# Geographies of War: Perspectives on 'Resource Wars'

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### Abstract

Natural resources figure prominently in studies of geographies of wars. This article reviews the three main perspectives on so-called 'resource wars': geopolitical, political economy and political ecology. Classical geopolitical perspectives mostly provide 'realpolitik' assessments of international tensions over the supply of 'strategic' resources. Such geopolitical constructs of 'resource wars' frequently oversimplify power relations and provide a fertile ground for critical enquiries. Refining understandings of resource scarcity and power relations, political economy perspectives point at resource dependence and 'looting' opportunities as potential risk factors in the onset and duration of armed conflicts. Finally, through greater contextual sensitivity and multiscalar analysis, political ecology perspectives emphasise the diverse forms of violence at play in 'resource wars' and stress the importance of identities and territorialities. Bridging and renewing conceptual and methodological approaches drawn from these three perspective could yield yet further insights on so-called 'resource wars' and serve broad objectives of social and environmental justice.

#### 1 Introduction

The term 'resource war' was popularised in the 1980s as a metaphor describing renewed tensions between the USA and the Soviet Union over the control of fuel and minerals in disputed 'peripheries', notably minerals in Southern Africa and oil in the Middle East (Broad 1980; Klare 1981). The term is most commonly understood as conflicts revolving over the 'pursuit or possession of critical materials' (Klare 2001, 25). The term has been widely used in reference to water, petroleum and other resources such as diamonds, timber, coltan or cod fisheries. Following nineteenth century Prussian military theorist von Clausewitz's perspective on war, the term is generally understood as the continuation of resource policies through the use of military force. Mostly deployed in reference to the international policies of states, the term has also been used to describe the struggles of local populations against large-scale resource exploitation projects, and neoliberal reforms in the control of resources and public utilities (Gedicks 1993; Perreault 2006). The coercive aspects of environmental

conservation have also led critics to argue that war has become 'a common model and metaphor for conceptualising and planning biodiversity protection in Africa [shaping] a new moral geography wherein parks and protected areas have become spaces of deadly violence' (Neumann 2004, 813).

As with 'ethnic war', the term 'resource war' reduces conflicts to a single factor, and thereby risks oversimplification. 'Resource war' often implies an exclusive analytical focus on resources, and asserts a direct link between conflicts and resources. Such narrow engagement overlooks the multidimensionality of conflicts. Furthermore, it is at risk of missing some of the political dimensions of conflicts if resources are reduced to their economic (exchange) or utilitarian (use) value. For example, resources are tied to particular places, involving a (political) sense of belonging. Other political dimensions of resources include the social practices involved in resource exploitation, circulation, transformation and consumption. Studies of 'resource wars' should thus engage with the potential interplay of resource related social processes, including identity formation and territorialities at various scales (Dunn 2001; Pearce 2005).

Resource sectors influence the (un)making of places, political systems and social movements involved in conflicts. Failing to do so, some resource exporting countries may seem intrinsically 'unstable', without any reference given to the historical role of the resource sectors in contributing to such instability. The mere presence of resources should also not be simply understood for the current or future stakes that they represent. The significance of oil in contemporary conflicts in Iraq, for example, should be situated within their historical context such coercive British colonialism in the early twentieth century (Atarodi 2003). Moreover, conflicts over resources are often played in a 'repeated game', in which the histories of past conflicts inform present ones. Examining farmer-herder conflicts in the Sahel, Turner (2004, 878) notes that:

The land-use conflict engaged in by herders differs significantly from the hereand-now conflict over scarce resources invoked by standard uses of the term 'resource conflict'. These are conflicts that are waged over the long term with the conflict's history being invoked and reworked to make moral claims in the present.

Studies of so-called 'resource wars' should thus bring in a 'thick' historical and geographical contextualisation, relating the past to the present, as well as resource locales to places of belonging and spaces of social relations. Given that many of the narratives of 'resource wars' are about future conflicts over 'increasingly scarce resources', studies of (future) resource wars should also engage with the deconstruction of particular geographies of vulnerability, threat and insecurity (Dalby 2002). This article reviews three perspectives on 'resource wars': geopolitical, political economy and political ecology. The main arguments and methodologies, as well as contributions from

geography, are reviewed for each one, with a particular focus on political ecology perspectives.

# 2 Geopolitical Perspectives

Classical geopolitical perspectives have most frequently linked the concept of 'resource war' to interstate conflicts over the supply of 'strategic resources', giving way to a narrow and militaristic notion of 'resource security' (and in particular 'energy security'). Western geopolitical thinking about resources has been dominated by the equation of trade, war and power, at the core of which were overseas resources and maritime navigation, with resources providing some of the means and motives of early European power expansion, and being the focus of inter-state rivalry and strategic denial of access. During the mercantilist period of the fifteenth century, trade and war became intimately linked to protect or interdict the accumulation of the 'world riches', mostly in the form of bullion, enabled by progresses in maritime transport and upon which power was perceived to be determined (Lesser 1989). Because sea power itself rested on access to timber, naval timber supply became a major preoccupation for major European powers from the seventeenth century onwards; a situation comparable to the case of oil in the twentieth century. With growing industrialisation and increasing dependence on imported materials during the nineteenth century. Western powers intensified their control over raw materials, leading to (along with many other factors such as political ideologies) an imperialist 'scramble' over much of the rest of the world. The significance of imported resources, and most notably oil, during the First and Second World Wars reinforced the idea of resource vulnerability among European powers.

