characteristics: segregation and multiplication.

First, the domain of energy security is dispersed and segregated, coagulating intermittently and differently around different issues, political modes, areas of activity or geographical contexts. If the war logic constantly modulates energy into quanta of oil/gas, the subsistence logic of energy security is a complexity model with interlocking segments and levels of interaction. The segregation of energy is visible in three aspects: (1) the type of energy resource: for example, nuclear power, renewables or fossil fuel; (2) the sectors of activity: for example, extraction, transport or distribution; and (3) the type of actors: producers, disruptors, suppliers, 'wardens', consumers, distributors, buyers, sellers, and so on. Among these aspects, the most publicly visible is undoubtedly the segregation and specialization of energy security policies. In the European context, the vast majority of formulations focus on the security of energy *supply* (European Union, 2007; UK Department of Trade & Industry, 2007). In contrast, we can encounter increasingly often different formulations that refer to the security of *demand* (El-Badri, 2008; G-8, 2006; TNK-BP, 2006). Debates surrounding the potential participation of NATO in energy security refer most often to the security of energy *infrastructure* (Cornell, 2007; Clarke, 2007; Gallis, 2006; Shea, 2006). Corporate actors often focus on *supply-chain* security (Kain, 2007; Lightburn, 2007), and it is also possible to identify formulations of energy security with an almost exclusively environmental focus (UK Department of Trade & Industry, 2007; White House, 2006, 2008).

The second characteristic of the logic of subsistence is the multiplication of actors involved in energy security, including securitization actors, referent objects, experts, policymakers and domain regulators. This is unsurprising, given the stake that national governments, international organizations, lobby groups, NGOs, civic movements and businesses have in the domain of energy (hence a terminological shift that sees them as 'stakeholders' rather than actors). States remain key actors even when not directly involved in securitization, especially through their regulative initiatives. Itself an effect

of the complexity of energy, this multiplication of actors produces its own effects. In addition to reinforcing the fragmentation of energy, the presence of different actors with different interests also creates strong pushes and pulls on all energy security policies – although the nature of actors is not directly related to their policy preferences, since similar actors (e.g. governments) can pursue different policies (e.g. energy independence or diversification of supply), and different actors can have similar policy preferences. What is significant in this respect is the relative positions of power of these actors, which they use to securitize energy in ways that generate preferred policy outputs. This is reflected, for example, in governmental reductions of energy to oil (White House, 2007); lobbying either for (Shell USA, 2008b; US Chamber of Commerce, 2007: 16) or against (Woolsey, Lovins & Lovins, 2002) oil and gas drilling in 'off limits' areas; or preferences for particular mixes of fossil fuels, nuclear energy and renewables in national energy policies (Winstone, Bolton & Gore, 2007). These policy preferences also signal the hierarchies that govern the interaction between the local and the global (global warming versus cold homes versus human security), and broad political orientations (domestic deregulatory versus global regulatory).

Paradoxically, therefore, the logic of subsistence draws on the general need for energy and the linkages between various sectors of activity this creates, in order to constantly disintegrate energy into different elements, isolating where necessary sector-specific dynamics – for example, the impact of energy consumption patterns on the environment, the domestic political effects of energy shortages or the impact of terrorist attacks on energy infrastructure. In concert with the proliferation of securitizing and functional actors, this segregation of energy produces contextual mutations in the logic of subsistence, which is continuously re/constituted by the hierarchical relationship between the three dimensions of energy: the environment, sustenance and growth.

Energy security is therefore not uniformly structured in the logic of subsistence. Different actors invest to varying degrees political, economic or environmental issues into energy security, and attach different policy instruments to it. While the framing of energy as a public good introduces in the domain of energy security modes of interaction that favour and reward cooperation, some policies still lend themselves to aggressive and even military pursuit. For example, qualified definitions of energy security depart from the leitmotifs of affordability and sustainability, focusing on 'the availability of energy to those who are *willing* to pay the market price' (Noël, 2008; emphasis added). While such an understanding of energy security invites market-based solutions and is very circumspect towards the militarization of energy, it includes the eventuality that some might not be *willing* to pay market prices and as a result could (and, some say, should) adopt 'a confrontation strategy with the oil producers rather than agreeing to a worldwide oil price' (Miller, 1977: 121). Similarly, defining energy security as 'assurance of sufficient energy

supplies to permit the national economy to function in a politically *acceptable* manner' (Mason Willrich, quoted in Miller, 1977: 119; emphasis added) establishes a very visible priority of economic growth over the environment, encourages a national rather than a global perspective, and leaves undefined the profoundly ethical and political issue of 'acceptability' and what happens when prices are deemed unacceptable. Even market-based solutions for the 'security of the oil trade' (Mitchell, 2002: 265) can require military instruments (for example, in order to 'open the energy market'), which can at times be presented as being superior to market alternatives (Leiby, 2007: 15–21).

