

Thinking Through Networks and Their Spatiality: A Critique of the US (Public) War on Terrorism and its Geographic Discourse

Nancy Ettlinger

Department of Geography, Ohio State University, Columbus, OH, USA; ettlinger.1@osu.edu

Fernando Bosco

Department of Geography, San Diego State University, San Diego, CA, USA; fbosco@mail.sdsu.edu

Conventional thinking about war is encumbered by an inappropriate geographic paradigm that conceptualizes "targets" in terms of fixed latitudinal/longitudinal locations. This paper reconceptualizes terms such as "war" and "targets" to recognize intangible problems and develop appropriate counter-terrorist strategies. This requires geographic inquiry focused on spatiality, not on location. We frame our discussion about terrorist networks (Al-Qaeda in particular) in terms of understanding a network's sense of place and sense of space. The former "places" a network's meeting and recruiting grounds; the latter clarifies the operational dynamics of a network across space, at different scales, from the body to the neighborhood, to the region, and across nations. We argue that the roots of terrorism lie in conditions of disenfranchisement in particular types of places, understanding, however, that the socio-cultural fabric of a terrorist network such as Al-Qaeda evolves across space as well as time. Counter-terrorist strategies should target neither people nor places but rather the conditions that give rise to terrorism; further, "intelligence" should focus on network dynamics, beyond particular people in particular places. We draw from network theories (specifically actor network theory and network approaches in economic sociology) to unravel network dynamics, and we draw from the literature on spatiality to interpret such dynamics in space, over time. We advocate a non-military engagement with terrorism on both moral and strategic grounds; here we focus on the strategic dimension, the value of which has received scant attention.

Prologue

This paper critiques the US military approach to terrorism, notably Al-Qaeda. We submitted this paper to *Antipode* in January of 2003, when public attention (including ours) was not especially focused on a war against Iraq, or more specifically, Saddam Hussein's regime. Had the timing been different, we may well have contextualized our thoughts in terms of US–Iraq relations. At the time of this final revision, Al-Qaeda seems a distant memory, yet it is hardly that; at a

minimum, Al-Qaeda was a catalyst in the war against Iraq, used, as it were, to focus US attention on a more familiar foe, as well as on a more spatially concise set of targets. This shift also directed attention towards an important source of oil—a strategic resource and, moreover, an industry in which the Bush administration is very much embedded.

We began to enter final revisions just after the war began, and some of these revisions were intended to clarify how our argument about Al-Oaeda could be broadened to the war against Iraq. We entered these revisions mostly in the introductory sections, and kept this type of revision to a minimum. World affairs change fast, and from this vantage point, it seems senseless to write and rewrite to chase ever-changing circumstances. More appropriate is the clarification of how and why our argument about Al-Qaeda can be extended to what is now, at the time of final revision, the apparent end of the (military) war against Iraq and what, in the future, will be a different constellation of problems. Further, despite the public attention directed to Iraq at the time of this revision, Al-Qaeda remains omnipresent, and it or something like it is likely to strike again and resurface as a central threat. Our purpose, then, is to forward a general argument focusing on particular empirical dynamics to clarify application, with the intent that the argument can be adapted across space and time with sensitivity to context-specific processes.

Introduction

This paper critically comments on the US war against terrorism, or at least its public face, which is the military. We recognize that there are covert, non-military operations of which we are unaware, and for that reason we bracket "war" in our title with a parenthetical "public". Consistent with the research agenda on the root causes of terrorism developed by geographers (Cutter, Richardson and Wilbanks 2002, 2003), we think counter-terrorism requires a critical understanding of network dynamics as well as the conditions that engender terrorism. From this vantage point, our purpose is not to write a critical history, but to develop a non-military position on counter-terrorism. There have been many critiques of war, and a non-military position is not in itself new. What distinguishes this paper is the effort to spatialize a non-military approach. Beyond a critique of war, our framework is normative; that is, we critique war as we know it and suggest a different way of thinking about war that is strategically sensible. We think that geography has much to offer to counter-terrorist strategic logic and, further, that the most appropriate geographic questions about long-run issues are not about location, but rather, about spatiality. Geography, and questions of spatiality in particular, are

not variables that can be added on, but rather provide a fundamental lens through which we can interpret social relations, whether cooperative or conflictive. Questions of location are valuable for some purposes, but they are insufficient to deal with long-term problems of terrorism. We recognize that geographic technologies (RS, GIS, GPS) are critical for a range of military-related activities, from domestic and international surveillance and inspection to precision bombing and coordinated, "surgical" strikes, and we also recognize their critical role in providing informational and analytical tools to communities directly victimized by terrorism; that said, although these technologies may address the effects of terrorism, we argue that the root causes of terrorism and achieving security are fundamentally political, not military or technological matters (Dalby 2002). Further, we suggest that specific military victories may prolong war and exacerbate social, political, economic, psychological, and ecological tensions and predicaments. A central proposition of this paper is that mainstream discourses about terrorism are implicitly or explicitly locational, and this orientation tends to foster militarism, which we argue cannot resolve terrorism. Our main suggestion for counter terrorism entails changing the nature of the geographic discourse that underlies conventional counter-terrorist strategies.

