



# Anthropocene Geopolitics: Globalisation, Empire, Environment and Critique

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## Abstract

Critique is about challenging the taken for granted categories in scholarly and political discourse. Three aspects of contemporary politics at the biggest of scales are subject to critique here: the assumptions underlying the War on Terror, globalisation and the notion of environment. The global War on Terror is not really global, and might well be better understood by using imperial analogies from the past. Globalisation, once its implicit geographies are directly addressed, might be better understood as a matter of glurbanisation. Likewise earth system science, and its suggestion that human actions are now on such a large scale that we live in a new geological period, the Anthropocene, requires us to rethink assumptions of our living within an external environment. Taken together these criticisms of the taken for granted spatial categories of contemporary political life raise big questions for how geography is now understood and how we might teach it in the future. Such an analysis also suggests the continued importance of critique as an intellectual practice in the academy.

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## 1 Critique

Criticism is a necessary part of all intellectual activity, a part of research and of teaching. It focuses the mind on the concepts and assumptions that structure thinking, and hence it leads to reflection on premises and practices of scholarship. Criticism is not easy to do well; it is not just a matter of arguing and refusing to accept the case made by someone with which one disagrees. Criticism involves hard thinking and a willingness to ask questions about one's own assumptions and thought. It is unavoidable if human existence is to be the subject of intellectual inquiry. More so than this, critique allows us to understand the limits of our categories and the possibilities of thinking differently about important matters in many fields. In Michel Foucault's (1988, 154–155) trenchant prose:

A critique is not a matter of saying that things are not right as they are. It is a matter of pointing out on what kinds of assumptions, what kinds of familiar, unchallenged, unconsidered modes of thought the practices that we accept rest . . . We must free ourselves from the sacralization of the social as the only reality and stop regarding as superfluous something so essential in human life and in

human relations as thought . . . Criticism is a matter of flushing out that thought and trying to change it: to show that things are not as self-evident as one believed, to see that what is accepted as self-evident will no longer be accepted as such. Practicing criticism is a matter of making facile gestures difficult.

Whatever geopolitics may be surely it is not facile!? No, but as the contemporary literature on geopolitics shows, some of the most taken for granted and obvious parts of contemporary political thought are assumptions about context and environmental circumstances. When these shape the reasoning and rhetoric of scholars and policy-makers they have very important effects. In John Agnew's (2003, 3) summation:

The world is actively 'spatialized,' divided up, labeled, sorted out into a hierarchy of places of greater or lesser 'importance' by political geographers, other academics and political leaders. This process provides the geographical framing within which political elites and mass publics act in the world in pursuit of their own identities and interests.

Putting critique and geopolitics together suggests the importance of evaluating those frames and of understanding where is important and where marginal in any political leader's thinking. So too in academic discussion of world politics where what happens in the capital cities of the great powers are so frequently the primary focus of attention. The schemes used by political organisations and international institutions are rarely the only obvious way of dividing up the world and using these divisions to justify policies and practices (O'Tuathail 1996). But precisely because of the taken for granted nature of geographical categories – states, regions, blocs, continents, resources and environments – it is important to stop and think about how these shape political discourse.

It is also important to recognise how persistent colonial modes of thought are in geopolitical reasoning and how Northern specifications of the global continue to reproduce the South as inferior; subject to surveillance, development and management in Northern terms. This is reinforced by the contemporary practices of neoliberalism where the whole planet is understood as an economic arena (Harvey 2006). Geopolitical reasoning is mostly about the view from the metropolises of the global polity. Taking the voices that resist such designations seriously matters; their post-colonial claims are an important part of contemporary critique (Slater 2004). This is especially so in the discussions of environment where numerous colonial modes of thought persist in the metropolitan discourses of both development and security (Dalby 2002).