What, then, does this mean in terms of the contextual formulations of the concept of security? The fact that cold homes and desertification coexist with war on the security agenda confirms both the irreversible broadening of the concept of security and its mobilizing power. Yet, it would be misleading to inscribe the logic of subsistence in the neoclassical sectoral approach, reducing the constituent dimensions of energy (sustenance, growth, the environment) to the familiar politico-military, economic and environmental sectors. While both the multiplication of actors and the multidimensional nature of energy would appear to invite something close to a sectoral reading of energy security – along the lines drawn by Buzan, Wæver & de Wilde (1998) – the subsistence logic of energy security is distinctive in that it is not based on the principle of survival. What security means is no longer to survive, and not even the absence of threats. All the elements of the (neo)traditional definitions of security as 'survival in the face of existential threats' – referent objects, threats and exceptional, usually military, measures – mutate under the influence of the polyvalence of energy. This does not mean that going to war is not a policy compatible with this logic of energy security. This remains a potentiality. Rather, it means that energy security policies remain non-specific as *security* policies. If market failure is the key problem for energy security, then the solution is the application of generic policies designed to improve market functionality. Similarly, if terrorist attacks against energy infrastructure are the problem, then energy security policy is not about energy but about terrorism (Kohl, 2004: 205). There is little *specific* about hardening energy-sector infrastructure (Hain, 2002).

To sum up, the characteristics of the subsistence logic of energy security are (a) the principle of subsistence replaces that of survival; (b) the segregation of energy; (c) the multiplication of actors; and (d) the indeterminate pull towards non-specific energy security policies determined by the hierarchy between the dimensions of the environment, growth and sustenance. Of these, the most important is the distinct *logic* of security, because (b) and (c) are shared by other views of security.

Total Energy Security: Towards Banal Security?

Two characteristics mark the transition towards the third logic of energy security: the totality and reflexivity of energy. The totality of energy is inherent in its three key dimensions of growth, the environment and sustenance: energy affects everything, everything affects energy, and, ultimately, everything *is* energy.[8] Frequently quoted in the descriptions of its causalities – or, better said, in the description of the causes of *in*security – the reflexivity of energy security draws on the fact that the intersection of the three dimensions makes energy a security problem because of our own actions, rather than, for example, the actions of some threatening actor. To paraphrase Rasmussen (2001: 290), when faced with the problem of energy, we are facing ourselves.

At first glance, to state that energy 'pervades every aspect of life' (Ocheltree, 2008: 1) is commonsensical and seems unproblematic in security terms. On closer investigation, however, this view of energy has significant consequences. In the most immediate sense, energy modulates security by taking it *everywhere*, simply because energy is everywhere. This assertion alone – 'security is everywhere' – will startle students and practitioners of security, because it challenges one of their most fundamental assumptions: that security has precise boundaries that make it a *domain reservé* of specialist knowledge and practice (Bigo, 1998; Ciută, 2009).

But, what precisely does it mean that energy security is everywhere? To quote one proponent of this view, 'energy security needs to be extended to the safety of the whole infrastructure and supply chain – recognizing the vulnerabilities that come from terrorism, war, brigandage, and natural disasters' (Yergin, 2006b: 1). In conceptual terms, this statement identifies an 'infinite number of targets' (Kain, 2007) that are subject to an infinite number of vulnerabilities. Energy security means the *security of everything*: resources, production plants, transportation networks, distribution outlets and even consumption patterns; *everywhere*: oilfields, pipelines, power plants, gas stations, homes; *against everything*: resource depletion, global warming, terrorism, 'them' and ourselves. At its maximum, this logic invests every single object of any kind with and in security. At least potentially, the result is a panoptic view of security that legitimates panoptic security policies (see Bigo, 1998).

It is at this point that the totality of energy intersects and reinforces its reflexivity. Former NATO SACEUR General James L. Jones (2007: 2) might have intended to emphasize only the totality of energy when he argued that energy is 'a national security issue as well as an international and family security issue', but his statement draws attention to the potential of energy security to percolate down through to the most minute, banal and intimate aspects of our lives. Families are not only affected by energy security, but

[8] As an example of the multidimensionality of security, the six volumes of the *Elsevier Encyclopedia for Energy* include almost 400 chapters and about 5,000 pages.

also produce energy insecurity – through consumption patterns, for example (Campbell, 2005) – and they can be security providers by the same means. The multiplication of actors signalled by the previous logic is thus pushed to the maximum, because *all* the myriad of actual and potential actors acquire simultaneously *all* possible security roles: they are at the same time referent objects, subjects, threats, vectors and agents of security. Thus, the call to broaden security becomes realized in paroxysmic manner. To paraphrase Dillon & Reid (2001: 58), energy security becomes 'omnidirectional, omnisensorial, omniversal'.