We emphasize that the term "war" is routinely conceptualized as pertaining to armed conflict, and we suggest that this conceptualization is unfortunate not only on moral but also on *strategic* grounds. While we regard the moral dimension as important, we focus here on strategic issues, which seem much less discussed, perhaps because the strategic value of non-military efforts are unclear or poorly understood. The war against Iraq is a case in point insofar as discussion of non-military strategies has been swept under an opaque dichotomy of war/anti-war. We focus on the strategic dimension of a non-military engagement with terrorism because although moral arguments help build and sustain cohesiveness within groups, they are ineffective persuaders for those of a different (moral) persuasion because they are embedded in a value system to which only the "true believers" and already converted subscribe. Here we take the moral side as given and strive to develop a spatialized argument as to why nonmilitary engagement with terrorism is more sensible and effective from anyone's perspective, irrespective of moral persuasion (or lack thereof).

Finally, although we recognize a variety of definitions of, as well as a geography of discourses about, terrorism (Ahmad 2001; Mustafa 2002), we reserve variation in understandings of terrorism for another project and engage here in a normative argument as to why a spatialized, non-military understanding of terrorism is sensible. We define terrorism broadly both conceptually and geographically as

violence to invoke fear that can be performed by networks such as Al-Qaeda as much as by urban gangs, and by nation states such as Iraq as much as by the United States.

Since 9/11...

Since 9/11 the United States has overtly proclaimed a war on terrorism. In September 2002, the Bush Administration released The National Security Strategy of the United States of America (Bush 2002). This document recognizes the changed character of "enemies". entailing "shadowy networks" rather than large armies. In sum, the stated approach to the new enemy entails "fighting terrorists and tyrants...preserv(ing) the peace by building good relations among the great powers...(and) encouraging free and open societies on every continent" (Bush 2002:iv). We find this approach alarming because, as we argue, it misconstrues the "target"; it reinforces power relations that have engendered exclusions (which, as we argue, constitute the roots of terrorism); and it is myopic in its allegedly constructive approach to bring hearths of terrorism into a global agenda. More specifically, as we will elaborate, the Bush administration has retained old conceptions of "targets" in terms of people (terrorists and tyrants) rather than the networks it otherwise acknowledges; it reinforces existing international power relations that disenfranchise people and organizations in places where disenfranchisement engenders terrorism; and it misses political and other dimensions of deprivation in its unilateral approach to globalization that interprets problems economically to the exclusion of political and other dimensions, and, consistent with neoliberalism, calls for direct investment among transnational corporations as a solution to (economic) deprivation.

The war against Iraq was undertaken in the Bush administration to achieve a military goal established by Dick Cheney as the Secretary of Defense in the earlier (senior) Bush administration, specifically, the dismantling of "rogue states" such as Iraq; it would also accommodate US business interests that underwrite the neoliberal agenda (notably regarding oil but also encompassing US export products such as rice, wheat, poultry) (Lincoln 2003). Although recognizing these military and economic goals helps clarify the logic of US approaches to terrorism, this understanding is nonetheless insufficient to answer why the Bush Administration targeted Iraq, specifically Saddam Hussein, at this particular time. Answering this question requires thinking through the implications of conventional geographic discourse. The war formally waged against Iraq in March 2003 reflected a crystallization of a military mentality that is spatially concise, and at least in the design phase, entailed targets that were seemingly

more manageable than "shadowy networks" across international space. Conventional locational thinking facilitated a much needed answer, of sorts, to the terrorism of 9/11 that the Bush administration could handle. Little matter that Iraq did not have any demonstrable relation to Al-Qaeda because the main issue was doing *something* about terrorism, and, as it happened, Vice President Cheney had previously declared Iraq as an agent of terror slated for defeat. The difficulty of dealing with "shadowy networks" rendered traditional locational targeting of a ("rogue") nation-state a logical solution. Further, this particular military agenda coincided with a neoliberal agenda in which the Bush administration, notably the President and Vice President, have personal, vested interests.

The novel "solutions" to terrorism have focused on military technologies. The war in Iraq was to be a high-tech exercise of precision weaponry and surveillance, capable of "shock and awe". The results of such an exercise were to have been few casualties among US troops and Iraqi civilians and a sure and *quick* victory. We argue, however, that physically destroying places and people, whether in Iraq or a Taliban/Al-Qaeda stronghold in Afghanistan, may result at best in a hiatus in the war against terrorism, but cannot terminate the war or resolve the problem.