Strategic thinking about resources during the Cold War continued to focus on the vulnerability arising from resource supply dependence and the potential for international conflicts resulting from competition over access to key resources (Westing 1988). Emphasis was placed on concepts of 'resource security' (through strategic reserves and alliances with producing countries), and a military 'balance of power' between the USA and Soviet blocks. The decolonisation process, 1956 Suez crisis, 1973 Arab oil embargo and 1979 Iranian revolution also contributed to an increase in focus of Western strategic concerns (as well as resource businesses) on domestic and regional political stability and alliances (Russett 1981). Beyond the Cold War, such security of 'resource supply' continues to inform governmental and corporate decisions in the management of several minerals, particularly concerning high-tech and radioactive materials, even if oil stands largely alone in terms of global strategic importance (Anderson and Anderson 1998).

By the 1970s, broader geopolitical conceptualisations of security had started to incorporate issues such as population growth, environmental

degradation and social inequalities in poor countries (Brown 1977; Ullman 1983). The ensuing concept of 'environmental security' came about to reflect ideas of global interdependence, illustrated through the debates on global warming, environmental 'limits to growth' and the political instability caused by environmental scarcity in the South. However, the concept represented a skewed and controversial 'securitisation' of environmental issues, occasionally casting the blame on the poor, calling for 'military' and 'international development' solutions and constructing biased identities and narratives of endangerment (Dalby 2002).

As further attention was devoted to the internal mechanisms of wars at the end of the Cold War, a view emerged that a new and violent scramble for resources among local warlords, regional hegemons and international powers was becoming a major feature of contemporary conflicts (Annan 1998; Klare 2001; Reno 1998). A popular understanding of future 'resource wars' is that a combination of population and economic growth leading to a relentless expansion in the demand for raw materials, expected resource shortages and contested resource ownership might stimulate further armed conflicts (Klare 2001). Asia's growing mass consumerism and energy demand, for example, are of specific concern for the militarised control of the South China Sea (especially Spratly islands), Caspian region, Gulf of Guinea and the Middle East. While the role of oil or diamonds in several civil wars in Africa had already drawn renewed attention to resource-funded conflicts, the USA-led invasion of Iraq in 2003 put the concept of 'resource war' at the forefront of global antiwar activism.

Like the Cold War, the 'war on terror' conducted by the Bush junior administration has rearticulated security threats and strategies along corporate interests. In this case, it has aimed at regimes opposing the USA, which are also reluctant to open their oil and gas fields to Western companies (i.e., Iraq, Iran and Venezuela). Akin to the Cold War, interventions have been framed upon the conflation of concepts of freedom and security. Debates on oil and the USA's security agenda have significantly shifted as a result of the '9/11' attacks in the USA, however. If on one side, those opposing USA military interventionism have argued that the 'war on terror' provided one more convenient cover for a renewed 'imperialist oil grab' in the region; on the other side, links between oil and terrorism pointed at problems of authoritarian (and warmongering) governance in several oil producing countries. As the 'war on terror' became justified as a war of liberation against oil-funded dictatorial regimes, the USA portrayed its foreign policy as shifting from ensuring a free flow of oil from the Middle East to the world market, to a view of oil as delivering 'freedom' to local populations and offsetting the cost of postinvasion 'reconstruction' for USA taxpayers (Le Billon and El Khatib 2004). Nowhere was this geopolitical construct more blatant (and tragically wrong-headed) than in the USA-led invasion of Iraq in 2003.

Beyond territorial control by military forces, Smith (2003, 265) further argues that the latest USA-led invasion of Iraq in 2003 was:

Above all, a geo-economic is not a geopolitical war. It is not a war simply to control oil resources but rather to control the global political economy within which the disposition of oil resources will be organised. It is a war for the fruition of ... USA globalism.

Like most geographers, Smith's reading of the 'Iraq war' seeks to move beyond conventional geopolitical perspectives on resource competition through a critical geopolitical approach that deconstructs the concepts of 'resource wars' and 'resource security'.