This article focuses on three contemporaneous changes in the human condition to question the appropriate framing of these developments and reflect on the categories we use to make sense of them. More specifically, the argument below first looks at the geopolitical events of September 11, 2001, and its aftermath, then second to the current transformation of humanity into an urban species, and third to the argument emerging from

earth system science that humanity is now changing 'natural' systems on such a scale that we have in effect become a new geological force in the biosphere, one that requires designating our times as a new geological era, 'the Anthropocene'. Putting the three themes together suggests the need for continued critique if geopolitical categories are to adequately grapple with the realities of the contemporary human condition.

## 2 *Geopolitics*

Classical geopolitics usually understands the geographical features of the earth's surface to be relatively stable, the stage as it were for the political dramas to unfold. More narrowly, it is sometimes defined in terms of the geographical dimensions of foreign policy making and the way in which foreign policy makers understand the context in which such policy is made (Kelly 2006). Much of this has been and continues to be written from the vantage point of Western intellectuals, concerned in the early days, when the approach of geopolitics was formulated at the end of the nineteenth century, with the rivalries of European states and their search for territory and power as well as larger aspects of Western culture (Dodds and Atkinson 2000).

While the term 'geopolitics' comes from Swedish writer Rudolph Kjellen, the scholar most usually associated with it is Halford Mackinder (1904), the British geographer who wrote a article published in 1904 on the geographical pivot in Central Asia, understood by him to be key to understanding the course of history. Some of these themes were picked up by Karl Haushofer and Nazi thinkers in the 1920s and 1930s to use in arguments about *Lebensraum* or living space for the German race. Nicholas Spykman (1942, 1944) extended Mackinder to argue that post-Second World War American policy should ensure that the 'rimlands' of Eurasia remained under control by forces friendly to the United States (Polelle 1999).

Mackinder's ideas have frequently faded from view, but they periodically undergo revivals of interest when the largest patterns of political power shift; the centenary of his 1904 article, which passed recently, has marked another renaissance with the discipline of geography (Dodds and Sidaway 2004). Simultaneously his analysis of the importance of geographical factors in international politics have continued to engage those interested in the strategic dimensions of international politics and those interested in matters of defence and great power rivalry (Sempa 2002). Current discussions of war in Central Asia have also invoked classical geopolitical themes repeatedly; geostrategy is under consideration once again as interpretations of contemporary military events seek to put those events in a larger context (Blouet 2005).

Places and other geographical terms are invoked in political discourse in numerous ways, not only in the formal texts of academic analysis and the practical geopolitical reasoning of policy-makers and politicians, but also in

more popular texts that articulate political identity and national policy with wider themes in popular culture (Dittmer 2005; Sharp 2000). This is important because in the capitals, policy discussion forums and think tanks of the great powers, policy is made through precisely such reasoning practices, regardless of how accurate their designations of particular places and peoples actually are. Indeed, even remote and apparently unimportant places, and events that happen there, are imbued with all sorts of symbolism that is part of the discourses of politics and has significance precisely because of the stories that are thus told (MacDonald 2006).

This focus on the politics of designating reality in such ways has been what critical geopolitics scholarship has been doing for the last 15 years (O'Tuathail and Agnew 1992; O'Tuathail and Dalby 1998; O'Tuathail et al. 2006). These investigations have made it clear that the geographical languages in which the important matters of war and peace, foreign and defence policy, and the appropriate foreign policy in the face of globalisation are discussed, are not innocent. The manner in which states are described in geographical terms are not objective categories divorced from the finer points of diplomacy or the threats of violent confrontation in war (Sparke 2005). Neither is their political meaning stable; states form alliances, fight wars and change relationships and sometimes do so with remarkable speed.

### 3 *The global era*

This became clear in late 1989 when suddenly Soviet dominance in Eastern Europe gave way to a very different geopolitical scheme as the Berlin Wall was demolished and the communist regimes were deposed largely by peaceful means. Where there had been a wall and fences to keep Europeans separate now people and goods criss-crossed the region. The important point here is that the geographical categories of politics were rearranged in the transitions from one to another period. What had been important but a few years earlier was swept away and enemies became allies in dramatic moments of political change. Maps of east and west were no longer appropriate after the Soviet Union collapsed. China now supplies huge amounts of consumer goods to the United States, an arrangement of affairs that was unimaginable even a generation ago.