Although the toll on US troops in Iraq was represented as relatively slight (excepting the perspective of war critics and families and friends of US casualties), the quick and sure victory at the outset became transformed into persistent US aggression that entailed urban warfare, the consequence of which was "collateral damage", namely the bombing of Iraqi civil (notably urban) society. Further, at the time of this writing, during the final phase of the war and the dismantling of Saddam Hussein's regime, a political (as opposed to military) understanding of the "victory" casts a long shadow over socio-political relations within Iraq and between peoples in Iraq and elsewhere in the global economy. As Taber (1969) pointed out during the Viet Nam era, guerrilla warfare reflects connections, not disconnections (as is often assumed), between militia and civilians, and is fundamentally about a sense of community constituted by socio-political relations that, while not necessarily harmonious, nonetheless frame daily life; this much is apparent from the unanticipated Shiite resistance to US troops in southern Iraq. Thinking about Al-Qaeda, about which we will elaborate in the ensuing sections, we argue that hunting down terrorists and their strongholds (people and places) similarly disregards the relations that produce terrorism and is an ineffective counter-terrorist strategy (although some may conceptualize it as a means of justice, which warrants another paper, at least).

Underlying military discourse is a locational, spatially delineated understanding of "terror" (whether contained in a nation such as Iraq or spread throughout an international network such as Al-Qaeda). Ironically, this locational discourse is consistent with both traditional military understandings of "targets" and new, precision-oriented avenues of technological advance. This irony is the rub of post 9/11 discourse: despite the apparent truism of a new world, solutions are embedded within an aged and quite rigid (govern)mentality. Further, the cue taken above from Taber, writing in the Viet Nam era, prompts us to think about whether current events represent new forms of historic processes (Boot 2002). Although the rhetoric of new precision weaponry and surveillance is laced with the comfort of science and glitz of high tech (Der Derian 2001; Gray 1997), it tends to overlook intangibles such as socio-political relations that echo old problems. The "new world", as per the post 9/11 truism, might fruitfully be problematized: it is reminiscent of old processes that have taken on new forms, and is being addressed with new technologies that conceptualize problems through an old, and we argue, inappropriate, geographic lens.

An alternative discourse might focus on the spatiality of terrorism. One critical issue is how terrorism is produced in particular places through social, political, economic, ecological, and psychological tensions. This type of understanding emphasizes changing conditions, not attacking people and places. The latter often serves to beget more violence; here one can turn Carr's (2002) argument in The Lessons of Terror on end: he argued that terror (violence against civilians) will always fail, and in his Prologue he suggested the application of his thesis to Al-Qaeda, arguing for the long-run failure of the 9/11 attacks. Extending discussion to Iraq, Mustafa's (2002) argument about discourses of terrorism suggests that US military action to effect "shock and awe" in Iraq could itself be understood as a matter of terrorism, and its military success will evolve into long-run failure due to the profound disruptions of local socio-political relations. Further, local socio-political relations are themselves connected to non-local socio-political communities, as seen in the case of relations between the Shiites in southern Iraq and Iran and the negative impact of those relations on Shiite-US relations. As pointed out by Kaldor (1999), the scope of organized violence in a global era is a matter of interconnections across space; national borders can no longer be perceived as containers.

In this paper we argue for a geographic discourse that conceptualizes places both as nodes within networks across space and as contexts in which tensions are produced, and we specify our argument normatively with reference to network theories as applied to Al-Qaeda. We suggest that terrorist networks such as Al-Qaeda are

constituted by a socio-cultural fabric that is intangible and cannot be located at fixed coordinates for either bombing or surveillance.

Subverting terrorism from a non-Cartesian perspective entails a host of long-term strategies aimed at changing conditions and relations. The Bush administration also has long-term strategies in addition to physical destruction. These neoliberal strategies entail direct investment by US firms in Afghanistan, Iraq, and elsewhere. Whether in explicit or implicit terms, such strategies overlook our stock of knowledge regarding the potentially negative effects of foreign direct investment on local economies and the welfare of local people (eg Carrillo 1995; Castells and Laserna 1994; Grabher 1994). The Bush administration is certainly not exceptional: at the time of this final revision the scramble is on in western Europe as in the United States for post-colonial investment turf in Iraq and elsewhere, and this competition for profits has fueled a rhetoric of "rebuilding" by the United Nations.

Specifically regarding Al-Qaeda, the Bush administration has another type of long-term strategy, notably dismantling Al-Qaeda's formal *financial* networks; however, we suggest that this too may have only temporary significance. As we will elaborate, the financial networks are only a part of Al-Qaeda, and further, the Bush administration's understanding of this part of terrorism lacks an appreciation of the spatial and temporal evolutionary dynamic.

We suggest that strategies such as financial targeting and basic concepts such as "war" require a non-military reconceptualization as well as a renewed understanding of "geography". Although new questions have been raised about military bombing and surveillance technology, it is unclear if new questions have been raised regarding the "targets", their nature, and how the nature of the "targets" should affect strategies to dismantle terrorist activity.

The issue is geographic, but the type of inquiry is not about location; it is about spatiality. It is to the spatiality of terrorist networks such as Al-Qaeda, to which we now turn.