In this regard, the stereotyping of resource exporting countries plays an important role in 'essentialising' places and actors supposedly involved in 'resource wars'. Drawing on simplistic representations of 'resource geography', the regions at war often become caricatured through the concept of resource war, brushing aside issues of scale and the multiplicity of distinct spaces and places. As each particular region becomes caricatured through its dominant resource sector, other aspects of conflicts get brushed aside. Agrarian issues in 'diamond mining' Sierra Leone, for example, are overlooked in 'resource war' narratives (Richards 2005). As Dodds (2003) also suggests, popular geopolitics conveved through movies contribute to the cultural re-production of world politics and representations of conflicts. Recent James Bond movies reinforce stereotypes of resource exporting countries, such as The World Is Not Enough (1999), based on the control of Central Asian oil exports, or Die Another Day (2002), linking West African conflict diamonds to North Korean weapons of mass destruction. Not all mass audience Western movies reinforce such caricatures, however. In the case of Iraq, Three Kings (1999 - working title, Spoils of War) provided a sharp critique of USA petro-imperialist motives and betrayal of Iraqi people during the 1991 Gulf War (ironically providing ground for the USA-led invasion of Iraq to remove Saddam Hussein in 2003).

Geopolitical perspectives often assert to provide a 'big picture' of future of international tensions over 'strategic' resources, thereby informing and reflecting dominant geostrategic policies and worldviews. Yet, as suggested above, such classical perspectives have often reflected Manichean constructs of places and identities, and biased conceptions of security. Given contemporary geopolitical narratives of 'war on terror', 'clash of civilisations' and 'empire', there remains much need for critical approaches to geopolitical interpretations and forecasting of 'resource wars' (Dalby 2004).

# 3 Political Economy Perspectives

The second set of perspectives originate from political science and development economics studies and are based on the assumption that the significance of resources in wars is largely rooted in questions of resource scarcity, abundance or dependence (de Sovsa 2002). Until relatively recently, the orthodoxy was that the likelihood of conflict increases as resources become more scarce (Homer-Dixon 1999). According to this 'resource scarcity' argument, widening the scope of the (international) security agenda to include environmental breakdown and livelihood resource access could help provide a basis for peace (Conca and Dabelko 2002; Myers 1993). Some of this work has received potent critiques for their methodological approach (Gleditsch 1998), neo-Malthusian assumptions and essentialising character (Peluso and Watts 2001) and for naturalising an environment-insecurity nexus in the South exonerating (Northern-led) modernity and development (Dalby 2002).

Moving beyond scarcity and finding primary commodity export dependence to constitute 'the strongest single driver of the risk of conflict', Collier (2000, 101) argued that 'the true cause of much civil war is not the loud discourse of grievance but the silent force of greed' (see also, de Soysa 2002). In response to the controversy and broad media coverage surrounding this statement, numerous studies have tested its validity and interpretation. Debates in this regard have focused on the selection of variables (primary commodity exports as a share of gross domestic product, resource production or resource stock per capita), the specificities of the models, the robustness of findings, as well as the validity of quantitative approaches (Cramer 2002; Mac Ginty 2004; Marchal and Messiant 2002; Ron 2005; Ross 2004a).

Overall, war onset does not seem to be robustly related to the broad category of 'primary commodities', at least defined in terms of export dependence. By distinguishing between different types of commodities and types of conflicts, however, patterns appear to emerge (Humphreys 2005; Ross 2006). Oil wealth seems to increase the likelihood of civil war (Fearon 2005), especially onshore compared to off-shore oil (Lujala 2004; Ross 2006), while 'contraband' goods such as gemstones, drugs and narcotics do not increase the likelihood of conflict onset (with the exception of alluvial diamonds in relation to ethnic conflicts and for the 1990s; Lujala et al. 2005), but prolong conflicts (Fearon 2004). Agricultural commodity production would increase the risk of conflict (Humphreys 2005), but like timber remains relatively under-tested.

To explain potential relations between resources and wars, political economy perspectives have articulated three main arguments about resources: an institutional weakening effect increasing vulnerability to conflict; a motivational effect increasing the risk of armed conflict; and an opportunity effect associated with resources financing belligerents (see Table 1). The first relates to the idea of 'resource curse', according to which resource wealth results in economic and political underperformance as resource rents distort the economy and states rely on them rather than on broad taxation. Auty (2001; 2004), Ross (2004b) and Le Billon (2001; 2005a) have focused on

## Table 1. Mechanisms linking resource wealth and armed conflicts.1

Resource dependence weakening of states and society organisation

- Weak state mechanism
  - Poor taxation/representation (government fiscally autonomous from population)
  - Authoritarianism and corruption
  - Weak tax handle (resource sectors hard to tax due to the ease of illegal activities and poor bureaucratic control capacity)

Weak socio-economic linkages

• Low socio-professional diversification, social cohesion and regional integration Resource wealth and exploitation motivating armed conflict

Grievance mechanisms

- High income inequality
- High economic vulnerability to growth collapse
- Grievances over socio-cultural-environmental 'externalities'
- Grievances over unfair revenue distribution

#### Greedy rebel mechanisms

- 'Economic violence' by domestic groups
- Greater rewards for state capture
- Greater rewards for secessionism

## Greedy outsiders mechanisms

- High (future) profits
- Strategic leverage on competitors through resource supply control

