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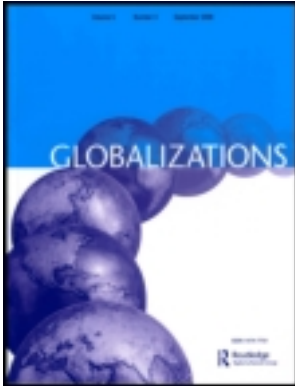
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### The Hybridization of the State-Capital Nexus in the Global Energy Order

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## The Hybridization of the State–Capital Nexus in the Global Energy Order

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**ABSTRACT** *This article theorizes the broader rearticulation of state power within the global energy order—signified by the resurgence of resource nationalism and the expansion abroad of state-owned non-Western energy corporations—alongside the persistently widening and deepening transnationalization of the global energy order. This is argued to be rooted in the broader dynamics of capital accumulation, in particular its expansive character and statist dimension. These contradictory dynamics are illustrated by empirical findings on some of the main trends of the ‘new geopolitics of oil’. The article concludes that we are moving towards a more multipolar and hybrid global energy order in which the rise of statist actors from outside the Western core is not signifying a unidirectional shift towards a statist model, let alone a ‘return of state capitalism’, but rather is generating more hybrid forms of cooperation, new alliances and dynamics and a blurring of categories.*

**Keywords:** global energy order, resource nationalism, national oil companies (NOCs), international oil companies (IOCs), corporate networks, elites, geopolitics, global governance of energy

### Introduction

When on 17 April 2012 the president of Argentina Christina Fernandez announced the nationalization of YPF-Repsol it sent shockwaves round the boardrooms of the oil industry worldwide (e.g. Pfeifer, 2012; Webber, 2012) and caused political outrage in Spain as well as condemnation elsewhere in the capitalist core countries. This event and its reception are examples of a broader trend that manifested itself around the turn of the millennium and seems to signal a crisis of the global energy order as it had existed throughout the 1980s–1990s. In those heydays of the neo-liberal era—after the fall of the Soviet Union and the opening up vast new frontiers of energy

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exploration and production as well as new markets—energy sectors globally were privatized and liberalized. Quite in contrast, the early 2000s have been marked by a resurgence of what is often called resource nationalism, that is a significant reappropriation of the extractive industry by the state in combination with renegotiations over access, and terms of contracts with foreign oil companies, in major producing regions of the world such as Latin America, Russia, and Central Asia; and the expansion and growth of state-owned energy companies with a non-OECD origin, commonly labelled National Oil Companies (NOCs), in particular the so-called ‘new consumers’ from Asia. Whereas NOCs have been owning 80–90% of the world oil reserves for decades (see e.g. Marcel, 2006; Wolf, 2009), the novelty is that since the mid-1990s the NOCs of major net-exporters (such as Venezuela and Russia) and major net-importers (such as China) are increasingly expanding beyond their national borders, directly penetrating markets that were previously Western dominated. This coincides with a general transformation of the geography of supply and demand due to the growth of the so-called BRICs (Asia in particular) and a decline of non-OPEC resources, leading to a tight market and high oil prices. All of this has put energy security centre stage of political debate and discourse and led to concerns among in particular OECD net-importers about the viability of the (neo)liberal model and the future competitiveness and interests of the International Oil Companies (IOCs), i.e. the private oil majors (e.g. Correljé and Van der Linde, 2006; Helm, 2005; Hoogeveen and Perlot, 2005; Vivoda, 2009).<sup>1</sup>

In response to these developments some authors predicted a shift towards a statist model or a general ‘return of state capitalism’ (see e.g. Bremmer, 2008, 2009); the demise of the private oil majors and the takeover of NOCs (Odell, 2006) and the outbreak of major resource wars (Klare, 2001, 2004). In contrast, the more liberal (institutionalist) approaches emphasized the interdependency of the global energy order (e.g. Yergin, 2006), and the ‘liquid, competitive and truly global market for oil’ (Goldthau and Witte, 2009, p. 3), which purportedly would make the statist and geopolitical dimension less relevant, since market mechanisms and levels of institutionalism would primarily be decisive in the distribution of supply, demand, and surpluses within the energy order. While the liberal institutionalist approaches rightly criticize the state-centric approaches for failing to address the crucial role of markets and institutions in the workings of the global energy order (*ibid.*), they—in turn—miss out on the crucial role played by states to ensure the functioning of markets and institutions. Subsequently, the liberal institutionalist approaches are unable to account for the apparent resurgence of the statist dimension, whereas the state-centric approaches fail to account for what this article will argue to be a persistent and growing transnationalization of the global energy order. This illuminates the need to re-examine the state–capital nexus of the global energy order. Clearly a transformation is taking place, but it is yet unclear precisely how, into what direction, and with which consequences.

In line with the dominant approaches above (i.e. realist state-centric and liberal institutionalist), the general approach to the transformation of the energy order is to frame it as a uni-directional shift between two discrete poles within a dichotomy, for instance a shift from market to state, from IOCs to NOCs or from the OECD to the non-OECD countries (see e.g. van der Graaf, 2008); or as a balance between two scenarios of ‘Regions and Empires’ on the one hand and ‘Markets and Institutions’ on the other (Correljé and van der Linde, 2006). The former ‘involves a world broken up in rival political and economic blocks, competing for resources and markets via political, economic and military power’, whereas the latter ‘exemplifies an economically and politically integrated, multilateral world with effective institutions and markets’ (*ibid.*, p. 532).

While certainly corresponding to a common perception in politics, business, and mainstream academic circles, these dichotomous representations are both empirically and theoretically

problematic. Seen from the critical political economy perspective adopted in this article, capitalist markets cannot exist without states and within a capitalist order both institutions are internally related (see also van Apeldoorn et al. in this issue; van Apeldoorn and Horn, 2007). The framing of a transformation of market to state—or ‘Institutions and Markets’ vs. ‘Regions and Empires’ (Correljé and van der Linde, 2006)—misses the point of their co-constitutive relations within the current capitalist order. Analysis based on a dichotomy necessarily leads astray because it fails to capture this interrelation. The concept of a state–capital nexus provides a heuristic device with which to incorporate this interrelation. The state–capital nexus here both refers to the indispensable role and function of the state with regard to capital and its accumulation and to the social relations that underpin these processes. The concept of a state–capital nexus thus also refers to (more or less concrete) configurations of social relations; in this article these are operationalized as both corporate and elite networks.