Situating the Spatiality of Networks

Clarifying the spatiality of network(s) requires thinking critically about sense of place and sense of space. We use "place" and "space" in the sense discussed by Massey (1993) in her formulation of "power geometry". "Place" refers to the constellation of behaviors, institutions, and structures in a locality over time; regarding a network such as Al-Qaeda, it signifies its meeting and recruiting grounds and encompasses network members' contextual experiences as well as symbolic and virtual understandings of meeting and recruiting grounds. "Space" refers to the operational dynamics of a network

across space, over time, at a variety of scales, from the body to the neighborhood, to the region, and across nations. Understood together, a network's sense of place and space gives clues about its prospects for sustainability or lack thereof.

Our argument is theoretically informed by literatures on networks and spatiality. There have been a number of critical reviews of network approaches (Bosco 2001; Dicken et al 2001; Ettlinger 2003; Meyer 1998; Perry 1999), and our goal here is not to restate cases but to clarify our wellsprings and succinctly state our position. In particular we draw from actor network theory (ANT) (Latour 1996) that is underscored by a relational appreciation of fluidity and mutability, as well as from network approaches in economic sociology that are useful in appreciating a *range* of types of networks and relations or ties. Although ANT is by now well known among geographers, the literature in economic sociology, beyond Granovetter's (1985) influential article, is less discussed. Geographers inspired by Granovetter's (1985) discussion of embeddedness have tended to interpret embeddedness as a localized phenomenon constituted by "strong", familiar ties (Granovetter 1973). Although the particular case of localization is encompassed by Granovetter's framework, his and others' (Burt 1992; Uzzi 1996, 1999) studies encompass a variety of other cases and prompt us to extend geographic inquiry to networks that exist across space, whereby social relations are embedded in a network but not necessarily in a locality or region; further, we also glean from the economic sociology literature an understanding that networks may be open as well as closed, prompting us to think about networks of networks, within and across localities.

While the literature in economic sociology, which is overall oriented to identifying patterns, is helpful in recognizing a range of types of networks as well as ties, the general cultural studies literature, of which ANT is a part, directs our attention to processes (social, cultural, political, economic, ecological, psychological...) that underlie interaction. Studies of spatiality, prompted by insights gleaned from cultural studies in the humanities, inform us about how these processes play out in space—in and across localities, over time (May and Thrift 2001). From the perspective of spatiality, space and society do not gaze at each other but rather are mutually embedded (Gregory and Urry 1985; Rose 1993; Smith 1990; Soja 1989). While geographers, among other social scientists, have taken important cultural cues from the humanities, geographers have much to offer cultural studies. Our aim in this paper is to show how thinking through the spatiality of networks is critical to understanding the dynamics of terrorism and developing appropriate "intelligence".

We also situate our discussion of social networks and their spatiality in the context of the contemporary literature on collective action

and transnational resistance networks (Alvarez, Dagnino and Escobar 1998; Routledge 2000), which implicitly offers insights regarding how networks such as Al-Qaeda operate. This wellspring is ironic because the destructive goals of terrorist networks such as Al-Qaeda are antithetical to the goals of most groups studied in the literatures on collective action and resistance; yet our stock of knowledge on these groups is instructive regarding network dynamics. Research on the geographic dimensions of social movements has suggested that thinking about collective action in terms of networks clarifies how social relations, which are embedded in webs of meaning and practice, range in scope from locations and places that facilitate activism to the transnational networks that link activists and sustain movements (Bosco 2001; Castells 1983; Miller 2000). Consistent with this view, we see Al-Qaeda as a transnational network of resistance without the usual normative implications that are often connoted in discussions of collective resistance. We use the term "collective resistance" to refer generically to the often non-institutionalized discourses and practices designed to challenge and change society as defined by those doing the "resisting" (Garner 1992:12).

Geopolitically, we situate Al-Qaeda as a resistance effort that is embedded in the "convergent space" (the social space where interests, goals, and affinities of different groups converge; Routledge 2000) of a particular type of contemporary transnational Islamism that harbors an exclusivist and xenophobic interpretation of Islam antagonistic to non-Muslims as well as some Muslims. Transnational Islamism is the wider discourse that offers such a convergence space. Al-Qaeda is a particular network, rooted in a global fundamentalist movement, that operates inside and among overlapping broader networks of resistance. Al-Qaeda's antagonism carries with it its own geography, symbolically casting the West as the hearth and leader of anti-Muslim discourse and behavior, despite the large number of Muslims in the United States and the global character of capitalism. Resentment towards the United States is itself geopolitically motivated by a perceived US territorial invasion of Islamic hearths; in this light it is perhaps unsurprising that the Taliban considered urban centers in Afghanistan—places influenced by US consumer goods, films, clothing—as the ultimate repositories of foreign influence and evil (Kaplan 2000). Although Al-Qaeda's ultimate goal is to contain US economic, political, and cultural power inside US national boundaries (Katzman 2001), its defiance of US discourse and capitalism is often localized in places that symbolize US power both inside the United States (eg the Pentagon, the World Trade Center) as well as elsewhere (eg US embassies in Africa). That said, although terrorist 'spectacles' often are localized so as to frame an event for a global audience, terrorist targets also can be understood as fluid because individuals in any

context or territory can be attacked as a silencing approach to disagreement or transgresson. In the case of Al-Qaeda's localized attack on the United States, the collective, fluid response in New York City and across the United States suggested (as publicized by the media) the tenacity of the US socio-cultural fabric and the long-run failure of Al-Qaeda.