## Resource revenues financing hostilities

• Higher viability of armed hostilities (resources financing the weaker party, but also covering for war-related budgetary expenditure)

economic collapse and political instability associated with the resource curse (Ross 2004a). Demonstrating the impact of political and economic dependence on resource rents, Verwimp (2003) demonstrates how the Habyarimana regime in Rwanda switched from buying political loyalty from coffee revenue redistribution to holding on power through massive repression following the late 1980s collapse of international coffee price. Arguing that industrial exploitation provided the state with more secure fiscal revenues than artisanal exploitation, Snyder and Bhavnani (2005) emphasise the 'tax handle' characterising the resource sector can contribute to political (in)stability. Jones Luong and Weinthal (2006) have focused on resource ownership and suggested that private ownership appears to reduce the risk of 'resource curse' and hence potentially the incidence of 'resource wars'.

The second argument is that resources motivate rebellion because of high potential gains (resource revenues) and low opportunity costs (prevalent poverty and lack of revenue alternative in many low income and resource dependent countries). Most prominently, Collier (2000) argued that impoverished youth fought in the hope of gaining access to resource revenues. Although the prospect of 'loot' has long been used to recruit

<sup>&</sup>lt;sup>1</sup>Adapted from Humphreys (2005).

and motivate fighters, many contemporary armed groups forcedly recruit fighters, especially among children and youth, questioning the whole motivational aspect. Furthermore, youth (often forcedly) integrated into rebels movements, such as the Revolutionary United Front in Sierra Leone, more frequently reported social justice, including economic equity, than individual rewards as motivational factor, with 'conflict diamonds' themselves inaccessible to foot soldiers and petty rewards provided by the movement on a relatively egalitarian basis (Peters and Richards 1998). However, as Weinstein (2005) notes economically motivated leaders appear to take over the control of armed groups over ideological ones in 'resource rich' contexts. Although motivation can be focused on long-term objectives, support for the hypothesis of individual financial motivation and 'economisation' of armed insurgencies remains tentative. Studies should thus be sensitive to the temporality of the conflict, prolonged conflicts appearing to favour economic motivations.

The third argument relates to the escalating and prolonging effects of resources on armed conflicts, and as received broader empirical support. Access to resource revenues ensures that more arms can be purchased, and conflicts can thus escalate. There is little evidence that resource revenues fund rebellions in their initial phase of escalation, at least in most recent cases of civil war cases involving financing by resources, but more evidence in terms of conflict prolongation (Ross 2004a, b). Overall, the influence of resource revenue access on the escalation and prolongation of conflicts depends in large part on which side benefits from such access: If the weaker party benefits, then prolongation and possibly escalation are likely; And if the stronger party benefits, a more rapid escalation towards its military victory is more probable. However, as argued by Keen (1998) profitable conflict stalemates are also frequent, whereby access to resource revenues by both parties appear to take precedence over military victory or conflict settlement objectives.

# 4 Political Ecology Perspectives

The third set of perspectives draws from political ecology and geography. It emphasises contextualisation, multidimensional power relations, a broad characterisation of resources and their mode of production, circulation and consumption. Political ecology studies have focused their attention on fine-grained analyses of 'local' conflicts, contextualised by specific histories and 'global' processes. Political ecology perspectives, and more broadly perspectives from geographers examining the political economy of natural resources, have made contributions.

The first contribution of political ecology has been to reconceptualise scarcity, abundance and dependence spatially. Attention is thus given to uneven resource distribution and commodity production and circulation, in order to resolve the puzzle of 'resource wars'. War itself frequently has a direct impact on this unevenness. Foreign investments respond to the risk of political instability and prevalence of hostilities. Oil reserves in Iraq, for example, have been 'under-exploited' since the 1980s, with the uneven effects of increasing current oil prospecting elsewhere (e.g., Gulf of Guinea) and the stakes of Iraqi oil control in the future (e.g., 2003 USA-led invasion of Iraq). Cambodian forests were either 'protected' or 'destroyed' between the late 1960s and 1990s according to the various forms taken by the conflicts (e.g., internationally unopposed genocide or massive USA carpet-bombing). In the early 1990s, on-going but 'lowintensity' conflict allowed many civilians and 'self-demobilised' soldiers to 'illegally' access forest resources (Le Billon 2000). As discussed below with reference to political ecology perspectives, uneven resource entitlements also reflect the antagonising effects of war on social identities, with sectarian violence in particular reshaping conditions of access and control over resources.