The question is whether this understanding of energy security reflects a *distinct* concept of security, and also whether there is actually anything new about it. Totality is not an attribute uniquely characteristic of energy. Dillon & Reid's (2001) insightful analysis of the impact of the digital revolution on security suggests some parallels with the total logic of energy security, derived primarily from the similarity of information and energy as prime movers. Likewise, reflexivity is not uniquely characteristic of energy security. Numerous analyses have drawn attention to the reflexive (and total) nature of environmental security. While this suggests that energy is not unique, it also indicates the structural mutation of traditional and neo-traditional concepts of security, which are subverted by the dimming contours of threats and the blurred distinction between threatening actors and referent objects. The similarities between energy, information and the environment – and perhaps also food and water, which are also driven by environmental dynamics – point toward the emergence of a new, distinctive logic of security.

In order to illustrate this, it is necessary to refer briefly to the burgeoning literature centred on the concept of risk.[9] I am not arguing that the study of energy security must replace the category of security with that of risk; the academic risk literature gives next to no attention to energy security. Nor do I imply that this literature is unified by a single concept of risk. Yet, this literature captures some broad dynamics that can shed light on the way we think about energy security as an intelligible category.

As anticipated, the starting point is that the reflexive and total nature of energy portends broader patterns in contemporary societies – particularly 'risk societies', as Beck (1992) defines them. Risk, Beck (1992: 21) argued, is 'a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself'. While Beck's is not the only way of understanding risk, it is suggestive because it points directly at the key elements of the total energy security logic. Thus, one defining characteristic of risk society is that 'under the roof of modernization risks, perpetrator and victim sooner or later become identical' (Beck, 1992: 38). Moreover, Beck (1992: 33) notes the

[9] Neither the broader literature on risk nor its presence in security studies and international relations can be comprehensively discussed here. Recent useful summaries can be found in Aradau, Lobo-Guerrero & Van Munster (2008) and Elbe (2008).

amalgamation 'of agents and conditions, reactions and counter-reactions', an observation parallel to that concerning the overlap between the subjects and objects of energy security. In addition, Beck (1992: 199) also draws attention to the escalating proliferation of security actors and agents, and in particular to the fact that 'the mass media and the scientific and legal professions in charge of defining risks become key social and political positions' (Beck, 1992: 23; see also Beck, 2002: 45).

Risk is not relevant to the study of energy security only in this sense. It is not unusual to come across perspectives on energy security policy constructed deliberately around the category of risk by various categories of practitioners – who are very much ahead of academics on this score. Particularly in the insurance industry, the analysis of energy security is suffused with the vocabulary of risk (Kain, 2007; Kernan, 2006; Lightburn, 2007; Westminster Energy Forum, 2006b). However, the majority of these engagements with energy security understand risk in a different manner. If a concept can be traced in their formulation, it is probably closer to François Ewald's 'neologism of insurance' (see Elbe, 2008: 185–189). Perhaps unavoidably, the interests of this type of interlocutor lie neither in energy security itself nor in risk itself, but rather in the possibility of insuring this risk, no matter what security or risk mean. In this sense, insurance is simply 'a technology for managing risk' (Baker & Simon, 2002: 8), rather than a policy designed to provide either energy or security. Consequently, as Dillon (2008: 314) argues, the practices of the insurance industry are symptomatic of an emergent 'biopolitics of security' whose 'epistemic object' is contingency (see also Elbe, 2008: 189–194). In this reading, risk 'operates as an assemblage of mechanisms for measuring and commodifying exposure to contingency' (Dillon, 2008: 310).

To reiterate, the issue here is neither identifying correctly the risks to energy security nor deciding whether insurance is the best way of dealing with them. Rather, it is to observe the mutual modulations of energy/security and their effects on the meaning of security. Up to this point, we noted that the totality and reflexivity of energy are transferred onto security predominantly through the vector of risk. Another noticeable effect is the arrival of biological terminology in the vocabulary of security, where energy is synonymous with 'blood', and oil is the 'lifeblood' of society (Cleveland & Kaufmann, 2003: 488). But, does the securitization of energy in this logic remove the hierarchies that bound sustenance, the environment and growth, mashing them up indistinguishably in the shape of insurance products? Does security really mean something else? Not according to Dillon (2008: 328), for whom 'the subject of risk-based securities is also preoccupied with survival'. His conclusion is perhaps inherent in the Foucauldian-inspired understanding that the biopolitics of security take 'life as their referent object' (Dillon, 2008: 310).

In order to decide whether a new meaning of security has emerged, we must ask an even stronger question. Does security still mean anything at all,

if indeed security is everywhere and in everything – as it must be according to the total logic of energy security? Is total energy security a banal kind of security? Is this the end of security, as the naysayers of the broad security agenda warned us? (And a banal death it would be indeed, since it went unnoticed in the torrent of news about the geopolitics of oil.) Emphatically, my answer is no. Total energy does take security everywhere, but this does not empty security of its meaning. Energy hooks itself on particular meanings of security, which it then takes everywhere. The key is that security can take different meanings. Only once this taboo of security studies is overcome can we fully grasp the modulation of energy and security.