For the first couple of years after the demise of the Cold War division of Europe most commentators were at a loss as to how to designate the 'post-Cold War' era and continued to call it just that, defining the new in relation to what it came after, rather than by its own criteria. However, by the mid-1990s, the term *globalisation*, popular among business leaders as a justification for the expansion of international commerce, and financial movements in particular, had come to dominate political discourse (Steger 2005). While globalisation was clearly the ideological framework for various forms of neoliberalism (Harvey 2006), it is also the case that communications did change cultural sensitivities as satellite television, cheap phone calls,

growing international tourism and then the Internet linked numerous parts of the world and their peoples together. While states persist, and appear likely to continue to do so for the foreseeable future, their functions are changing as global financial flows and numerous decisions about many things are taken regardless of state boundaries (Sassen 2006). We now supposedly live in a 'global era' (Albrow 1997).

In the 1990s, many states moved to at least partly disarm as the threat of major superpower warfare apparently evaporated although a number of wars and armed struggles persisted, some of them hangovers from the Cold War. The standoff on the Korean Peninsula in particular persisted despite the reduction in support for North Korea after the demise of the Soviet Union. Nonetheless, humanitarian interventions and attempts at 'global' peacemaking were initiated in what seemed to some commentators as a more peaceful period in which superpower rivalry was no longer fuelling arms races. To other critics, these 'interventions' seemed like an old pattern of imperial politics repeated all over again, a view sharpened by the air attack on Yugoslavia in 1999 (Chomsky 1999).

A historical view of geopolitics suggests, more clearly than most methods, the importance of understanding that the geographical specifications of politics at the very biggest scale need to be analysed very carefully. Where threats come from and who is responsible for them change in the minds of politicians with remarkable speed; the essential building blocs of states and regions, friends and enemies, can be reconfigured very rapidly in a moment of crisis or 'geopolitical transition' (Taylor 1990). Indeed in moments of geopolitical change dramatic rearrangements may shift alliances and understandings of world politics in entirely unanticipated ways. Assuming stability in geopolitical arrangements is frequently a mistake.

#### *4 Geopolitics and 9/11*

All this becomes clear in light of the unforgettable events of September 11 when hijacked airliners crashed into both towers of the World Trade Center in New York. Suddenly, America was involved in a new war, one that was supposedly 'global' in some way or other. Alliances shifted with amazing rapidity in the weeks that followed. Russia and America were now allies in the new War on Terror. Pakistan, under sanction for its nuclear weapons activities, suddenly became firm friends with the United States to the considerable discomfort of many of its citizens and some of its serving military officers too. Afghanistan was attacked because it was reluctant to concede to unilateral American demands. All this was new the American media assured worried viewers.

But some careful reflection, and this was in very short supply in the months following 9/11, and in particular some simple questions about the geography of all this, suggested that the CNN designation of the events as 'America's New War', and the Bush administration's discussions of a global

War on Terror, were badly misconstruing what was going on (Dalby 2003). Put bluntly this supposedly global war was not global at all. The hijackers were not 'global', nor did they have a global network of support. They were mainly Saudis, with a few Egyptian helpers involved, and while they had travelled to various part of the world, their network was a more limited one than popular media representations suggested. These attackers came from one of America's allies not one of the states that supposedly presented a threat to American security.

In many ways, the War on Terror was not all that 'new' either. Again the taken for granted assumptions of novelty were read off the simple tactical innovation of using airliners as guided missiles. This was novel, but the struggle between renegades and their former imperial masters is a matter with a long history. Bin Laden's start in the world of conflict came as a fighter in Afghanistan to defeat the Soviet Union's troops there in the 1980s. These efforts were supported by American supplied weapons and training. Bin Laden subsequently turned on his former allies after the introduction of American troops into Saudi Arabia in 1990 in response to Saddam Hussein's invasion of Kuwait. Clearly discussing this in terms of 'blowback', the unanticipated consequences of prior American involvement in supporting resistance fighters opposing the Soviet Union in Afghanistan, grapples with part of what is happening (Johnston 2000).