The second set of contributions drawn from geographical and political ecology approaches relates to issues of scale. At its most basic, scale relate to the level of process, empirical observation and analysis (e.g., national level data versus subnational disaggregation of data). Scale also plays a central role in interconnecting various places in order to make sense of 'local' or 'global' patterns of violence and resource flows (Le Billon 2001; O'Lear and Diehl 2007). As pointed out by O'Lear (2006), studies should question not only at which location, but also at what scale are conflicts occurring. In this respect, much of the case study literature 'supporting' the 'resource scarcity' argument has been sensitive to scale, at least in terms of the processes involved; arguing for example that 'environmental scarcity contributes to diffuse, persistent, subnational violence ... [i]t rarely, if ever, contributes directly to conflict among states' (Homer-Dixon 1999, 179). Yet, some of the political economy literature, particularly among studies taking econometric approaches, has overlooked scale, both methodologically and conceptually (O'Lear and Diehl 2007).

Methodologically, national-level statistics do not always adequately reflect 'local' realities. At a national scale, Russia produces diamonds and is facing a civil war. Yet, the production of diamonds in the Sakha Republic, Siberia, has little to do with the war in Chechnya: Russia is not affected by a 'diamond war'. The more literal understanding of the importance of spatial scale has been recently addressed by locating conflicts and resources more precisely at the subnational level, through spatial analyses using new subnational data and geographic information systems that allow for a better specification of models used in large N-studies (Buhaug and Lujala 2005). Two generations of spatial analyses have so far been developed to account for subnational variations in the location of conflicts and resources. The first generation is based on defining a conflict centre point and diffusion radius, limited by national borders (Buhaug and Lujala 2005). The second generation uses grid cells (100 × 100 km) and allows for a more discrete

analysis at a meso-scale (Buhaug and Rød 2006). Geographic information system-based regression analysis can better identify the relative significance of factors by using location specific meso-scale data. Yet, as demonstrated by a study of land conflict in the Eastern Brazilian Amazon by Simmons (2004), such analyses have to be complemented by detailed and historically grounded case studies, including at the micro-scale.

Attention to historical context, identities and power relations has also drawn on political ecology studies to recognise the chronic and multiscalar character of many resource-related conflicts, rather than simple concepts of duration and intensification. In a study of chronic violence in oil-rich Nigeria, Watts (2004) argues that violence does not only relates to the territorial control of oil fields of the Niger delta, but more broadly results from the effects of the 'oil complex' (configuration of community, state and firm) onto community identities; petro-capitalism undermining the project of secular modern governance through the reshaping of incompatible community identities, from the indigenous to national scale. Examining the interplay of identities and civil war in Sri Lanka on access to commonpool resources, fisheries and water, Korf and Funfgeld (2006, 391) argue that:

The political geographies of war affect access regimes and entitlements to ... resources and thereby confine the livelihood opportunities of resource users. These dynamics of the political economy of war cross different scales and go beyond simple place-based struggles, for they are rooted in broader spatial dynamics of warfare creating place-space tensions in the sense that spatial dynamics of military control impinge changing access regimes upon specific places.

Relationships between conflicts and resource access are of major interest to political ecology. The question of resource access through violent means, or for purposes of violence, has motivated research on the spatial characteristics of commodities, in terms of location, distribution, as well as mode of control and exploitation (Le Billon 2001; Ross 2003). Often dubbed 'a rebel's best friend' due to their high 'lootability', diamonds have been subject to detailed geographically informed enquiry into conditions of control and access to resources and implications for conflicts, for example (Buhaug and Lujala 2005).

The third contribution has consisted in greater attention to the characteristics and spatiality of resources. Although frequently absent, the 'ecological' aspect of political ecology also calls for greater attention to the materiality of ecological processes and their integration with social processes, giving way to the concept of 'socio-nature' (Swyngedouw 1999). Focusing on the spatial characteristics of resource control and access, Le Billon (2001) argues that control can define resources as 'proximate' or 'distant', while access can distinguish them as 'point' or 'diffuse' (Le Billon 2001). The control of resources results in part from the relative spatial position of a resource towards the centre(s) of power. Proximate resources are close to the centre of power (i.e., firmly under the control of the government, whether due to a physical spatial relationship or socially constructed one) and are less likely to be captured by rebels than those close to a border region inhabited by a group lacking official political representation. Distant resources are located in remote territories along porous borders, or within the territory of social groups politically marginalised or in opposition to the extant regime (i.e., under tenuous or controversial control of the government). These criteria are thus not only defined by their 'physical' locational attributes, but also by their broader political geography relating to socially constructed space.

The access to resource resources results in large part from the spatial spread of resource production areas and mode of exploitation and control (see also Auty 2001). Resources are more easily accessed by insurgent movements if they are spread over a large area and produced by a larger number of firms, rather than if they are spread over a small area and produced by a very small number of firms that can be more easily defended. Point resources are spatially concentrated in small areas and socioeconomically concentrated through technological means or corporate structures. They include mainly resources that can be exploited by capitalintensive extractive industries, such as deep-shaft mining or oil exploitation, which generally employ a small workforce and can be spatially concentrated as in the case of off-shore oil platforms. Diffuse resources are spatially spread over vast areas and access to their revenue is socio-economically dispersed. They are often exploited by less capital-intensive industries than point resources and include, for example, alluvial gems and minerals, timber, agricultural products and fish, but also on-shore oil wells and facilities. Other resource characteristics have also been examined in relation to conflicts. Ross (2003) underlines the importance of legality (e.g., narcotics versus legal cash crops), transportability (e.g., weight/volume ratio) and 'obstruct ability' (e.g., surface on-shore pipelines are more vulnerable to attacks and 'obstruction' than off-shore or deep-buried pipelines and are thus more likely to result in extortion schemes). These, in turn, also inform control and access of resources.