Sense of Place

While networks of resistance can and do operate transnationally, the struggles and the identities of resistance are often born locally through activists' sense and experience of place (Pile and Keith 1997). Sense and experience of place entails much more than location. It is about the complex interplay of processes in a context that may or may not be geographically circumscribed (Ettlinger 2002). Especially in the case of groups that are spread across space, a sense of place can be symbolic. It refers to a network's home or common meeting ground, its spatial imaginary. Most computer users are at least implicitly familiar with the symbolic sense of place: nodes in cyberspace (web sites, for example) are "homes" for networks of people and organizations in disparate locations. Another well-known example is a national flag, which evokes a sense of place at a national scale (Anderson 1991). Research on the Madres de Plaza de Mayo in Argentina has shown that for the madres, mothers of "disappeared" sons and daughters, the plaza (irrespective of location, that is, plazas across cities in Argentina as well as in other countries and continents) has represented sites of resistance, recruitment, solidarity, and conflict resolution (Bosco 2001). Especially when considering a diasporic network such as Al-Qaeda, we begin by taking cues from our stock of knowledge of social movement organizations and their spatial imaginaries.

Where, or what, then, is or are the common meeting grounds, the sense of place and experience, for Al-Qaeda? How do members of a diasporic, terrorist network find connection and reinforce solidarity, even in the midst of internal conflict? Of course, any group (such as a terrorist group) that operates by surprise is unlikely to have a transparent meeting ground, such as the plaza for the *Madres* in Argentina. In the case of a terrorist organization that cloaks itself in religion, we might look to particular types of symbolic events such as pilgrimages, or even more regular occurrences such as times and locations of worship as places of recruitment (Sachs 2001). Particular Pakistani *madrasas* (religious schools), for example, have represented places of education and the inculcation of culture for Taliban leaders (Mishra 2001). Similarly, key places in Europe such as mosques and even *jihad* training facilities in specific neighborhoods in London, Paris, and

Hamburg have been places of recruitment and training for fundamentalist operatives.

Another critical type of meeting and recruiting ground is found in coerced living conditions, such as a refugee camp. Refugee camps along the Afghani-Pakistani border such as Quetta and Peshawar, where large numbers of children have grown up in crowded, poor, urban conditions while being educated in Saudi-sponsored Madrassas, have been fertile grounds for the recruitment of Taliban and Al-Qaeda supporters (Kaplan 2000). Palestinian refugee camps in Lebanon and Israel have functioned for many years as recruitment points for suicide bombers who act on behalf of groups such as Hezbollah, or even independently (Bennet 2002). More generally, refugee camps are ghettos that crystallize and spatially delimit disenfranchisement, thereby engendering conditions conducive to the development of communities of resistance. Importantly, disenfranchisement has multiple dimensions, and is not just about poverty; it is economic as well as social, cultural, psychological, ecological, and, importantly, political. More generally yet, ghettos of any kind alienate people and are constituted by formal and informal mechanisms that obstruct basic human rights toward developing capabilities of self-development and self-determination (Sen 1992; Young 2000); they are places where the absence of rights leads to solutions of last resort, such as terrrorism.²

The above said, disenfranchisement is not necessarily specific to refugee camps as a type of ghetto. Individuals may be figuratively ghettoized and thereby socio-culturally and psychologically alienated; this can occur in the context of any community anywhere in the world. Disenfranchisement extends territorially to regions and nations (such as Afghanistan)—places that have been "off the map" and excluded from the discourse of globalization (neoliberally or radically conceived). Territory itself has become symbolic: Afghanistan, which is not in the Middle East, is nonetheless often relegated "there", to the Middle East, which is perceived as the incubator of the terrorist-related problems. Further, recognizing the multidimensionality of disenfranchisement at multiple scales helps explain apparent anomalies such as why the economically privileged status of many of the Al-Qaeda leaders does not translate into other societal opportunities.

We suggest that it is conditions of disenfranchisement and alienation, not the people in the places nor the places themselves, that require "targeting". Although the Bush administration has acknowledged poverty as a catalyst for terrorism (not disenfranchisement, which encompasses political and other exclusions as well as economic plight), its neoliberal response is blind to the potential problems of foreign direct investment and also is dangerously partial in its economic focus. Recognizing the multiple dimensions of

disenfranchisement as a terrorist sense of place—from places of worship and education to places of disenfranchisement—suggests that solutions also should be multidimensional. Beyond or *instead* of the visible hand of transnational firms, we advocate supporting strategies to constructively harness local assets, which must be understood in terms of people and their talent, creativity, passion, and knowledge (Kretzman and McKnight 1993). We conceptualize "people" inclusively with the understanding that the globally conventional practice of sweeping exclusions on the basis of gender, ethnicity and other axes of difference "under the rug" is unacceptable. As a case in point, viable feminist groups in Afghanistan, notably the Revolutionary Association of the Women of Afghanistan (RAWA), have routinely been overlooked as potential governance organizations (Brodsky 2003). The constructive as well as inclusive harnessing of local energies means that extra-local bodies of governance (US and other governments, transnational corporations, United Nations, World Bank, International Monetary Fund) must recognize and work with³ local bodies of governance that embrace strategies for the development of (all) people's capabilities in multiple dimensions of life, including but not limited to the economy. Indeed, multidimensionality is a critical feature not only of disenfranchisement, but also of human capabilities and strategies toward dismantling disenfranchisement.