But given American support for the House of Saud and other rulers in the oil-supplying states of the Persian Gulf, the geography of this suggests an imperial arrangement whereby local rulers are supported by distant military forces. This is not new either in this region or other parts of the world; it is a geopolitical pattern that emphasises a long history of connections and responsibilities rather than the emergence of something new in September 2001 (Klare 2004). Renegades who taunt the rulers of empires from remote peripheries are a persistent problem of imperial politics; Bin Laden is little different. But none of this suggests that contemporary events justify the invocation of the language and strategy of a 'global' War on Terror. Nonetheless, that is exactly how it was portrayed by the Bush administration in the years after 2001, all the while denying that America is an empire, because it apparently does not conquer territory (Dalby 2006).

But if one does not accept the global War on Terror as global, and recognises that many American actions are imperial in nature, even if permanent conquest is not one of them, then the world looks very different from the conventional assumptions of an international system of equal nation states and 9/11 as something altogether new. American military invasions and policies of political pressure, financial control and direct intervention in the running of many supposedly sovereign states make much more sense if politics is understood in imperial terms (Dalby 2005). Many states are much less in control of their destinies than the conventional assumptions of territorial integrity and precisely defined borders suggest; sovereignty is a much more complicated matter (Agnew 2005).

A historical sensitivity to the history of invasions of many parts of the world by Western forces, and to the rhetoric of civilisational superiority that is invoked to justify killing people at great distances from the homeland, also makes the continuities with imperial thinking clear (Gregory 2004). In many ways, the geopolitical categories have been shuffled once again to bring nineteenth-century matters of civilisational dominance back to the forefront of thinking about world order where American politicians reserve the right to intervene in any rogue states they judge to be a threat to American interests, and do so by justifying these actions as necessary to protect civilisation. It also makes clear that the practices of such rule frequently produce very violent geographies (Gregory and Pred 2006).

### *5 Glurbanisation*

These criticisms of the conventional assumptions of post-9/11 geopolitics and the suggestion that it is important to understand the imperial dimensions of contemporary politics, also raise other questions about contemporary geographies and how we might understand the rapidly changing human condition. These matters are at the heart of the geographical discipline with its core mandate to study the earth as the home of humanity. They link the spatial dimensions of politics to the matters of the administration and the consumption of resources in making contemporary modes of life. Much of this too is related to imperial rule, and crucial to a geopolitics that understands the world as an external entity to be manipulated and controlled, turned into resources and commodities for the purposes of the rich and powerful (le Billon 2004).

More specifically, we need to understand the maps and many of the boundaries used for administrative purposes by contemporary states as an artefact and legacy of European empires (Sparke 2005). Financial networks now link cities together suggesting a geography of a single urban system in which there are a pattern of nodes of business activity much of which is less concerned with particular states than with the finer points of corporate operations (Sassen 2006). Globalisation is all about economic phenomena crossing boundaries, a process that challenges the mental maps of policy-makers and citizens alike as it enmeshes us all in commodity chains that span the globe (Cameron and Palan 2004). Many of the geographical entities on the world map today, which appear as permanent arrangements are very recent. Territorial structures of many states continue to evolve. Even as citizenship is now codified in passport regimes, in Europe national boundaries are dissolving as a passport from one state is recognised by all European states. Dual citizenships are now frequent too, further complicating any attempt to tie people neatly to territory. European states and notably Canada have responded with official policies of multiculturalism. But most of this is viewed within an interpretative grid focused on states, citizenships and borders.

If one ignores this framing of globalisation and looks instead at where people are coming from and going to in geographical terms now, in contrast to the European colonising migrations of the nineteenth century, new migrants are becoming big city dwellers, rather than farmers, miners and foresters opening up new rural areas to exploitation. They are moving towards the metropolises of the global economy not into the rural hinterlands of new colonies. This too suggests an important change in migration patterns, a matter not helpfully understood as a matter of globalisation. What is important to recognise too is that rural to urban migration is a longstanding pattern, part of the process of modernisation of the rural areas and the spread of commercial, and more recently industrial, farming that displaces traditional practices. While most of this may happen within states the growing matters of migration, legal and illegal, might best be understood as a matter of urbanisation on the global scale, not something that is necessarily easy to see based on statistics that measure state border crossings.