Based on the four main categories outlined above, different types of resources are more likely to be associated with different types of conflicts (Le Billon 2001, see Table 2). The argument is not that oil, for example,

Table 2. Relation between resource characteristics and conflict types.

Characteristics	Point	Diffuse
Proximate	Coup d'état Congo-Brazzaville (1997, oil)	Mass rebellion El Salvador (1980s, coffee) Warlordism Afghanistan (1979-ongoing, opium)
Distant	Secession Angola/Cabinda (1960s-ongoing, oil)	

should 'deterministically' be associated with conflicts taking the form of secession if oil is located in politically marginalised areas, chronic civil unrest and warlordism if oil is on-shore, or a coup d'état if oil is off-shore; but that the characteristics of resource sectors provide a context for political mobilisation, as well as for the motivations, strategies and capabilities of belligerents. If the characteristics of a resource influence the motives of conflicts and balance of opportunities between opposing parties, complicity between members of supposedly opposing groups, corruption and involvement of government officials or agencies in the illegal economy are frequently blurring the boundaries of these categories.

To take an example, a point resource distant from the centre of power should be more likely to be associated with armed secession. Point resources, such as oil, are less likely to generate direct revenue access for local populations than diffuse resources through local participation in resource exploitation. Access to resource revenues thus depends on the 'goodwill' of the central government, or the influence that local elites can exert on the central government. In contrast, local populations are more likely to bear the costs of exploitation, such as pollution and restriction in access to land. Political marginalisation of local populations in production areas effectively makes point resource 'distant' from the centre. So-called 'sons and daughters of the soil' are thus more likely to be mobilised to challenge the government through a secessionist struggle, rather than through warlordism (resource revenues being harder to access without the control of sovereign rights) or a coup d'état (the central state being able to afford its security through point resource rents). Moreover, point resources tend to have a low local employment rate with little scope to set in motion class-based mass rebellion or 'peasant wars'. This is not to argue that oil deposits will automatically transform local people into armed secessionists. Yet, when unable or unwilling to secure the control of resources through the existing centre of power, political movements in resource production areas have an interest in asserting secessionist sovereign claims over the lucrative periphery they claim as theirs. No less than ten secessionist movements were active in regions with large point resource endowments in the 1990s (Le Billon 2005b; see also Hoeffler and Collier 2006).

Most secession or decolonisation attempts have a pre-existing historical basis, yet these movements have often been reinforced by the socioeconomic and political transformations affecting resource rich regions and by the resource stake, not to mention immediate financial opportunities. Most recently, the presence of large oil reserves around Kirkuk in northern Iraq (or southern Kurdistan) significantly heightened the stakes around the creation of an autonomous Kurdish state in the region during the invasion of Iraq by USA-led forces. It was clear for the Turkish government that large oil revenues falling under Kurdish control would constitute a threat to the territorial and political integrity of Turkey (Peimani 2002). Because of the current reluctance of the international

community to reshape international borders under the United Nations Charter, nationalist claims need to be backed by historical sovereign rights. Such formal rights for Iraqi Kurds have long been rejected by Turkey and Western powers, even though southern Kurdistan has been a quasi-independent country since 1991. In contrast, sovereign rights afforded East Timor the opportunity to regain its independence from Indonesia in 1999. Ironically, this was made possible by Australia's military intervention, one of the few countries that had officially recognised Indonesia's illegal sovereignty over East Timor, in part to obtain a (more favourable) settlement of territorial claims over petroleum resources in the Timor Sea (Dubois 2000).

Beyond the likely type of conflict, this approach has also informed the debate on the role of resource sectors in the duration of conflicts. Continued access to resource revenues should also prolong conflicts, an effect empirically supported for 'contraband goods' such as alluvial diamonds and narcotics, but not for oil. Arguably oil revenues are more likely to be accessible and concentrated by the government than by rebel groups, although this depends in part on the accessibility of oil infrastructures and 'racketeering' opportunities. Empirical testing of some of these hypotheses through quantitative studies suggest that long-standing rebellions tend to be associated with diffuse and distant resources ('contraband goods' in Fearon 2004; alluvial or secondary diamonds in Lujala et al. 2005), and separatist conflicts with nonfuel mineral revenues (point resources, with the possible exception of alluvial diamonds, see Ross 2006).