As always, there is some good news about this, and then there is some bad news too. Also as always, it is perhaps better to start with the bad news. The bad news is that, as we have seen in the war logic, energy can attach itself to a conflictual understanding of security, which it takes everywhere owing to its total and reflexive nature. If, as Lovins & Lovins argue ([1982] 2001: 10), 'threats to national security are expressed through the energy system', the result is as inevitable as it is alarming: to draw again on the analogy between energy and information, energy security assimilates 'the principle of war . . . into the very weft and warp of the socio-economic and cultural networks' (Dillon & Reid, 2001: 42). The totality of energy makes war total in scope and paroxysmic in intensity, so energy security becomes the node where the quasi-Darwinian scramble for resources, the Clausewitzian logic of total war and the Schmittian inescapable politics of enmity meet. From this point of view, the issue is not the banalization of security, but rather the banalization of war. Yet, energy security need not prompt only despair. The good news is that energy can potentially attach itself to any definition of security. Cooperative and non-conflictual understandings of security can also be carried by energy in all spheres of activity, so neither the militarization of energy nor its survivalist principle is inevitable. Energy is not, in this sense, the problem: the problem is that of formulating different concepts of security and creating contexts where these can acquire legitimacy and political grip – and as a result could also arrest issues other than energy.

Conclusion

Although space does not permit a detailed analysis of the pathologies of energy security policy, the argument developed above illustrates the effects of the securitization of energy on energy policies. Understanding these effects requires not just a cartography of pipeline politics, but also a consideration of the manner in which different actors, assumptions about international relations, political and normative hierarchies, and policy vernaculars cluster around distinct logics of energy security. In turn, the emergence of these

variable and sometimes diffuse logics becomes a puzzle for security theory in general, because it seems to run against the disciplinary quest to establish peremptorily the 'essence' of security.

In this sense, the lack of conceptual debate on energy security is all the more puzzling. No easy fit can be found between energy and existing security theories, precisely because the attempt to find such a fit destabilizes the conceptual scaffolding of these theories. As we have seen above, for example, the apparent fit between energy and the traditional approach to security undermines terminally the first principle of this approach, namely, the strict boundaries of the concept and practice of security. Energy security is formulated in patterns that contain jagged fragments and distorted residues of the elements thought essential to many different definitions of security – either survival and existential threats, or emancipation, exception, and distinctions between friend and foe. As a consequence, energy displaces, reshapes and remodulates the definitions of security embedded in these theoretical approaches.

In turn, this reinforces a continuing devaluation of security signifiers, visible in the incessant circulation of energy security discourses via lay channels – media, business reports or blogs – and in the rapid multiplication of the actors and spheres of activity that fall under the umbrella of 'security'. In other words, energy apparently confirms that 'security' may still have power but does not need to have an obvious meaning. Security is not present in 'energy security' in order to explicate what is security-ish about energy, but as a result of a reflex that only seems to confirm both its power and its meaninglessness. Even the absence of conceptual debate on energy security could confirm this inflationary tendency. We may simply not care anymore whether energy is really a security issue, or whether it is wise to put it on the security agenda. Theoretically speaking, the totality of energy may make security total, but not before it makes it banal, a redundant empty signifier.

Whether it is a good thing or not cannot be decided in these pages, but the death of security definitely seems prematurely foretold. If anything, the constant public presence of energy security demonstrates both the resilience of security and its pulling power. Yet, the potential move towards a banal or total concept of security invites serious discussion about the liminality of security as a category in-between theory and policy. Especially significant in the stories of energy security is the profound effect that lay, non-theoretical takes on energy security have on the concept of security itself. As I have tried to demonstrate above, security always *has* meaning in every context – although this may not be the meaning ascribed by a particular security theory. Ultimately, therefore, the emergence of energy security suggests that the *constant presence* of security need not signify the *intransient essence* of security. While its very liminality makes it difficult to conceptualize, energy security adds to the arguments for a contextual understanding of security that sees the (potential) variation of its meaning as a matter of theoretical

principle, and for taking seriously the participation of lay actors in the production of this meaning (Ciută, 2009). To paraphrase a particularly felicitous formulation, when it comes to energy security, security theory 'has become embodied and hides itself in public praxis' (Heelan, 1991: 226).

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References

Aalto, Pami & Kirsten Westphal, 2007. 'Introduction', in Pami Aalto, ed., *The EU–Russia Energy Dialogue: Securing Europe's Future Energy Supplies?* Aldershot: Ashgate (1–22).