The article argues that the current transformation of the global energy order is marked by a contradictory dynamic between a persistent transnationalization process that increasingly transcends national borders on the one hand, and a re-pronunciation of state power and of territorial and national boundaries on the other. This contradiction is argued to be inherent and essential to global capital accumulation and as capital globally expands this contradiction is not transcended but continuously rearticulated. After first critically discussing some of the literature on the ‘new geopolitics of oil’, this article will theorize the contradictory dynamic mentioned above, followed by some empirical substantiation of how this is manifested in the energy sector.<sup>2</sup> It will be shown (building upon de Graaff, 2011) that the rise of the state-owned ‘contenders’ is paralleled by increasing *transnationalization* of the global oil sector, generating increased levels of global interdependency and connectedness with new hybrid alliances and coalitions of interests. Similarly, it will be addressed how the resurgence of resource nationalism today takes place in a context of widespread transnationalization and has a more pragmatic and opportunistic nature than the ‘revolutionary’ kind of resource nationalism that emerged in the late 1950s–1960s. However, it will also be shown (based on de Graaff, forthcoming) that the oil elite networks of respectively (non-Western) NOC directors and (Western) IOC directors still exhibit quite distinct patterns, showing little sign of cooperation and integration in terms of the social organization of power at the apex of the global energy order. Lastly, will be addressed how this influenced the rules of the game, i.e. global governance of energy, to conclude with a discussion on the direction that the transformation of the energy order is taking. The latter—it will be argued—cannot be seen as a unidirectional shift towards either a more state-dominated energy sector nor towards a liberalized global free market exclusively dictated by private forces, but points towards an increasingly hybrid energy order in which all kinds of statist, private, and hybrid alliances and coalitions of interests mix in the competition over resources, but which remains wedded to a system of states with distinct and at times conflicting interests and strategies and thus with an ever present geopolitical dimension underneath.

### **The New Geopolitics of Oil**

An important backdrop to the current crisis of the energy order is a structural transition characterizing the beginning of the twenty-first century, of a global shift in power towards the South, most particularly East Asia. This shift is combined with declining (economic) power and legitimacy of the US. Whereas in the 1990s and the early 2000s there was still an academic debate going on about the (dis)advantages of a unipolar world order and the Bush 43 administration actively pursued a grand strategy to establish or prolong such a world order (de Graaff and

van Apeldoorn, 2011), it has now become clear that we are moving towards a more multipolar world order in which the major emerging states of the global South—especially China—can no longer be excluded. Moreover, the growth of these countries implies a new geography of demand and supply (see also Bradshaw, 2009). The non-OECD countries now account for about 52% of global energy consumption (IEA, 2009) and over the next 25 years 90% of the projected growth in global energy will come from the non-OECD economies according to the IEA (2011). Thus there is a new dynamic within the global oil market related to these major ‘new consumers’, putting strain on existing world supplies, subsequently driving up the oil price and also, of course, increasing competition over those supplies.

Indeed the resurgence of ‘resource nationalism’ is to a large extent related to the rise of new growth centres within the global political economy and to the concomitant rise of oil prices. The latter is generally understood to lead to increased assertiveness and autonomy of the major resource holders. Indeed, in most of the literature on ‘resource nationalism’ and the growing influence of non-Western NOCs, it is interpreted as a correlate or outcome of the oil price level, i.e. oil price determines the extent or presence of resource nationalism (see e.g. Bremmer and Johnston, 2009; Vivoda, 2009; Wälde, 2008). An underlying dynamic that is often referred to is the so-called ‘obsolescing bargain’, first defined by Vernon (1971). In this model conflicts over access and production of resources between host states (in this case resource owners) and TNCs (in this case foreign oil companies) are structured as a bargain initially favouring the TNC, but once oil is discovered and the investment ‘sunk’ in development, shifting bargaining power to the host state which subsequently imposes tougher conditions (i.e. higher taxes or asset expropriation) and hence the original bargain obsolesces (see Vivoda, 2009; also Stevens, 2008). While it has been largely questioned to what extent the ‘bargain’ for TNCs actually ever ‘obsolesced’, since in particular the 1980s–1990s were very favourable to TNCs and FDI, the current resurgence of resource nationalism has been seen as a revival of the obsolescing bargain (e.g. Vivoda, 2009). Oil price clearly plays a role since it empowers resource holders; there are, however, other important factors that drive and shape resource nationalism, more generally resource nationalism cannot be reduced to a purely economic law like dynamic, but springs from, and is subjected to, social forces and dynamics and (as the name suggests) is inherently political, thus needs to be related to agency.

Stevens offers a more sophisticated analysis of what he identifies to be two waves of resource nationalism, showing how price is but one—even if important—driver of resource nationalism and advances as another dimension the state of ideology with regard to ‘the perceived role of the state in the operation of the national economy’ which according to him ‘contributes to a cyclical appearance to the phenomenon’ (2008, p. 6; see also Wilson III, 1987). Lacking from Stevens’s account, however, is an explanation of why what he labels the ‘ideology of state intervention’ changes. While rightly pointing to the importance of ideological drivers he doesn’t connect these to the ‘material drivers’ he identifies. This, I argue, can be done when the phenomenon of resource nationalism (and more generally the prevailing ideology with respect to state intervention) is located in (global) capital accumulation processes and its constitutive social relations, including the crucial role of the state. Prevailing ideologies, and the changes they are subject to, are not just naturally occurring phenomena, but produced by agency in particular social contexts. Hence, we need a framework of understanding that includes these elements.