The fourth contribution has been recognition of a broader range of violence than geopolitical and political perspectives. Peluso and Watts (2001, 5) call not only for understanding conflicts as 'glocaly' contextualised by history, power relations and material transformation taking place at a diversity of scales, but also for multiple forms of violence to be acknowledged in relation to resources. Beyond the coercive use of physical force to control or access resources, such studies engage with broader understandings of violence, such as Galtung (1990) notions of physical, cultural and structural violence, or multiscalar forms of social, economic and political violence (McIlwaine 1999). As noted above, the form of violence recognised by quantitative studies defines the spatiality and temporality of armed conflicts studied (i.e., armed conflicts are not accounted for when less than 25 people die per vear directly from a battle engaging the state against at least one recognised armed group). This can overlook, for example, long histories of single-sided 'repressive' violence by the state, or protract high levels of 'criminal' violence in the postconflict period (Pearce 1998).

Political ecology perspectives have also contributed to the theorisation of resource access and control in relation to conflicts and various forms of violence (Peluso 1994). Defining access as 'the ability to derive benefits' using all possible means, Ribot and Peluso (2003, 173) argue that a 'bundle of powers' shape access to resource benefits, not only a 'bundle of [property] rights'. They distinguish in turn among gaining, controlling and maintaining access to resources, and the power relations that these entail. Building on this work, control can be defined as the ability to enforce the rights to benefit from resources, using all possible means including various forms of violence (on the violence of property rights, see Blomley 2003). Historical analysis, in-depth interviews of individual or communal perceptions of violence, anthropological methodological approaches and gender-sensitive analyses can address these gaps and help to explain what constitutes violence in relation to resources, and how resources in turn relate to violence. Studies of opium production in Afghanistan, for example, demonstrate the dual standards of the USA in relation to narcotics production, as well as various dimensions through which opium relates to the financing of war crimes, peasant coping strategies and legally criminal yet socially accepted 'shadow' economies (Goodhand 2005).

Fifth, political ecology perspectives are also attentive to the construction of resources and their social connections with violence. This implies analyses of commodification (i.e., how 'things' become resources or commodities defined by their exchange value) and fetishisation (i.e., how imaginative aspects of resource production and consumption affect power relations). Political ecology perspectives have made use of commodity chain analysis to bridge site-specificity and multiscalar interconnections between resources and wars. At its most basic, this approach 'follows' resources from their point of production to their point of consumption (and 'disposal'). In doing so, connections are made, and actors, their motivations and power relations are more easily identified; thereby allowing for some degree of accountability beyond the immediate perpetrators of physical violence. Commodity chain analysis can help identify the links between different scales of resource production, transformation, circulation and consumption (for examples, see Hartwick 1998 on gold; Le Billon 2000 on timber). Commodity chain analyses of 'everyday' commodities, such as coffee, can reveal the structural violence at play in highly unequal power relations (Smith 1996; Talbot 2002). It also helps to identify responsibilities, regulatory spaces (and absence thereof), and il/licit (i.e., socially unacceptable) and il/legal (i.e., legally banned) social practices (van Schendel and Abraham 2005).

Human rights organisations, such as Global Witness as well as 'expert panels' from the United Nations on economic sanctions, have successfully taken this approach to publicly expose resource businesses and politicians implicated in the financing of war crimes. One of the purposes of commodity chain analysis is to bridge or fold scales in order to counter the 'localism' present in many narratives of contemporary armed conflicts. By showing the connections between 'killing fields' and 'shopping malls', commodity chain analysis moves from one scale to the other; broadening understandings of 'local' forms of violence away from the most physically

direct consequences capturing the interest of the media and recasting them within much broader processes of global commodity circulation and consumption (Hartwick 1998; Le Billon 2006). Scale here intervenes as both an analytical concept bridging the local and the global, as well as an interpretive framework. The different forms of violence relating to resources are better understood through the scales that resources link and (re)produce. For example, scales entail a hierarchical power relation between global demand (and global firms promoting it) and local sites of supply. In turn, these hierarchical relations are matched by different forms of violence, from the structural violence of mass consumption in retail spaces to physical violence on the body of workers and ecosystems in production sites. Human rights and environmental advocacy campaigns have stressed the need for fair trade along such lines. In the case of diamonds, multiscalar analysis has succeeded in demonstrating the structural (e.g., inequity), cultural (e.g., racism) and physical (e.g., amputations) forms of violence involved in the diamond sector (Le Billon 2006).

Commodity chain analyses are frequently used to examine commodification and its links with violence. Vertical commodity chain analyses identify actors and processes directly involved in the successive transformation of 'nature' into consumed resources. As vertical analyses follow resources from the fields to the dumps, they seek to explain power relations and various forms of violence along the chain, often with ethical purposes in mind such as pointing to responsibilities hidden by distant or publicly undisclosed connections. Horizontal analyses seek to deepen the understanding of particular links or nodes along the commodity chain, by studying their broader context and indirect relations (Leslie and Reimer 1999). In this way, individuals involved in mining 'conflict diamonds', for example, are not understood simply as 'greedy thugs' profiting from war, but as individuals and communities making choices in part dictated by prevalent conditions of destitution and repression (de Boeck 1999).