Albert, Mathias, 2000. 'From Defending Borders Towards Managing Geographical Risks? Security in a Globalised World', *Geopolitics* 5(1): 57–80.

Aradau, Claudia; Luis Lobo-Guerrero & Rens van Munster, 2008. 'Security, Technologies of Risk, and the Political: Guest Editors' Introduction', *Security Dialogue* 39(2–3): 147–154.

Asia Pacific Energy Research Centre (APERC), 2003. 'Energy Security Initiative: Some Aspects of Oil Security'. Tokyo: APERC; available at http://www.ieej.or.jp/aperc/pdf/project2002/security.pdf (accessed 26 January 2009).

Baker, Tom & Jonathan Simon, 2002. 'Embracing Risk', in Tom Baker & Jonathan Simon, eds, *Embracing Risk: The Changing Culture of Insurance and Responsibility*. Chicago, IL: University of Chicago Press (1–26).

Balzacq, Thierry, 2005. 'The Three Faces of Securitization: Political Agency, Audience and Context', *European Journal of International Relations* 11(2): 171–201.

Baran, Zeyno, 2007. 'EU Energy Security: Time To End Russian Leverage', *The Washington Quarterly* 30(4): 131–144.

Barnes, Joe; Amy Myers Jaffe & Edward L. Morse, 2004. 'The Energy Dimension in Russian Global Strategy: Geopolitics of Russian Supply and US Foreign Policy', Working Paper of the James A. Baker III Institute for Public Policy, Rice University; available at http://www.bakerinstitute.org/publications/geopolitics-of-russian-supply-and-u-s-foreign-policy (accessed 10 March 2008).

Beck, Ulrich, 1992. *Risk Society: Towards a New Modernity*. London: Sage.

Beck, Ulrich, 2002. 'The Terrorist Threat: World Risk Society Revisited', *Theory, Culture & Society* 19(4): 39–55.

Belkin, Paul, 2007. 'The European Union's Energy Security Challenges', Congressional Research Service Report RL33636; available at http://www.fas.org/sgp/crs/row/RL33636.pdf (accessed 10 December 2009).

Bielecki, Janusz, 2002. 'Energy Security: Is the Wolf at the Door?', *The Quarterly Review of Economics and Finance* 42(2): 235–250.

Bigo, Didier, 1998. 'Sécurité et immigration : vers une gouvernementalité par l'inquiétude?' [Security and Immigration: Towards a Critique of the Governmentality of Unease], *Cultures & Conflits* 31–32: 13–38.

Bird, Jenny, 2007. 'Energy Security in the UK', Institute for Public Policy Research Fact File. London: Institute for Public Policy Research.

Burrows, Mathew & Gregory F. Treverton, 2007. 'A Strategic View of Energy Futures',