Labban (2008) from an economic geography perspective includes the dynamics of capital accumulation in his analysis of the extractive sector, i.e. the upstream sector of the oil industry. In his insightful account he conceptualizes this as struggle over the differential appropriation of the surplus profit between two rivalling fractions of capital, namely ‘landed capital’ and

‘extractive capital’, and subsequently argues that this dynamic is translated into a dialectic of geographical fragmentation and integration. The struggle relates in particular to the appropriation of ground rent and the ‘organization of scarcity’. The argument with respect to the latter is that in contrast to Malthusian resource scarcity assumptions about geological constraints on natural resource supplies—and although there is finiteness to non-renewable resources per definition—scarcity *is in first instance organized socially* (see Bridge and Wood, 2010; Labban, 2008).

The organization of scarcity demands a precarious balancing between oversupply and undersupply because in both cases the result will eventually be falling prices.<sup>3</sup> The main challenge for oil producers is to control the flow of capital going into production (see Labban, 2008), but while they thereby are in control of the organization of scarcity, the producer (landowner) *needs* productive capital in order to make the land (i.e. its minerals) economically valuable in the first place. Without productive capital (including of course the application of human labour to work the land, extract the resources), land will remain nature and the resources will remain underground. ‘Landed capital’ as Labban calls it, is thus dependent upon ‘extractive capital’ (ibid.). Conversely, extractive capital depends on landed capital. First of all, to be provided access under terms that will allow for profitable production of the land (or its resources). Secondly, to be provided *exclusive* access, i.e. to restrict the access of others, since this generates differential (surplus) profit for them (as it does for landed capital). In this balancing act between over- and undersupply (the organization of scarcity) landed capital and extractive capital thus have common interests, but at the same time they also have to negotiate their conflicting interests which are related to ground rent.<sup>4</sup>

However eloquent it is in capturing the upstream dynamic, Labban’s framework is not sufficient to address the research problem of this article on the nature and explanation of the transforming state–capital nexus in the global energy order. First of all because the industry is broader than the upstream (exploration and production) sector alone; including also a mid-stream (transportation) and downstream (refining, marketing, retail, etc.) sector. Secondly, the proposition advanced in this article, about an increasing transnational dimension and the concomitant hybridization of energy relations and increased shared interdependencies makes categories as landed capital and extractive capital less useful as analytical categories. A national oil company—as Labban himself also argues—combines these two ‘roles’ (2008, p. 41). Moreover, an important new category of NOCs are resource-seeking NOCs, these might thus be seen as extractive capital but are still quite distinct from the IOCs in that they are state-owned. Indeed, given the ongoing transnationalization of the global energy order, the organization of scarcity entails an expanding range of increasingly influential factors and actors (such as financial speculation, the transnationalization of the legal profession and of international corporate law) that cannot be captured by the dynamic of landed vs extractive capital.

The next section theorizes the persistent trend of *transnationalization* and the ongoing crucial relevance of *national borders* and *conceptions of territorially bounded power*, argued to be underlying the transformation of the state–capital nexus in the global energy order. This requires first of all an understanding of the expansionist character of the global capital accumulation process and its inherent contradictory tendencies, which—following Harvey—is interpreted as ‘spatial fixes’ to (pending) crises of over-accumulation (Harvey, 1985, 2006). But whereas Harvey incisively exposes the value-theoretical (economic) dimensions of these dynamics, he is less elaborate on the extra-economic dimensions (see Jessop, 2007, pp. 9–13), in particular the statist dimension.

### Dynamics of the State–Capital Nexus in the Global Energy Order

First it should be mentioned that as a meta-theoretical point of departure agency and structure are seen as interrelated; while social structure is shaped and continuously reshaped by agency, it does at the same time both constrain and facilitate agency (Bhaskar, 1979). Social structure is seen as consisting of social relations at several interrelated levels of abstraction; to involve power relations; and to be inherently dynamic. The most concrete level of social relations is made up of inter-actor (i.e. inter-organizational and interpersonal) relations; the level of social structure to which I argue the network approach can be usefully applied to. As Dicken et al. put it: ‘networks are both social structures and ongoing processes, which are constituted, transformed and reproduced through asymmetrical and evolving power relations by intentional social actors and their intermediaries’ (2001, p. 105). While social relations are shaped by actors (agency), they are thus at the same time understood as social structures which cannot be reduced to the properties or actions of the individual actors. Rather, these social structures inform part of their identity and interests and both facilitate and constrain particular behaviour.

Following Barnett and Duval, I adopt a broad definition of power as: ‘the production, in and through social relations, of effects that shape the capacities of actors to determine their circumstances and fate’ (2005, p. 42). In particular its emphasis on the ‘relational’ dimension of power is of relevance for this article, i.e. the production of effects through social relations, or in other words, an *embeddedness of agency in broader social structures* (both concrete networks of social relations and deeper underlying social structures), which are partly shaped by agents, but at the same time form the pre-conditions of their agency (and thus power relation).

Building upon Harvey’s work on capital expansion (1985, 2003, 2006), this analysis emphasizes the statist dimension of global capital accumulation. As Neil Brenner (1998, 1999) has eloquently demonstrated, global capital accumulation is characterized by a continuous process of de-territorialization and reterritorialization in which the state plays a key role ‘at once as a site, medium, and agent of globalization’ (Brenner 1999, p. 41; see also Sassen, 2000). As Brenner puts it: ‘Globalization therefore entails a dialectical interplay between the endemic drive towards space-time compression under capitalism (the moment of *deterritorialization*) and the continual production of relatively fixed, provisionally stabilized configurations of territorial organization on multiple geographical scales (the moment of *reterritorialization*)’ (1999, p. 43).

I interpret this dialectical process as an ever widening and deepening of transnational (social) space, which—it should be stressed—is not to imply the demise of the national (social) space or the state but, on the contrary, is argued to be necessarily grounded in the *continued existence of spaces of territorially bounded sovereignty*. In contrast to the general trend in most IPE and globalization studies—which focuses on the growth of the transnational dimension, most often understood as at the expense of the national state—it is their *coexistence and dialectical relation* that needs to be stressed (see also van Apeldoorn, 2004). My proposition, to be elaborated below, is that this dialectical coexistence is fundamentally rooted in the contradictory dynamic of global capital accumulation, namely its endless striving to transcend geographical boundaries while at the same time requiring them for its expansion (i.e. for continued differential accumulation).