The myopia of neoliberalism is paralleled by strategic flaws in the military engagement with terrorism, notably blindness to a network's fluid sense of place. The perseverance of Al-Qaeda following the large-scale bombing operations in Afghanistan is instructive, demonstrating that people in networks often adapt to external pressures, such as the destruction of gathering places, by reconstituting internal cohesion in new ways. For example, soon after the US attacks on Afghanistan, members of Al-Qaeda began communicating though electronic mail and web sites, re-organizing their network across many different locations (Risen and Johnston 2002). From Internet cafes around the world, mobile Al-Qaeda members not only sustained the vitality of their network but also discussed the possibility of establishing new places of operation, such as in remote sanctuaries near the Afghan border in Pakistan. More recently, the sprawling urban area of Karachi has become a new base of operations for Al-Qaeda, where its operatives blend in with the rest of the local population and operate from unsuspecting apartments in different neighborhoods in a city of over 14 million people (Rohde 2002).

Like many transnational groups, the functioning of Al-Qaeda depends on local scale articulations of a broader discourse that has wide spatial reach, yet there are alternatives to the specific practices on which a network may be founded (Routledge 1997, 2000).

Al-Qaeda's resilience demonstrates that adaptation strategies may entail a fluid, mutable sense of place. Since 9/11 Al-Qaeda experienced a progression from place-based experiences (eg refugee camps, cultural inculcation in *madrasas*, pilgrimages) that symbolize discourse at a larger scale, to a virtual community⁴ and in some instances back to place-based activities that take advantage of the anonymity that large urban areas can provide. We find a movable sense of place as a response to the physical targeting of places that were associated with the specific spatial imaginary of a network at a particular point in time. As networks expand and contract across space, their spatial evolution is entwined with a temporal evolution of the concept of community in response to changes in context. Ironically, the military engagement with terrorism has engendered increased complexity, rendering "the enemy" ever more formidable.

Sense of Space

While sense of place(s) is critical to most networks (and to any organization that aims to physically target a network), equally critical is a network's sense of space, its spatial arenas of operation or potential operation. As we have indicated, although convergent spaces of networks of resistance are rooted in places, they are not necessarily local. Scholars already have shown that whereas the politics of resistance often are organized around place-specific struggles, what also gets diffused and organized across space is the "common ground" shared by different groups—often the result of groups' entangled interests (Routledge 2000:27). We concur, and suggest that nonmilitary counter-terrorist strategies must also grapple with the spatial reach and dynamics of terrorist networks. Some networks begin, evolve, and remain localized; others spread across space-from localities to regions to nations to continents, though not necessarily in any particular order. Further, in the case of spatial evolution, networks can expand as well as contract, and the geographic fluidity of a network can contribute to its resilience to external threats and thus to its sustainability (Bosco 2001). The case of Al-Qaeda is instructive.

Bin Laden's Al-Qaeda network is the continuation of a pre-existing worldwide network of Muslim militias created by Abdullah Azzam, a Palestinian whom bin Laden met in Saudi Arabia in 1979 (Bergen 2001; Mishra 2002). The original network operated from Pakistan, had "offices" in the United States (eg Detroit, New York), and recruited men and money for the Afghan *jihad* (Bergen 2001). In 1984, bin Laden set up Al-Qaeda (which interestingly translates both as *the base* and *the way*) as another network that operated parallel to

the military network originally set up by Azzam. Al-Qaeda's mission was to finance activities beyond the Afghan *jihad*. When Azzam was assassinated in unclear circumstances in Pakistan in 1989, bin Laden continued his work with Al-Qaeda (Bergen 2001).

Al-Qaeda operated first from Pakistan, subsequently from Sudan and Saudi Arabia, and then from Afghanistan (Bergen 2001). From the beginning, Al-Qaeda did not have a continuous fixed geographic location but rather changed, expanded, and contracted in relation to changing political opportunities and constraints in different geographic contexts. As in the case of place, sense of space entails much more than an identification of fixed locations that lose significance when a network expands and contracts.

In the case of a diasporic network in particular, more to the point than latitudinal/longitudinal fixes is how and why a network changes. Expansion, for example, may occur either as a network grows, or alternatively, as a network connects with other networks within localities or across space to form a coalition. A case in point is Al-Qaeda's recently discovered coalition with drug networks and arms dealers spanning the United States, Hong Kong, and Colombia (Lichtblau 2002). Contractions, also within and/or across localities, occur as well, notably when coalitions dissolve in reaction to inter-network conflict or possible external threat (from governments, for example) to member network(s). For example, after the fall of the Taliban regime in Afghanistan, the coalition between Al Qaeda and the Taliban (or at least its "visible" dimensions) began to dissolve. Whether this separation is temporary or permanent is difficult to ascertain, but this particular network dynamic demonstrates how Al-Qaeda associated with the Taliban initially for strategic reasons (when the Taliban offered a safe haven for planning and training) but later (publicly) dissolved the relationship following external threat, namely the US attacks on Afghanistan and the oust of the Taliban regime.