Survival 49(3): 79–90.
Buzan, Barry; Ole Wæver & Jaap de Wilde, 1998. *Security: A Framework for Analysis*. Boulder, CO & London: Lynne Rienner.
Campbell, David, 2005. 'The Biopolitics of Security: Oil, Empire, and the Sports Utility Vehicle', *American Quarterly* 57(3): 943–972.
Ciută, Felix, 2009. 'Security and the Problem of Context: A Hermeneutical Critique of Securitization Theory', *Review of International Studies* 35(2): 301–326.
Ciută, Felix & Ian Klinke, n.d. 'A Question of Discipline: Reading the New Cold War with Critical Geopolitics', unpublished manuscript.
Clarke, Jack, 2007. 'Managing Risks to Energy Sector Critical Infrastructure', in Phillip E. Cornell, ed., *Energy Security and Security Policy: NATO and the Role of International Security Actors in Achieving Energy Security*. Oberammergau: NATO School (70–75).
Clawson, Patrick, 1998. 'Is Energy Security a Meaningful Concept?', *Defence Journal* 1 (March 1998); available at http://www.defencejournal.com/march98/energysecurity.htm (accessed 10 April 2008).
Cleveland, Cutler J. & Robert K. Kaufmann, 2003. 'Oil Supply and Oil Politics: Déjà Vu All Over Again', *Energy Policy* 31(6): 485–489.
Clingendael International Energy Programme (CIEP), 2004. *Study on Energy Supply Security and Geopolitics*, CIEP Report TREN/C1-06-2002. The Hague: CIEP.
Cornell, Phillip E., 2007. 'Conclusions', in Phillip E. Cornell, ed., *Energy Security and Security Policy: NATO and the Role of International Security Actors in Achieving Energy Security*. Oberammergau: NATO School (142–147).
Correljé, Aad & Coby van der Linde, 2006. 'Energy Supply Security and Geopolitics: A European Perspective', *Energy Policy* 34(5): 532–543.
Dalby, Simon, 2004. 'Exorcising Malthus's Ghost: Resources and Security in Global Politics', *Geopolitics* 9(1): 242–254.
De Hoop Scheffer, Jaap, 2008. 'Beyond the Bucharest Summit', speech by NATO secretary general, Brussels Forum; available at http://www.nato.int/docu/speech/2008/s080315a.html (accessed 16 March 2008).
Deudney, Daniel, 1990. 'The Case Against Linking Environmental Degradation and National Security', *Millennium: Journal of International Studies* 19(3): 461–476.
Dillon, Michael, 2008. 'Underwriting Security', *Security Dialogue* 39(2–3): 309–332.
Dillon, Michael & Julian Reid, 2001. 'Global Liberal Governance: Biopolitics, Security and War', *Millennium: Journal of International Studies* 30(1): 41–66.
Doty, Roxanne Lynn, 1998. 'Immigration and the Politics of Security', *Security Studies* 8(2): 71–93.
Egenhofer, Christian; Leonid Grigoriev, Vladimir Socor & Alan Riley, 2006. 'European Energy Security: What Should It Mean? What To Do?', European Security Forum Working Paper no. 23. Brussels: Centre for European Policy Studies; available at http://shop.ceps.eu/BookDetail.php?item_id=1392 (accessed 13 February 2008).
El-Badri, Abdalla Salem, 2008. 'Energy Security and Supply', keynote address by the OPEC secretary general at the conference 'Middle East Energy 2008', Chatham House, London, 4 February; available at http://www.opec.org/opecna/Speeches/2008/EnergySecuritySupply.htm (accessed 12 March 2008).
Elbe, Stefan, 2008. 'Risking Lives: AIDS, Security and Three Concepts of Risk', *Security Dialogue* 39(2–3): 177–198.
European Union, 2007. *An Energy Policy for Europe*, communication from the Commission to the European Council and the European Parliament, COM (2007)1.
Fierke, Karin M., 1997. 'Changing Worlds of Security', in Keith Krause & Michael C. Williams, eds, *Critical Security Studies: Concepts and Cases*. London: UCL Press (223–254).
Freedman, Lawrence, 1998. 'International Security: Changing Targets', *Foreign Policy* 110: 48–63.

G-8, 2006. 'Global Energy Security', statement of the G-8 meeting, Saint Petersburg, 16 July; available at http://en.g8russia.ru/docs/11-print.html (accessed 30 January 2008).
Gallis, Paul, 2006. 'NATO and Energy Security', Congressional Research Service Report RS22409; available at http://www.fas.org/sgp/crs/row/RS22409.pdf (accessed 10 December 2009).
Gault, John, 2004. 'EU Energy Security and the Periphery', in Ronald Dannreuther, ed., *European Union Foreign and Security Policy: Towards a Neighbourhood Strategy*. London: Routledge (170–185).
Hain, Peter, 2002. 'Energy Security', *The RUSI Journal* 147(6): 34–36.
Hamon, David W. & Arnold C. Dupuy, 2008. 'Security of Energy: The Conflict After Next?', *Strategic Insights* 7(1); available at http://www.nps.edu/Academics/centers/CCC/publications/OnlineJournal/2008/Feb/hamonFeb08.html (accessed 10 December 2009).
Hansen, Lene, 2000. 'The Little Mermaid's Silent Security Dilemma and the Absence of Gender in the Copenhagen School', *Millennium: Journal of International Studies* 29(2): 285–306.
Heelan, Patrick A., 1991. 'Hermeneutical Phenomenology and the Philosophy of Science', in Hugh J. Silverman, ed., *Gadamer and Hermeneutics*. London: Routledge (213–228).
Homer-Dixon, Thomas, 1991. 'On the Threshold: Environmental Changes as Causes of Acute Conflict', *International Security* 16(2): 76–116.
Homer-Dixon, Thomas, 1994. 'Environmental Scarcities and Violent Conflict', *International Security* 19(1): 5–40.
Homer-Dixon, Thomas, 2008. 'Straw Man in the Wind', *National Interest Online*, 1 February; available at http://www.nationalinterest.org/Article.aspx?id=16524 (accessed 14 February 2008).
Horsley, William, 2006. 'Poland Slams Russian Fuel Policy', BBC News, 19 May; available at http://news.bbc.co.uk/1/hi/world/europe/4997200.stm (accessed 29 January 2008).
Jaffe, Amy Myers & Robert A. Manning, 1998. 'The Myth of the Caspian "Great Game": The Real Geopolitics of Energy', *Survival* 40(4): 112–129.
Jones, James L., 2007. 'Energy as a Security Imperative', address at the 24th International Workshop on Global Security, Paris; available at http://www.csdr.org/2007book/jones07.htm (accessed 14 February 2008).
Kain, Andrew, 2007. 'Energy Security: The Challenges for Security and the Terrorist Advantage', presentation at the 3rd Westminster Energy Forum Annual Geopolitics of Energy Seminar, London, 1 May; available at http://www.westminsterenergy.org/Upload/2006-2008-public-events/20070503/Kain.pdf (accessed 2 March 2008).
Kernan, Peter, 2006. 'Interaction of Energy Security Risks and Credit Ratings', presentation at the Westminster Energy Forum & Royal United Services Institute conference, London, 5 April; available at http://www.westminsterenergy.org/Upload/2006-2008-public-events/marchIntEn/kernan.pdf (accessed 8 February 2009).
Klare, Michael T., 2001. 'The New Geography of Conflict', *Foreign Affairs* 80(3): 49–61.
Klare, Michael T., 2008. 'The New Geopolitics of Oil, *The Nation*, 19 May 2008.
Kohl, Wilfrid L., 2004. 'National Security and Energy', in Cutler J. Cleveland, ed., *Elsevier Encyclopaedia of Energy*. Oxford: Elsevier Academic Press (193–206).
Leiby, Paul N., 2007. 'Estimating the Energy Security Benefits of Reduced U.S. Oil Imports', Oak Ridge National Laboratory Report ORNL/TM-2007/028. Oak Ridge, TN: Oak Ridge National Laboratory.
Leverett, Flynt & Pierre Noël, 2007. 'Ahead of the Curve: The New Axis of Oil', *National Interest Online*, 13 February; available at http://www.nationalinterest.org/Article.aspx?id=13584 (accessed 14 February 2008).
Lieber, Robert J., 1992. 'Oil and Power After the Gulf War', *International Security* 17(1): 155–176.