The discussion of globalisation frequently misses the crucial point that in the last half century we have become an urban species. Whatever the finer points of statistical measures, the general tendency is clear, and millions now live in the enormous slums of the cities in the global South (Davis 2006). For the first time in history humanity is now an urban species; the conditions of our lives are increasingly artificial and interconnected as a result of this fundamental change in our condition. But how we think about governance and rulership in these new conditions has not yet overcome the imperial legacy of territorial administration based on property, territory and citizenship defined in terms of supposedly exclusive spaces (Sparke 2005). Urbanisation, with its indirect but powerful impacts on rural areas far from the metropolitan centres, is the dominant artificial force in the global biosphere. It is in need of appropriate rules and structures of governance, but we have yet to think seriously about how to devise such arrangements. Once again the geographical categories through which we think these matters need to be the object of critique.

Viewed in these terms then the traditional theme of European geopolitical thinking concerning the control of remote peripheries to ensure the supply of essential commodities for metropolitan consumption comes more clearly into view (Hoogvelt 2006). As we become an urban species, and as rural people become more enmeshed in the commodity circuits of the global economy, questions of violence and rule in the periphery are key to imperial power. Much of the discussion of violence and resource wars then comes to be seen in a different geographical way. The resource wars in Africa in particular are about controlling the local revenue streams from the export of valuable resources, diamonds, minerals, timber and oil (le Billon 2005). This only makes sense when understood as part of a global economy where rural areas are both a source of materials for consumption in the metropolises and, now, also increasingly a matter of tourist destinations where environments are turned into resorts, theme parks and ecotourist conservation areas, game parks, hunting concessions and forestry hiking areas.



Put in these geopolitical terms then the post-9/11 world, which links pacification of the rogue states in the Bush administration's terms, makes better sense than talking about sovereignty and territorial states as the containers of political life. Placed in the largest terms Bin Laden's fugitive existence in the more remote parts of the global economy also makes sense; so too does the logic of the Bush administration in trying to dominate the Persian Gulf region militarily. As commentators from right and left have begun to suggest forcefully, the Americans are involved in a war for control of the petroleum resources of the region, a war that Andrew Bacevich (2005) suggests might well be understood as the fourth world war, following the two world wars of the first part of the twentieth century with the Cold War understood as the third. Ensuring local rulers are cooperative is again an imperial pattern of longstanding and it explains the continuing American support for the house of Saud that so infuriates Osama Bin Laden.

### *6 Anthropocene geographies*

But all this importance placed on petroleum leads to the heart of the ecological predicament of our times, one in which our artificial ecologies of urbanity are now changing the biosphere itself in significant ways. The violence in the Gulf region is related directly to these things because it is the petroleum from the region that both fuels the contemporary transformation of the human condition and threatens, when it is turned into air in furnaces and internal combustion engines, to alter the basic composition of the planetary atmosphere which will change in one way or another the conditions of human life. There are numerous other uses of petroleum products, and the huge use of carbon fuels in concrete production, electricity generation and space heating is important, but the infrastructure of highways, roads as well as automobile production, was the key element in state and economic 'development' through the twentieth century, hence the focus on car culture remains appropriate (Paterson 2007). But once again the geopolitical language, the spatialisations used to organise our understandings of the world, to facilitate the promotion of our identities and interests in the world, are out of line with the new contexts of our lives.