Although subject to continuous debate (see, for a recent good overview of the Marxian debate on the interstate system and capital, Anievas, 2010; also e.g. Pozo-Martin, 2007; Wood, 2003) the state plays an indispensable role in the capital accumulation process in many ways, in fact; within a capitalist order, state and capital must be seen as internally related. While the state has a plethora of roles and functions in relation to capital (see for an elaboration van Apeldoorn et al.



in this issue) the focus here is on its function in relation to the expansionist dimension of capital accumulation; as the power that erects barriers to the movement (motion) of capital, but that in doing so crucially sustains the territorial fragmentation and unevenness on which the spatial expansion of capital rests (cf. the notion of ‘uneven and combined development’, e.g. Allinson and Anievas, 2010). More precisely then, the focus is on capital accumulation within a multiplicity of states; the geopolitics of capital. The state system—it is argued—sustains the anarchy that enables capital to move freely (i.e. the power to exit; see van Apeldoorn, 2004). But the state system also provides an uneven (differentiated) political and spatial surface, due to its constitution of a nearly seamless patchwork of sovereign territories, which is crucial for capital expansion and thus for its survival.

As Harvey has highlighted, within capitalism there is a tendency towards ‘structured coherence to production and consumption within a given space’ (Harvey, 1985, p. 146). Capital within a given (limited geographical) space will however ultimately start to over-accumulate and will need an external space to invest its surpluses in order to keep profitably accumulating (Harvey, 2003, 2006). Thus, in order to avoid devaluation surpluses of both capital and/or labour seek geographical expansion in various forms, which is what Harvey identified as the ‘spatial fix’ (2003, p. 109; 2006, p. xxiv; see, for useful discussions of spatial fix, also e.g. Brenner, 1999; Colas and Pozo, 2011; Jessop, 2006).<sup>5</sup> Geographical differentiation and unevenness is thus crucial for capital expansion. While geographical differentiation can take many forms—importantly of course, there is a naturally given geographical unevenness—the politically created and constituted geographical differentiation embodied by the state system provides capital accumulation with a stable foundation, because it carves up the globe into exclusive spheres of territorial sovereignty. This first of all creates an ‘internal’ and an ‘external’ space for capital (the latter which it needs to expand in order to avoid devaluation, i.e. the spatial fix). Secondly, because these exclusive spheres develop differently, those differences can be exploited, i.e. they provide a basis for differential accumulation (i.e. inter-capitalist competition).<sup>6</sup>

The general point is that capital accumulation harbours a contradictory dynamic of on the one hand a continuous strive to transcend geographical boundaries while at the same time requiring them because they constitute the uneven surface that capital needs to expand spatially and accumulate differentially. The state as the political and institutional embodiment of the perhaps most entrenched type of geographical boundaries, sovereign territorial entities, harbours this contradiction. This explains the dynamic between a widening and deepening transnational dimension and a resilient statist dimension. With the global expansion of capital these contradictions are not transcended but continuously rearticulated. A contradictory outcome of the expansion of capital through the spatial fix is what (based upon Harvey) I call the ‘boomerang effect’, i.e. it creates rival centres of accumulation which ultimately will need an ‘external’ space for their own over-accumulated capital and thus will become competitors to the original ‘centre’ of over-accumulation.

The resurgence of resource nationalism and the global expansion of state-owned energy corporations from outside the OECD core can be interpreted in light of the contradictions of Western capital expansion (and dominance) along two dimensions, or a combination of these two. First, as a strategy of states outside the capitalist core to ‘catch up’ with the dominant core (see van der Pijl, 2006), including various grades and shades of mercantilism (see e.g. Overbeek, 2012). Second, it can be interpreted as the ‘boomerang effect’ addressed above (see Hung, 2008 for the case of China in particular). In this light the ‘return of the state’ in the energy sector and the competition from rival centres of accumulation—while posing a challenge to the

capitalist core and its dominant conception of neoliberalism—can also be seen as products of Western capital's latest phase of expansion (neoliberal globalization); which also implies a further expanding and deepening of capitalism's inherent contradictions. As the next section will argue, the concomitant rearticulation of state–capital relations is not indicating a turn towards state-domination or a definite end of the neoliberal order. Rather, we are currently seeing a hybridization of the energy order and its rules of the game, while at the same time it is becoming increasingly multipolar. This will be empirically illustrated by briefly addressing some of the main trends of the current transformation: the expansion of state-owned non-Western energy corporations, the hybrid nature of contemporary resource nationalism, the configuration of distinct Western and non-Western oil elite networks, and how the rules of the game, as well as the institutional landscape of global governance of energy, are still testifying to the power of the West.

### **A Transforming Global Energy Order: Hybridity and Multipolarity**

A longitudinal analysis of the world's five largest state-owned oil companies and their changing corporate networks revealed that alongside their expansion they increasingly cooperated with the private IOCs and other NOCs (see de Graaff, 2011). In fact, whereas the network constituted by the corporate relations of these five major NOCs in 1997 included only 40% of the other key players in the global energy market (for which I took the Petroleum Intelligence Weekly annual ranking as a proxy; Energy Intelligence Group, 2008),<sup>7</sup> in 2007 the network incorporated almost 75%. In this period the selected five major NOCs from diverse regions such as Latin America (PDVSA), Russia (Gazprom), China (CNPC/Petrochina), and the Middle East (Saudi Aramco and National Iranian Oil Company) displayed a significant increase in terms of their corporate relations: joint ventures abroad more than doubled, and joint ventures at home more than tripled. This increase took not only place through upstream alliances and investments which nearly tripled (from 46 to 132), but also through mid- and downstream investments which almost doubled (68 to 117). IOC–NOC alliances of this selection of companies doubled in the period 1997–2007, and still make up the largest share in terms of cooperation models. Another cooperation model that is rapidly increasing is the NOC–NOC alliance, which quadrupled in the case of these five NOCs. The largest increase, however, took place in the category of NOC–Hybrid alliances (i.e. with partly state-owned companies); from virtually non-existent to 20% of all the different types of alliances in 2007.