Lightburn, Paul, 2007. 'Threats to Energy Supplies and the Supply Chain', presentation at the 3rd Westminster Energy Forum Annual Geopolitics of Energy Seminar, London, 1 May; available at http://www.westminsterenergy.org/Upload/2006-2008-public-events/20070503/Lightburn.pdf (accessed 2 March 2008).

Lippmann, Walter, 1943. *U.S. Foreign Policy: Shield of the Republic*. Boston, MA: Little, Brown & Co.

Lovins, Amory B. & L. Hunter Lovins, [1982] 2001. *Brittle Power: Energy Strategy for National Security*. Andover, MA: Brick House; available at http://www.rmi.org/rmi/Library/S82-03_BrittlePowerEnergyStrategy (accessed 18 December 2009).

Luft, Gal, 2007. 'Energy Security: What Does It Really Mean?', in Phillip E. Cornell, ed., *Energy Security and Security Policy: NATO and the Role of International Security Actors in Achieving Energy Security*. Oberammergau: NATO School (32–38).

Luft, Gal & Christophe Paillard, 2007. 'Debate: Should NATO Play a Major Role in Energy Security?', *NATO Review* 1 (Spring 2007); available at http://www.nato.int/docu/review/2007/issue1/english/debate.html (accessed 19 April 2007).

Lugar, Richard, 2006. 'Speech in Advance of NATO Summit', address to the German Marshall Fund Conference, Riga, 27 November; available at http://www.rigasummit.lv/en/id/speechin/nid/36/ (accessed 28 November 2006).

McDonald, Matt, 2008. 'Securitization and the Construction of Security', *European Journal of International Relations* 14(4): 563–587.

McSweeney, Bill, 1999. *Security, Identity and Interests: A Sociology of International Relations*. Cambridge: Cambridge University Press.

Mallaby, Sebastian, 2006. 'What "Energy Security" Really Means', *Washington Post*, 3 July.

Miller, Linda B., 1977. 'Energy, Security and Foreign Policy: A Review Essay', *International Security* 1(4): 111–123.

Mitchell, John V., 2002. 'A New Political Economy of Oil', *The Quarterly Review of Economics and Finance* 42: 251–272.

Monaghan, Andrew, 2005. 'Russian Oil and EU Energy Security', Conflict Studies Research Centre Russian Series 05/65. Swindon: Defence Academy of the United Kingdom.

Morse, Edward L. & James Richard, 2002. 'The Battle for Energy Dominance', *Foreign Affairs* 81(2): 1–9.

Noël, Pierre, 2008. 'Is Energy Security a Political, Military or Market Problem?', *Financial Times*, 17 January.

Nye, Joseph, 1982. 'Energy and Security in the 1980s', *World Politics* 35(1): 121–134.

Ocheltree, Matthew, 2008. 'Energy Issue Brief', The Levin Institute; available at http://www.globalization101.org/uploads/File/Energy/energy2009.pdf (accessed 14 April 2008).

Rasmussen, Michael Vedby, 2001. 'Reflexive Security: NATO and International Risk Society', *Millennium: Journal of International Studies* 30(2): 285–309.

Russell, James & Damien Moran, 2008. 'The Militarization of Energy Security', *Strategic Insights* 7(1); available at http://www.nps.edu/Academics/centers/ccc/publications/OnlineJournal/2008/Feb/moranFeb08.html (accessed 10 December 2009).