Not least because as geographers have been pointing out for quite some time the old geographical assumptions of an environment outside or separate from human existence is no longer a tenable assumption for thinking about matters of nature (Castree and Braun 2001). On all scales the human presence in nature changes it as it changes humans; if environment is no longer understood as out there, somewhere separate from humanity then 'our' place 'in' nature too is a matter for critique. New anthropic 'forcing mechanisms' are now driving the processes of the biosphere in novel and as yet unanticipated ways (Steffan et al. 2004). We are literally changing the air, and many of the other physical processes of the biosphere on such a scale that earth system scientists have started suggesting that we now live in

a new geological era, which is now increasingly called the 'Anthropocene' (Crutzen 2002; Flannery 2006). In the words of the International Geosphere Biosphere Program authors (2001, 4):

The interactions between environmental change and human societies have a long and complex history, spanning many millennia. They vary greatly through time and from place to place. Despite these spatial and temporal differences, in recent years a global perspective has begun to emerge that forms the framework for a growing body of research within the environmental sciences. Crucial to the emergence of this perspective has been the dawning awareness of two fundamental aspects of the nature of the planet. The first is that the Earth itself is a single system, within which the biosphere is an active essential component. In terms of a sporting analogy, life is a player, not a spectator. Second, human activities are now so pervasive and profound in their consequences that they affect the Earth at a global scale in complex, interactive and accelerating ways; humans now have the capacity to alter the Earth System in ways that threaten the very processes and components, both biotic and abiotic, upon which humans depend.

This growing recognition of changed circumstances of our collective existence has been slow to penetrate either the academy or the halls of political power in the West. While it has gradually permeated the rhetoric of international politics and at least some of the formulations of global security in the United Nations (Secretary General's High Level Panel on Threats, Challenges and Change 2004), how all this might change our understandings of the appropriate governance structures for humanity is only beginning to be considered. To facilitate such understandings the term Anthropocene may be helpful.

All of which suggests quite clearly that we need to rethink our identities as agents of geological change, and in the process understand humanity's role in the larger order of things in new ways (Millennium Ecosystem Assessment 2005). Can we rethink smelting as a new mode of geological metamorphic process? Is not the huge destruction of habitat that humanity is undertaking at an apparently accelerating pace, and which is leading to loss of many species, another example of a major geological event similar to changes that led to the extinction of the dinosaurs and which has marked the transition between geological eras a number of times in the past? Can we imagine the huge conversion of fossil fuels into carbon dioxide as literally turning rocks into air on a planetary scale, because that is what we are in fact doing? As geomorphic agents human excavations of mines and quarries, and the transport of these materials all over the planet in tankers, freighters, pipelines, trains and trucks, now dwarf 'natural' processes (United Nations Environment Program 2002).

Just as critique in geopolitics emphasises the importance of challenging the taken for granted spatialisation of political thinking, so too here I am suggesting that the discipline of geography has a role in challenging the modern assumption that nature is an external entity which industrial processes

can manipulate, and which our urban designs can effectively ignore because of the power of this technology. Security threats to modernity, long the preoccupation of the discipline of international relations, have usually assumed that threats are external to states, a matter of manipulation of external environments. But in the case of environment it is clear that such formulations are seriously misleading because it is the consequences of industrial production, and the appropriation of resources and displacement of populations as a result of these appropriations, which are causing the environmental changes that are supposedly a threat in the first place (Dalby 2002). As the evidence for human-induced climate change mounts, and some of the initial projections in the 1980s are confirmed as the years go by, we have effectively taken on the role of determining what the world's climate will be in the future (Hansen et al. 2006).

How then might we think differently about the global ordering of politics in the Anthropocene? Given the focus of my critique here we might want to rethink humanity's place, and our role in the biosphere in altogether different terms. Indeed might we argue in light of the discussions of climate change that most of us, social scientists, and certainly many geographers are guilty of a form of 'terrestrocentrism' a focus on the land rather than an understanding of ourselves as part of a biosphere dominated by oceans and atmosphere. Given the obvious importance of these themes, and the essential role of the ozone layer in making life on the planetary surface possible, a matter that is clear both in the blueness of the sky and the blue colour of the globe in the famous Apollo photograph of 'the whole earth' (Cosgrove 1994), might we not now need a new form of 'blue theory' to explain human life on earth?