These aggregate numbers indicate not only an increase in cooperation of these five top non-Western NOCs with other IOCs and NOCs, but also an increase in vertical integration and diversification. First of all, this illustrates the widening and deepening transnational dimension alongside a resilient and—to some extent also—expanding statist dimension. In spite of the concerns over the expansion of non-Western NOCs posing a threat to IOC interests and distorting market mechanisms, the former's expansion since the mid-1990s has in fact been paralleled by increased cooperation with the OECD IOCs. In addition, it points to an increasing hybridization of the sector, with resource-holding NOCs that traditionally operated exclusively within their borders now gradually moving beyond them and also increasingly moving downstream in the oil value chain, for which they involve with IOCs in order to gain technological knowhow and management expertise. In addition, the major resource-seeking NOCs from the 'new consumers' (i.e. rival centres of accumulation) represent a whole new type of category, directly competing with the IOCs but still having a distinct identity as state-owned entities. Thus as Valerie Marcel, Chatham House fellow and NOC expert, puts it, the categories are

increasingly ‘blurring’.<sup>8</sup> Yet, it also shows the dynamic of capital expansion as outlined in the former section, i.e. a combination of a statist ‘catch-up’ strategy and a globalizing strategy of corporate (but state-owned) actors from the former ‘periphery’ that now have become direct competitors to the oil majors of the Western ‘core’.

Another new dynamic is the increasingly influential role of energy service companies such as Schlumberger and Halliburton. This confounds the traditional alliances and power balance between IOCs and NOCs, since the NOCs can now buy the services and technologies they need—for which they previously relied on the IOCs—from the energy service companies. Ironically perhaps, the growth of service companies is an outcome of the neoliberal restructuring during the 1980s–1990s in which the IOCs increasingly outsourced their technical services to these companies in order to become more efficient and profitable (see also e.g. de Graaff, 2012). The role of energy service companies indeed underlines how the relations within the global energy order are becoming increasingly commercialized and marketized. And thus it seems that the global energy order—at least as far as the companies is concerned—is increasingly marked by what Wim Thomas, Shell’s chief energy advisor and head of their Energy Analysis Team, calls ‘a coalition of the willing’.<sup>9</sup> But the role of energy service companies, as an outcome of neoliberal restructuring that now empowers statist actors, also provides another example of the contradictions inherent in the capital accumulation process and its expansion.

Also with respect to the resurgence of so-called ‘resource nationalism’ there is a noticeable difference from how it manifested itself in the 1950s–1960s. The ‘modalities of resource nationalism have changed’, as a senior international disputes partner at an international, Texas-based law firm remarked.<sup>10</sup> Resource nationalism today is more pragmatic and opportunistic. While perhaps using rhetoric of the past, the actual relations with foreign companies often reflect a pragmatic approach, preserving a role for foreign partners, while tightening state ownership and raising government’s take. Neither do we witness the kind of international economic policy activism (e.g. Arab oil embargo 1973 and the rise of OPEC) that prevailed on the part of the major producers at the time. Whereas the earlier major wave of resource nationalism and the creation of the non-Western NOCs was a primarily a mercantilist response to Western capital expansion—in this case the dominance of the so-called ‘Seven Sisters’, a global cartel of mainly Anglo-Saxon private oil majors—aimed at a protection of the domestic industry; the latest wave is also an expansion outward with a globalizing dynamic of itself. Thus it is both a protective response to Western capital expansion and domination in order to ‘catch up’, and the outcome of the capital expansion process which has generated rival centres of accumulation that now themselves need outlets for their capital as well as resources for their growth and become competitors to the originating Western core (i.e. the boomerang effect noted above).

Another example of such a contradictory outcome is how the transnationalization of Western (mainly Anglo-Saxon) corporate law and the legal profession, which has accompanied neoliberal globalization, not only provides the resource holders with the ‘legal technology’ that enables them to play the rules of the game with increasing ‘sophistication’ but also—as pointed out by a senior international disputes partner<sup>11</sup>—accelerates the trend of resource nationalism. Corporate lawyers—dominantly stemming from the American corporate law culture—play a crucial role in this respect. Driven by competition, profit motives, and career prospects, corporate lawyers try to broaden their clientele, thereby ‘marketing’ resource nationalism to governments (see Dezalay and Garth, 1995, for a more general analysis of the construction of a transnational legal order).

While also empowering the non-Western resource holders, this globalizing of a rule set that is typically Western within a domain that is crucial to conflicts over energy resources, nonetheless testifies to the power of the West. In particular, its ‘productive power’; the power to create ‘discourse’ as Barnett and Duvall (2005) conceptualize it, i.e. to define: ‘the (im)possible, the (im)probably, the natural, the normal, what counts as a problem’ (ibid., p. 55). As such, part of the rise of the non-Western NOCs is premised on their capacity and ability to play the rules of the game as defined by the West.

In addition, while indicating a deepening and widening transnational dimension (taking conflicts over hydrocarbon resources out of the national jurisdiction and thus also out of reach for democratic accountability), it also harbours a national and statist dimension. As Sassen observes, the fact that English and American law firms have been able to formulate the particular content of ‘international’ corporate law testifies to the strategic and geopolitical role played by the Anglo-Saxon powers in the formation of transnational legal regimes that are centred in ‘neoliberal concepts of economic relations with its strong emphasis on markets, deregulation, and free international trade’ (2000, p. 382). This illustrates first of all how the statist and the transnational dimensions go together. Second, it shows how not only transnational actors (such as major corporations or law firms) but also states are active in processes of globalization. Put even more strongly, how states are the indispensable authors of globalization (see also Brenner, 1999; Panitch, 1994).

The analysis of the corporate elite networks of the directors in charge of the major oil companies, both including (non-Western) NOCs and (Western) IOCs, revealed quite distinct patterns with respect to the corporate networks, policy planning networks, and state–business relations of these directors (see de Graaff, forthcoming). Whereas the Western oil elites inhabit a core place within a transnational corporate elite, as they interlink with powerful transnational capital groups as well as with central transnational policy planning networks; and have an advisory relation to the state and state policy, the non-Western oil elites are only scarcely connected to these Western corporate and civil society networks and do not form any similar alternative networks themselves. Thus while the NOC elites are directing a major expansion of their oil companies, which also implies increased cooperation with other major players within the global energy order—and generates an increasingly hybrid set of coalitions and alliances—they do not integrate yet into typical Western business circles.