Shea, Jamie, 2006. 'Energy Security: NATO's Potential Role', *NATO Review* 3 (Autumn); available at http://www.nato.int/docu/review/2006/issue3/english/special1.html (accessed 29 November 2006).

Shell USA, 2008a. 'What Is Energy Security?'; available at http://www.shell.us/home/content/usa/responsible_energy/energy_for_the_future/energy_security/what_is_es/ (accessed 25 January 2009).

Shell USA, 2008b. 'A National Dialogue on Energy Security: The Shell Final Report'. Houston, TX: Shell Oil; available at http://www-static.shell.com/static/usa/downloads/energy_security/pdf/shell_final_report.pdf (accessed 25 January 2009).

Solana, Javier, 2008. 'Climate Change and International Security', paper from the High Representative and the European Commission to the European Council, S113/08;

available at http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf (accessed 10 December 2009).
Stokes, Doug, 2007. 'Blood for Oil? Global Capital, Counter-Insurgency and the Dual Logic of American Energy Security', *Review of International Studies* 33(2): 245–264 .
TNK-BP, 2006. 'Russia Formulates New Energy Security Concept', 16 May; available at http://www.tnk-bp.com/press/news/2006/5/444/ (accessed 30 December 2009).
UK Department of Trade & Industry, 2007. *Meeting the Energy Challenge: A White Paper on Energy.* London: The Stationery Office.
US Chamber of Commerce, 2007. 'Energy Security in the 21st Century: Facts, Choices, and Challenges'. Washington, DC: Institute for 21st Century Energy, US Chamber of Commerce; available at http://www.energyxxi.org/reports/Energy_Security.pdf (accessed 15 December 2009).
US–China Economic and Security Review Commission, 2008. *Annual Report to Congress of the U.S.–China Economic and Security Review Commission*. Washington, DC: US Government Printing Office; available at http://www.uscc.gov/annual_report/2007/report_to_congress.pdf (accessed 7 December 2008).
Victor, David, 2007. 'What Resource Wars?', *National Interest,* 12 November; available at http://www.nationalinterest.org/Article.aspx?id=16020 (accessed 30 December 2009).
Victor, David, 2008. 'Smoke and Mirrors', *National Interest,* 2 January; available at http://www.nationalinterest.org/Article.aspx?id=16530 (accessed 30 December 2009).
Walt, Stephen, 1991. 'The Renaissance of Security Studies', *International Studies Quarterly* 35(2): 211–239.
Wæver, Ole, 1995. 'Securitization and Desecuritization', in Ronnie D. Lipschutz, ed., *On Security*. New York: Columbia University Press (46–86).
Wæver, Ole, 1996. 'European Security Identities', *Journal of Common Market Studies* 34(1): 103–132.
Westminster Energy Forum, 2006a. *The New Energy Security Paradigm*. Geneva: Westminster Energy Forum.
Westminster Energy Forum, 2006b. 'Trends in International Energy Security: Implications for Foreign Relations, Industry and Global Markets', Conference Executive Summary, Westminster Energy Forum and Royal United Services Institute Conference, London, 5 April; available at http://www.westminsterenergy.org/previous-events-in-the-public-domain (accessed 8 February 2009).
White House, 2006. *Advanced Energy Initiative*. Washington, DC: White House National Economic Council.
White House, 2007. 'Fact Sheet: Energy Independence and Security Act of 2007', 19 December; available at http://georgewbush-whitehouse.archives.gov/news/releases/2007/12/20071219-1.html (accessed 30 December 2009).
White House, 2008. 'Factsheet: Increasing Our Energy Security and Confronting Climate Change'; available at http://useu.usmission.gov/Article.asp?ID=24873062-2BF8-454F-B7A8-902BD1976383 (accessed 30 December 2009).
Winstone, Ruth; Paul Bolton & Donna Gore, 2007. 'Energy Security', UK House of Commons Research Paper 07/42, 9 May; available at http://www.parliament.uk/commons/lib/research/rp2007/RP07-042.pdf (accessed 10 December 2009).
Wolfers, Arnold, 1952. 'National Security as an Ambiguous Symbol', *Political Science Quarterly* 67(4): 481–502.
Woolsey, R. James; Amory B. Lovins & L. Hunter Lovins, 2002. 'Energy Security: It Takes More Than Drilling', *Christian Science Monitor,* 29 March; available at http://www.csmonitor.com/2002/0329/p11s02-coop.html (accessed 10 December 2009).
Yergin, Daniel, 2006a. 'Ensuring Energy Security', *Foreign Affairs* 85(2): 69–82.
Yergin, Daniel, 2006b. 'What Does "Energy Security" Really Mean?', *Wall Street Journal*, 11 July.