It is easy to have fun inventing such terms, but my purpose in talking of terrestrocentrism and blue theory is to extend the task of critique by using new vocabulary to challenge the taken for granted categories within which both ecological and geopolitical matters enter political dialogue. If we take the science of earth systems seriously then the implications for governance and politics are profound. Linking this up with the themes of glurbanisation and empire and thinking about climate change mitigation policies in terms of carbon emissions trading, suggests that at least some old imperial patterns of mind, those of exporting products, people and convicts to colonies, are still very much in operation. Now poor states of the South are places to establish cheap quick growing forestry plantations to absorb Northern carbon dioxide emissions, often with unforeseen and unpublicised problems for the local communities who find themselves the supposed beneficiaries of the latest form of development (Development Dialogue 2006). All the while Northern industries and consumers are let off the hook; the peripheries of the world economy are doing the task that 'we' have assigned 'them'; cleaning up our mess! Nonetheless, the very fact that carbon emissions are beginning to be taken seriously suggests a useful innovation in governance and the beginnings of an understanding that we live in a biosphere that we

are changing. But further critique of the geopolitical categories that structure the debate on emissions trading is obviously needed.

### *7 Geopolitical alternatives*

Support for the contention about the need to take science seriously in the reformulation of geopolitics can also be found in contemporary discussions of social theory, and in particular in one prominent student of the social nature of science, Bruno Latour (2004, 18), has formulated matters in an especially interesting manner where he discusses politics as 'the progressive composition of the common world'. Moving on from his earlier discussions of hybrids and the ontological impossibility of the distinction between nature and culture that shapes so much modern thinking (Latour 1993), he poses a series of meditations on the necessity for rethinking democracy once that distinction is rendered untenable. This runs neatly parallel to the implications of thinking geopolitics in light of the changed perspectives in earth system sciences epitomised by the formulation of the Anthropocene. All of which requires a shift of focus away from geographies of administration in terms of blocks of space and a recognition of how economic and ecological phenomenon are about connections, links and consequences that flow across these boundaries.

Putting a focus on connections and flows of materials, wealth and people instead of the administrative conveniences of states and their boundaries, suggests that politics be rethought rather drastically in so far as distance is no longer used as an excuse for inaction (Hughes and Reimer 2004). There are consequences of metropolitan consumption in the biosphere both in general in terms of carbon dioxide and climate change and more specifically in terms of the disruptions, and violence of a 'shadow globalisation' caused by the extraction of resources and their processing and transport (Jung 2003). In terms of politics and governance, the whole planet is being remade by our contemporary urban industrial systems; geopolitical thinking needs to catch up with these insights from earth system science.

This is not to suggest that there are no important innovations in governance and international politics in the last few decades to respond to some of these matters (Clapp and Dauvergne 2005). The Montreal Protocol on stratospheric ozone depletion and limitations on the export of toxic wastes and other agreements have begun to tackle some aspects of the global environmental situation, but the fundamental switch to understanding ourselves as actively creating the global climate has yet to be made. The liberal assumptions that markets will decide, or at least are the most effective way of dealing with, environmental difficulties still refuses to focus on what we make, and how we produce the things that are changing the biosphere. Focusing only on cleaning up the mess or limiting the pollution suggests that much critique remains to be done! Thinking about politics as 'the progressive composition of the common world' suggests looking forward

and understanding that decisions taken today effect changes in the future, but changes in both nature and humanity together.

Such a focus understands technology, and our collective choices of which technologies we choose to research, develop and use, as of direct importance for shaping not only our lives but the larger context in which these lives are lived, the contents and processes of the biosphere itself. In the title of one important volume is on the subject 'Materials Matter' (Geiser 2001). Nowhere is this clearer than in the debate about energy use and the choice of technologies and fuels. In the long term, how the planet's peoples cope simultaneously with both diminished supplies of fossil fuels and the probable disruptions of climate change is crucial. Will elites fight to control these diminishing supplies or will they actively move to introduce solar, wind power and perhaps hydrogen fuel schemes making sure that social programmes provide energy needs for the poor and vulnerable? The tendency in Washington in the last few years clearly suggests a policy emphasising the former not the latter, but this is not necessarily a policy that will be permanent if matters continue on their violent course in the Gulf region (Bacevich 2005; Klare 2004).