Defetishisation is a second major approach to examining the social construction of resources and their connections to violence. The 'conflict diamond' campaign successfully reconnected 'violent' spaces of diamond exploitation and 'peaceful' spaces of jewellery consumption by exposing diamond-trading practices and deceitful diamond-marketing strategies, and it demonstrated that many diamonds were 'tainted' by hatred and grave human rights abuses. Such 'defetishising' of diamonds as constructed objects of love and purity captured the attention of the media and forced the diamond industry to accept significant trade reforms through the Kimberley Process Certification Scheme against 'conflict diamonds'. Mobilising such powerful terms as 'war', 'blood' or 'terror' in consumption politics can thus prove highly rewarding for advocacy campaigns and media coverage. Yet, it may also be ambivalent in terms of their effects on producers, consumers and the advocacy campaigns themselves. The inclusion of racialised images of Africa in the reporting of 'diamond wars', for example, arguably burnished the 'reputable' character of Western industrialised mining interests at the expense of their historical accountability, while associating terror with artisanal diamond miners in Africa (Le Billon 2006).

As illustrated by some narratives of 'conflict diamonds' and as more generally argued by Castree (2001), defetishisation narratives are often narrow and essentialise the localities and social relations constitutive of these commodities, such as 'places of origin'. When 'unveiling' the nasty aspects of resource production and consumption for the sake of 'getting the message across to the public', defetishising narratives may underplay the positive sides of production and consumption and use images that are themselves tainted by prejudice. Informing consumers of unethical practices in a market full of 'smoke and mirrors' is ethically necessary, but such exercise can occasionally prove counterproductive if it mostly (re)produces prejudiced imaginative geographies and agendas (Bridge 2001; Cook and Crang 1996). Arguably, this risk may be increased as advocacy campaigns against 'conflict resources' rely on distant perceptions of problems and people, co-depend on the mass-media to build seductive storylines, and outbid each other in caricaturing situations to attract maximum attention and public support (Freidberg 2004).

#### 5 Conclusion

Reviewing perspectives on 'resource wars' is a precarious exercise. The term itself is conceptually 'reductionist', especially so when arguments exclusively relate conflicts to resources and take a narrow understanding of resources focused on their exchange or use value and their physical location. Conflicting perspectives have also pitted theoretical and methodological approaches against each other. Early studies selecting resources as 'proxy' variables for social processes have been criticised for their (de)politicising effects, particularly when emphasising the immediate financial aspects of resource 'looting' at the expense of other dimensions. 'Resource war' narratives have also been characterised by a high degree of essentialism, especially with regard to the decontextualisation and finger pointing of 'greed-driven thugs looting resources' frequently reported in the public media. As a result, broader contexts, scales and interconnections have often been overlooked. As Dalby (2002) urges, research on resource-related conflicts should be self-reflective and clearly question whose 'security' interests are actually served by the perspective and methodologies adopted. Although academic research often lagged behind advocacy-oriented research, academic perspectives on 'resource wars' continue to bear a responsibility on policy processes and the interpretation of conflicts.

Engagement between different perspectives has contributed to novel approaches to the significance of resources for conflict risk, duration and

resolution. Mainstream geopolitical perspectives have clearly put a priority on the resource supply security of wealthy nations, to the point of calling for military invasions abroad or resource autarky at home. There is little doubt that resource supply is a major concern of 'realpolitiks', but geopolitical narratives have often been blinded by seductive (and sometimes dubious) supply and demand statistics, articulated by an oversimplified geographic understanding of power relations and representations of potential 'flash points'. Critical geopolitical perspectives have rightly denounced such narratives, pointing to the vested interests involved and built-in prejudices and calling for greater contextual sensitivity and nuance towards power relations among firms, communities and authorities.

Studies from political economy perspectives have strived for precision in the study of mechanisms-linking resources and conflicts and for methodological rigueur within a mostly quantitative template, allowing for some more detailed comparative case studies. The methodological approach taken by these studies has often limited the scope of their historical engagement, the form of violence studied and the possible variables that could factor for the processes hypothesised. These studies have yielded major insights into the significance of resource dependence for conflict risks, and patterns of conflicts relating to particular types of resources and mode of exploitation and regulation.

Political ecology perspectives have emphasised contextualisation and multiscalar relations, pointing also to the specific material and social dimensions of resources. Most political studies have continued a fruitful tradition of fine-grained and historically grounded analysis of largely individual case studies with a focus on nuanced analyses of power relations. Significant findings have been gained on the importance of the historical, institutional and material context of 'resource wars'. Certain resources have been found to increase vulnerability to certain types of conflict or to prolong conflicts. Bridging and renewing conceptual and methodological approaches drawn from these three perspective could yield vet further insights on so-called 'resource wars' and serve broad objectives of social and environmental justice.

#### Note

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