The socio-spatial evolution of relations suggests the need to think about networks and coalitions of networks in a long-run framework because dissolution and contraction may be temporary, as in the case of abeyance as a response to external threat (Taylor 1989); expansion following such a contraction can be understood as either the development of a fundamentally new coalition, or alternatively, the strategic reconstitution of an old coalition in the context of a political window of opportunity. Generally, then, dismantling a network by focusing on absolute space(s) is ineffective because concrete patterns of organization do not exist in a tidy one-to-one correspondence with processes; rather, any one process may result in any one of a number of patterns, over time. From this vantage point, the conventional mapping of network topologies is limiting in light of the variety of

network relations and dynamics, and further, may misconstrue realities (Latour 1996). With a focus on *processes*, germane to an investigation is an understanding of network growth and contraction strategies, coalitional development and change, and an identification of the groups to which a network may connect and the circumstances and strategy of connection and dissolution.

Also critical to a network's sense of space is the way it is structured. The media has portrayed Al-Qaeda's structure in terms of "cells" that are "spread to the wind". What is the structure of the cells? Are they open or closed, that is, is membership fluid or constant? If the cells are open, then approaching the network must focus on "gateways" to cells, rather than on cells that may be little more than the spatial imaginaries of the hunters. Further, are the cells centralized or decentralized? Decentralization requires disentangling the spatial and aspatial dimensions because a network can be spatially decentralized but power may remain highly centralized, and vice versa. If power is spatially centralized, at issue is targeting the top of the hierarchy; yet if power is decentralized, then at issue is not only the structure of local leadership but also the entrepreneurialism of local leadership, the degree to which local leaders take risks and develop initiatives independently. Many of the members of Al-Qaeda around the world (or those in connection with it) reportedly have significant freedom of action and do not necessarily have strong links (eg intimacy, loyalty) to bin Laden. When an Al-Qaeda cell was disassembled in France in late 2001, the judge in charge of the procedure publicly stated that he believed it was a mistake to assume that the fall of the Taliban or the capture of bin Laden could effectively deal with new terrorist attacks because many of the new Al-Qaeda operatives do not depend on orders from bin Laden to act (Hedges 2001). Understanding and identifying entrepreneurialism among individuals in cells of a network is critical.

Further, we must ask whether a network such as Al-Qaeda is really a single network or, rather, a federation of cells that share common strategic goals and coalesce into temporary networks on individual tactical missions and dissolve upon completion of a mission, forming again in different configurations for other tactical missions. Information about Al-Qaeda has surfaced after the September 11 attacks, suggesting that Al-Qaeda is a *network of networks*, a "constellation" or "federation" of overlapping relations among bin Laden's business associates, employees, donors, and supporters, as well as among fundamentalist Islamic groups in several Muslim and non-Muslim countries, several of which in turn have been funded by bin Laden's financial network (CIA 1996). It is the complexity of Al-Qaeda's relations and connections that complicates understanding Al-Qaeda's constitution, and, therefore, how to dissolve it.

Interestingly, the idea of a federation, capable of continual internal reconfiguration, has been developed in US defense as well as in US business (Goranson 1999). In the early 1990s the US Congress supported an institutional foundation for research to respond to pressing issues presented by a constantly changing environment for defenserelated production, which was seen as unprepared for new and continually changing demands. The Pentagon's center for high-risk, high payoff projects, Advanced Research Projects Agency (ARPA), created a program that was managed by several military services and the National Science Foundation (NSF). A core set of projects, mostly managed by the Air Force, were established to focus on agility, the ability to respond to unexpected change. To meet the needs of dispersed production in the defense industry, Sirius-Beta, a research firm that played a key role in the projects, merged the concept of agility with virtual enterprise, an ephemeral network of talent and resources to respond to the needs of a particular business opportunity. At the same time, NSF also supported the establishment of research centers at universities, production pilot programs, information networks, and an Agility Forum at Lehigh University under the auspices of the Iaccoca Institute. Although federal funding diminished as Republicans overtook Congress in 1996 (Goranson 1999), the institutional foundation of the new paradigm at universities has had enduring effects in the private sector (Goldman, Nagel and Preiss 1995; Preiss, Goldman and Nagel 1996). The Agility Forum released the report 21st Century Enterprise Strategy: An Industry-Led View, of which 25,000 copies were published and disseminated to private sector companies, followed by seminars, workshops, presentations, and the like.