Will in future, therefore, the Persian Gulf be understood in the geopolitical language of Washington, Paris, London, Delhi and Beijing as a region that has to be fought over to control the oil supplies, or will the future involve more cooperative ventures to reduce fossil fuel consumption and cooperate in a more reasonable division of the earth's resources? Some European states have made moves towards the latter mode of thinking by following up on initiatives from Agenda 21 and other international agreements (Dodds and Pippard 2005). Beijing has recently initiated hasty development of renewable energy sources too; but a larger understanding of a shared fate and the benefits of cooperation have yet to appear in discussions of such things as the future of Iran or how to deal seriously with climate change. Such cooperative endeavours might well lead to a much more peaceful world where trading rather than fighting are understood as the appropriate way of dealing with disruptions, and where the use of military force to ensure the supplies of resources from remote peripheries to metropolitan consumers is finally abandoned as an historic imperial relic of earlier geopolitical ages.

### *8 Critical geopolitics*

For this to happen both the geopolitical categories and scientific understandings that underpinned twentieth-century geopolitical reasoning will need continued critique. This is an essential task for the discipline of geography and especially for studies of geopolitics if the bloody legacy of the past is to be confronted with appropriate conceptual tools in the Anthropocene. A critical geopolitics now works to challenge obvious spatial framings of threats 'there' in the wild zones, and endangered virtue 'here' in the metropolitan centres of the global economy. This critique will be all

the more effective for being carried out far from the metropolitan centres where geopolitical knowledge is usually produced. Nonetheless, tackling it within those centres is essential if the imperial premises of contemporary global thinking are to be critiqued at source.

In an interconnected world, it is obvious that attempts at national independence will continue as a defensive measure in many places for many reasons. But complete autonomy is impossible and glurbanisation continues to move national populations into large cities far from traditional homelands in ways that suggest the importance of all sorts of political initiatives and dialogues that do not simply take the cartographies of national power as the only geopolitical specification that matters. Contemporary political 'assemblages' to borrow Saskia Sassen's (2006) term, simply do not work in the neat territorial boxes of classical international relations theory; the use of the term empire makes this much clearer. Again a basic assumption in political reasoning is challenged here. Empire requires a focus on the connections between places and the links between metropolitan actions and violence on the frontiers of the global economy, just as it forces a reconsideration of the identities of the subjects at its centre who are literally 'driving' global change (Paterson and Dalby 2006).

Geopolitics has a long and bloody history of providing arguments for war and justifying the vilification of foreigners, but the perspectives of earth system science now offer powerful additional tools for understanding the interconnections between the fates of people in different but connected social and ecological conditions. Environment cannot any longer be understood as a separate external entity; thus the divisions between human and physical geography are once again also in question. But clearly we must think about integration of the discipline without the imperial ethnocentric spatial framings of the past, and its related assumption that the view from the metropolises is either superior, or the basis whereby 'we' in the metropolises can administer 'them' in the periphery. This is especially clear given that the biophysical forcing mechanisms in the Anthropocene era are shaped much more by the modes of consumption in industrial economies than they are by the actions of 'peripheral' peoples.

### 9 Biography

Simon Dalby is a Professor at Carleton University. He was educated at Trinity College, Dublin, the University of Victoria and holds a PhD from Simon Fraser University.

He has written widely on issues of Geopolitics, Security and Environment. He is author of *Creating The Second Cold War* (London, Pinter and New York: Guilford 1990) and *Environmental Security* (Minneapolis: University of Minnesota Press 2002) and co-editor of *The Geopolitics Reader* 2<sup>nd</sup> edition, (London and New York: Routledge, 2006). He has written for journals such as *Studies in Political Economy*, *Geopolitics* and *The Canadian Geographer*. Simon is the political geography section editor for *Geography Compass*.

## Note

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