The lack of integration and cooperation at this ‘level’ points first of all to the differences in terms of the national state–capital nexuses in which the NOC elites operate. Unsurprisingly, the connections with the state apparatus were found to be much more direct and close, in fact many of the NOC elites held simultaneous board positions and high level government positions.<sup>12</sup> This might also explain why for instance the Chinese NOCs play dual roles, as several Chinese experts, among which a former director of overseas development of CNPC, pointed out: they are NOCs domestically but IOCs abroad.<sup>13</sup> When operating abroad the NOC increasingly cooperates with IOCs and adapts to the Western-style governance and rules of the game, but in its domestic operations it remains wedded to its distinct national and statist governance regime type and corporate culture (i.e. rules and practices).

Secondly, these findings underscore the emergent multipolarity of the energy order, in which some non-OECD states are rising to power but without their statist-corporate elites integrating in the multilateral order dominated by the US. Indeed, the existing global institutional landscape does not in any fundamental way represent the changed configuration of power and social forces that is taking place, i.e. the rise of the ‘new consumers’ and some major non-OECD producers. Membership of the International Energy Agency (IEA)—the Western ‘consumer’

countries' watchdog and widely acknowledged organization in terms of producing knowledge (the World Energy Outlook)—is still limited to OECD members and, while it does increasingly express the ambition to involve the major emerging consumers as well as major non-OECD producers as Russia more actively, actual membership is still far from being realized (see e.g. Florini, 2011). Other major bodies for global energy governance are the G8 + 5 and the G20. But as, for example, Lesage et al. (2010) have eloquently shown, these bodies—while increasingly 'forced' by the changed political and global circumstances to be more inclusive—in fact are trying to 'reach out' to the new powers exclusively on the terms of the West, in the language of the West and with the underpinning motives and interests of the West. This seems rather exemplary of what Barnett and Duvall frame as a manifestation of institutional power: 'Long-standing institutions represent frozen configurations of privilege and bias that can continue to shape the future choices of actors' (2005, p. 52).

On the other hand, the non-OECD powers seem to have a preference towards more state-to-state deals, which is also indicated by the extent of bilateral and regional deals/relations in comparison to a much smaller number of multilateral arrangements (Knodt et al., 2012). This preference might in part be a response to the limitations provided by the typical Western 'multilateral' governance bodies such as the IEA, but in part this is also due to a different way of organizing/managing the economy, i.e. a more state *directed* manner (see van Apeldoorn et al. in this issue) with a less passionate belief in the benign workings of the free market.

## Conclusion

This article has looked at the nature and transformation of the state–capital nexus in the global energy order and theorized its driving dynamics. Although it is too early to draw any firm conclusions about the direction of these developments, the transformation seems marked by increasing hybridization of social relations and governance (i.e. rules of the game) on the one hand, and the emergence of multipolarity—in which there are significant differences and conflicting interests—on the other. This is rooted in the structuring dialectic of global capital accumulation generating a widening and deepening transnational dimension alongside the continuation and rearticulation of state power.

We are witnessing the expansion of some rising powers from the global South as 'new consumers' and competitors on the global energy market, as well as a concomitant gradual power shift towards the non-Western state-owned oil companies (NOCs) in terms of: (a) their ownership of reserves, and (b) their capacities as transnationally operating companies. This has not yet led to a takeover of the NOCs or a unidirectional shift to a statist model, let alone a return of state capitalism. Rather, with respect to the energy order and its social relations it is generating more hybrid forms of cooperation, new alliances and dynamics, and a blurring of categories. However, this does not—as of yet—represent a major shift away from the Western neoliberal rules of the game. Although NOCs have gained bargaining power (e.g. Vivoda, 2009) and in the case of the resource-holding NOCs use that bargaining power to turn the rules of the game to their advantage—they are not rule makers yet. It has been shown how the landscape of global energy governance still dominantly represents (the interests of the) OECD core, testifying to its 'institutional power'; and how the transnationalization of the legal regime and profession—which is crucial for international conflicts over resources—is an indicator of the 'productive power' of the West. As such, part of the rise of the non-Western NOCs is premised on their capacity and ability to play the rules of the game as defined by the West.

This then implies a deepening and widening of the transnational dimension alongside the continued existence of different rearticulations of state power to sustain capital accumulation processes. The dual roles that for instance the Chinese resource-seeking NOCs are playing illustrates this hybridization which does not imply a wholesale adaptation to the Western market based model, but rather a coexistence. In sum, while the non-Western powers and their state-owned oil companies have gained more bargaining power, and are increasingly expanding within the domain that was previously exclusively reserved for the IOCs and the Western powers, this shifting balance of forces has not yet led to a fundamental challenge to the neoliberal model.

Nevertheless, a fundamental transformation *has* taken place, namely, from a multilateral order under US hegemony towards an increasingly multipolar order. Given this fundamental change—and given the dialectic between the transnational and the statist dimension generated by the continued expansion of capital—statist tensions will remain and might in the future very well lead to a more fundamental power shift.

This also has implications for the often heard call for global governance as a solution to the current multiple crises of the global energy order (see e.g. Goldthau and Witte, 2009; also Brand and Wissen in this issue). On the one hand, the ongoing transnationalization of the global political economy will lead to a progressive increase of shared properties and interdependencies (which is of particular importance with respect to global energy security because it does not only entail the precarious balance between security of demand and supply, but also the ‘externalities’ of climate change). On the other hand, the realization of such global governance is hampered because of the deep rooted nature of capital accumulation within the system of sovereign nation states and its need for geographical differentiation that is politically organized and institutionalized.

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### Notes

- 1 It should be noted that the terminology of national oil companies and international oil companies is in fact outdated, stemming from an era in which NOCs were exclusively or predominantly active within their national borders and IOCs were for a majority of their operations operating abroad. Nowadays, the picture is much less clear cut, most importantly since the major oil companies are essentially *transnational* companies; the non-Western NOCs increasingly so. Also, in spite of their name, the core business of these majors (state-owned or not) is not only oil, but also—for instance—gas. In spite of these shortcomings I will stick to the usage of these terms here because they are the most commonly used and known in the literature.
- 2 In this article the focus is primarily on oil and gas because this is the core business of the major NOCs and IOCs. Of course the energy sector comprises a much wider range of energy sources and products, but for the sake of parsimony I opt for the loosely defined term ‘energy’ instead of the more accurate and narrow term ‘oil and gas’.
- 3 High prices of oil lead to overproduction which subsequently results in falling prices. Moreover, high prices leads to the migration of capital into new reserves which will also result in increased production and expansion of the stock of producing reserves and thus in the end to decreasing prices. This leads to the paradoxical situation that: ‘as reserves grow and oil becomes more abundant, it must be made scarce in order to produce and realize the surplus profits of the oil industry’ (Labban, 2008, p. 4), and thus follows the incentive to induce *artificial scarcity* (ibid., p. 26). Undersupply, however, will of course similarly lead to high prices that in the end generate the same dynamics as sketched above.

- 4 Ground rent is that part of the surplus profit that is appropriated by the owner of the land because of his/her entitlement to a monopolizable ‘force of nature’ (Marx, 1984, p. 6). Ground rent is obtained when the owner of the land provides access to the land and its resource(s) to a producer. The landowner will try to extract as big as possible a share of the surplus profit (i.e. ground rent) by restricting access to land (thus withholding it from production and thereby limiting overproduction and oversupply); however if too strict limitations are imposed, the stimulus for investment will disappear (Harvey, 2006, p. 364).
- 5 Another type of ‘fix’ that Harvey identifies is the temporal fix, referring to temporal displacement (of surplus capital and/or labour) through investment in long-term capital projects such as infrastructural projects or social expenditures. This leads to a situation in which: ‘[A] part of the circulation of capital slows down in order to promote accelerating turnover times for the remainder’ (Harvey, 1985, p. 136). The temporal fix can also be used in combination with the spatial fix, i.e. the spatio-temporal fix.
- 6 The current European debt-crisis is an illuminating example of the latter, i.e. how financial capital, seemingly unrestricted by territorial boundaries, crucially needs and uses territorial national boundaries as a source of accumulation and profit. Indeed it is national differences and the speculation on expectations of the differential national performance that is the source of profit. The author would like to thank Bastiaan van Apeldoorn for making this point explicit.
- 7 The PIW annual ranking is widely recognized and based upon operational data from over 130 firms; it uses several distinct rankings (e.g. reserves and production, refinery capacity, product sales volumes) which are then added together to determine a cumulative, overall position of the firms.
- 8 Telephone interview, 16 December 2009.
- 9 Interview, The Hague, Netherlands, 10 March 2010.
- 10 Interview with senior international disputes partner (requested to remain anonymous), Texas, 3 March 2010.
- 11 Interview with partner in international, Texas-based law firm, 3 March 2010.
- 12 While the scope of this article doesn’t allow for an elaboration of this matter, there is of course a wide variation in terms of state–capital nexuses and clearly these also transpire into different strategic choices on the part of the actors within and beyond the state apparatus (see for an elaboration of such strategies with respect to SWFs the contribution of Schwartz in this special issue, and with respect to the Chinese SWFs in particular Overbeek, 2012).
- 13 Telephone interview Xu Xiaojie, 21 January 2010, Shan Weiguo CNPC, Director, Petroleum Market Study, email interview, 14 June 2011.

## References

- Allinson, J. C. & Anievas, A. (2010) Approaching “the international” beyond political Marxism, in A. Anievas (ed.) *Marxism and World Politics: Contesting Capitalism* (London and New York: Routledge), pp. 197–214.
- Anievas, A. (ed.) (2010) *Marxism and World Politics: Contesting Capitalism* (London and New York: Routledge).
- Barnett, M. & Duvall, R. (2005) Power in international politics, *International Organization*, 59(1), pp. 39–75.
- Bhaskar, R. A. (1979) *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences* (London: Routledge).
- Bradshaw, M. (2009) The geopolitics of global energy security, *Geography Compass*, 3(5), pp. 1920–1937.
- Bremmer, I. (2008) The return of state capitalism, *Survival*, 50(3), pp. 55–64.
- Bremmer, I. (2009) State capitalism comes of age: The end of the free market? *Foreign Affairs*, 88(3), pp. 40–56.
- Bremmer, I. & Johnston, R. (2009) The rise and fall of resource nationalism, *Survival*, 51(2), pp. 149–158.
- Brenner, N. (1998) Between fixity and motion: Accumulation, territorial organization and the historical geography of spatial scales, *Environment and Planning D: Society and Space*, 16(5), pp. 459–481.
- Brenner, N. (1999) Beyond state-centrism? Space, territoriality, and geographical scale in globalization studies, *Theory and Society*, 28, pp. 39–78.
- Bridge, G. & Wood, A. (2010) Less is more: Spectres of scarcity and the politics of access in the upstream oil sector, *Geoforum*, 41, pp. 565–576.
- Colas, A. & Pozo, G. (2011) The value of territory: Towards a Marxist geopolitics, *Geopolitics*, 16(1), pp. 211–220.
- Correljé, A. & van der Linde, C. (2006) Energy supply security and geopolitics: A European perspective, *Energy Policy*, 34, pp. 532–543.
- De Graaff, N. (2011) A global energy network? The expansion and integration of non-triad national oil companies, *Global Networks*, 11(2), pp. 262–283.

- De Graaff, N. (2012) The rise of national oil companies: Transformation of the neo-liberal global energy order?, in H. Overbeek & B. van Apeldoorn (eds) *Neoliberalism in Crisis* (Basingstoke and New York: Palgrave), pp. 161–178.
- De Graaff, N. (forthcoming) Oil elite networks in a transforming global oil market, special issue, *Journal of Comparative Sociology*.
- De Graaff, N. & van Apeldoorn, B. (2011) Varieties of US post-cold war imperialism: Anatomy of a failed hegemonic project and the future of US geopolitics, *Critical Sociology*, 37(4), pp. 403–427.
- Dezalay, Y. & Garth, B. (1995) *Dealing in Virtue: International Commercial Arbitration and the Construction of a Transnational Legal Regime* (Chicago: University of Chicago Press).
- Dicken, P., Kelly, P. F., Olds, K. & Yeung, H. W. (2001) Chains and networks, territories and scale: Towards a relational framework for analysing the global economy, *Global Networks*, 1(2), pp. 89–112.
- Energy Intelligence Group (2008) *The Energy Intelligence Top 100: Ranking The World's Oil Companies* (UK: Energy Intelligence Group, Inc).
- Florini, A. (2011) The International Energy Agency in global energy governance, *Global Policy, Special Issue: Global Energy Governance*, 2, pp. 40–50.
- Goldthau, A. & Witte, J. M. (2009) *Global Energy Governance: The New Rules of the Game* (Washington DC: Brookings Institution Press).
- Harvey, D. (1985) The geopolitics of capitalism, in D. Gregory & J. Urry (eds) *Social Relations and Spatial Structures* (London: Macmillan), pp. 128–163.
- Harvey, D. (2003) *The New Imperialism* (Oxford and New York: Oxford University Press).
- Harvey, David (2006 [1982]) *The Limits to Capital* (London and New York: Verso).
- Helm, D. (2005) The assessment: The new energy paradigm, *Oxford Review of Economic Policy*, 21(1), pp. 1–18.
- Hoogeveen, F. & Perlot, W. (eds) (2005) *Tomorrow's Mores: The International System, Geopolitical Changes and Energy*, CIEP 02/2005 (The Hague: Clingendael International Energy Programme).
- Hung, H. (2008) Rise of China and the global overaccumulation crisis, *Review of International Political Economy*, 15(2), pp. 149–179.
- IEA (2009) *World Energy Outlook 2009* (Paris: International Energy Agency).
- IEA (2011) *World Energy Outlook 2011 Factsheet* (Paris: International Energy Agency).
- Jessop, B. (2006) Spatial fixes, temporal fixes and spatio-temporal fixes, in N. Castree & D. Gregory (eds) *David Harvey: A Critical Reader*, Antipode Book Series (Oxford: Blackwell Publishing), pp. 142–166.
- Jessop, B. (2007) *State Power: A Strategic-Relational Approach* (Cambridge: Polity).
- Klare, M. (2001) *Resource Wars: The New Landscape of Global Conflict* (New York: Metropolitan/Owl Book, Henry Holt and Company).
- Klare, M. (2004) *Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum* (New York: Metropolitan Books).
- Knodt, M., Müller, F. & Piefer, N. (2012) Rising powers in international energy governance, working paper, Technische Universität Darmstadt.
- Labban, M. (2008) *Space, Oil and Capital* (London and New York: Routledge).
- Lesage, D., van de Graaf, T. & Westphal, K. (2010) *Global Energy Governance in a Multipolar World* (Aldershot: Ashgate).
- Marcel, V. (2006) *Oil Titans: National Oil Companies in the Middle East* (Washington, DC: Brookings and Chatham House).
- Marx, K. (1894) *Capital*, Volume III, <http://www.marxists.org/archive/marx/works/1894-c3/>
- Odell, P. R. (2006) The long-term evolution of the global energy industry, *Geopolitics of Energy*, 28(9), pp. 2–3.
- Overbeek, H. (2012) Sovereign wealth funds in the global political economy: The case of China, in B. Van Apeldoorn & H. Overbeek (eds) *Neoliberalism in Crisis* (London: Palgrave Macmillan), pp. 138–160.
- Panitch, L. (1994) Globalisation and the state, in R. Miliband & L. Panitch (eds) *Socialist Register, 1994* (London: Merlin Press), pp. 60–92.
- Pfeifer, S. (2012) Finds that form a bedrock of hope, *Financial Times*, 23 April, p. 11.
- Pozo-Martin, G. (2007) Autonomous or materialist geopolitics?, *Cambridge Review of International Affairs*, 20(4), pp. 551–563.
- Sassen, S. (2000) Territory and territoriality in the global economy, *International Sociology*, 15(2), pp. 372–393.
- Stevens, P. (2008) National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle, *Journal of World Energy Law & Business*, 1(1), pp. 5–30.
- van Apeldoorn, B. (2004) Theorising the transnational: A historical materialist approach, *Journal of International Relations and Development*, 7(2), pp. 142–176.



- van Apeldoorn, B. & Horn, L. (2007) The marketisation of European corporate control: A critical political economy perspective, *New Political Economy*, 12(2), pp. 211–235.
- Van de Graaf, T. (2008) Old rules, new players? Integrating the BRICs in global energy governance, in L. Spetchinsky & T. Struye (eds), *La gouvernance de l'énergie en Europe et dans le monde*, IEE Document 42 (Louvain-la-Neuve: Presses universitaires de Louvain), pp. 33–51.
- van der Pijl, K. (2006) *Global Rivalries: From Cold War to Iraq* (London & Ann Arbor, MI: Pluto Press).
- Vernon, R. (1971) *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises* (New York: Basic Books).
- Vivoda, V. (2009) Resource nationalism, bargaining and international oil companies: Challenges and change in the new millennium, *New Political Economy*, 14(4), pp. 517–534.
- Wälde, T. (2008) Renegotiating acquired rights in the oil and gas industries: Industry and political cycles meet the rule of law, *Journal of World Energy Law & Business*, 1(1), pp. 55–97.
- Webber, J. (2012) Tough conditions for exploration, *Financial Times*, 25 April, p. 17.
- Wilson III, E. J. (1987) World politics and international energy markets, *International Organization*, 41(1), pp. 125–149.
- Wolf, C. (2009) Does ownership matter? The performance and efficiency of state oil vs. private oil, *Energy Policy*, 37(7), pp. 2642–2652.
- Wood, E. (2003) *Empire of Capital* (London and New York: Verso).
- Yergin, D. (2006) Ensuring energy security, *Foreign Affairs*, 85(2), pp. 69–82.

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