The new business paradigm is about responding to unexpected change in an increasingly uncertain and highly competitive world, and its solution lies in reconfiguring. Although reconfiguration can be accomplished both within firms and externally in a network, the latter is generally most pragmatic because the span of knowledge in an individual firm is likely to be insufficient to react rapidly to new demands, especially in an era of increasing customization (Grant 1998). One example of a federation of firms that reconfigures alliances for specific business projects is the Agile Web, which began as a group of 19 small firms in eastern Pennsylvania that were brought together in 1995 under the auspices of the state-funded Ben Franklin Center at Lehigh University, where the Agility Forum was earlier established (Sheridan 1993, 1996). The Agile Web is an approach to a virtual enterprise that operates through a central clearinghouse that identifies required expertise for particular projects and coordinates member firms of the federation so they can collaborate; upon completion of projects, specific alliances dissolve and firms are then reconfigured into different networks as demand requires. The centralized structure represents one form of a federation of firms, and whets our imagination for other forms, such as one in which individual members operate on a more individualized, entrepreneurial basis, coalescing with other members on their own initiative and developing projects independently of a central authority.

The new business paradigm is suggestive of the dynamics of Al-Qaeda. Osama bin Laden was himself a successful businessman who evolved into a terrorist. Indeed, it was perhaps bin Laden's effective engagement in financial networks that contributed to his success both in business and terrorism (Bergen 2001). Even though bin Laden was originally recruited by Saudi intelligence to contribute to the mobilization of foreign volunteers in the jihad against the Soviet occupation of Afghanistan, his involvement at the time was more related to business opportunities in Central Asia than to a fundamentalist approach to politics (Mishra 2002). For example, bin Laden used the connections of his family's construction business in Saudi Arabia to build roads, tunnels, storage depots, and hospitals in Afghanistan (CIA 1996). Similarly, bin Laden had not shown much interest in the anti-communist jihad immediately after the Soviet invasion of Afghanistan in 1979; he reportedly had not been around the Afghan battlefields much. Even after he became involved in the jihad, his political inclinations seem to have been limited to the expulsion of the Soviets. Moreover, when bin Laden became more political and moved to Sudan—after being expelled from his own country as a result of his criticism of the Saudi collaboration with the United States in the military operations against Saddam Hussein-he established himself at the outset as a businessman (CIA 1996; Powers 2002). Some reports indicate that it was only then, once he was established in Sudan, that bin Laden built more enduring connections with radical Islamic groups in Algeria, Yemen, Egypt, the Philippines, Russia and elsewhere (Powers 2002). Whether bin Laden's politicized activities in Al-Qaeda began in Afghanistan or later in Sudan, we view the important point as being that Al-Qaeda was originally set up as a financial network that generated funds from and for bin Laden's various businesses. Over time, once bin Laden developed more extremist political views, he began utilizing his financial network to distribute funds to radical Islamic cells around the world. But whereas bin Laden was crucial in coordinating the financial dimension of Al-Qaeda over time, the power structure of the terrorist component of the network is, as we have suggested, decentralized rather than tightly knit. The idea of a federation of relatively independent, entrepreneurial units or cells helps clarify the complex dynamics.

Al-Qaeda appears to be a coalition of two networks, a financial and a terrorist network, each of which has a different history as well as structure. Although both networks are spatially decentralized, power

is centralized in the financial network yet decentralized in the terrorist network. Revisiting now our earlier statement, targeting the financial network is only a partial solution to subverting terrorism, and a temporary one at that when considering the possibility of abeyance. This is not to say that obstructing financial flows is unnecessary or unimportant; rather, the main point is that such an effort requires at a minimum a parallel effort targeted to the conditions that give rise to terrorism, which pertains to a different set of socio-spatial relations. The strategies for understanding and targeting the financial and political networks must themselves differ because the structures and dynamics of the two networks differ.

Ironically, despite the origination of the concept of *agility* in US military and defense circles, an understanding of agility and its implications does not appear to have been brought to bear on the socio-spatial relations of agile networks such as Al-Qaeda. Whereas the centralized power of Al-Qaeda's financial network can be approached by identifying the locations of the sources, the decentralized and entrepreneurial character of the cells in the terrorist network require understanding sense of place as it is played out across space, over time. The concept of agility, although adopted by for-profit, private-sector firms, has remained fundamentally a military and locational matter in the public sector.

Conclusion

We think that new questions are required to understand terrorism and develop counter-terrorist strategies. At issue is reconceptualizing "war" and "targets" and substantially revising approaches to "intelligence". Our understanding of "target" departs from a Cartesian approach focused on latitudinal/longitudinal coordinates; instead we focus on issues of spatiality. This is abstract, and that is the point because targets conventionally are understood in concrete terms: who are the hunters, who are the hunted, where are the locations of the hunted, and how can the hunted be caught or destroyed. Taking a moral stance as given and focusing here on a strategic perspective, we suggest that counter-terrorism cannot effectively be about destroying locations or people because new people can assume and develop responsibilities when others die, and locations can change as networks evolve across space and time. The conventional route can at best induce abeyance of a terrorist organization or of one or some of its constituent parts. Rather (and specifically from a network perspective), we suggest first, that efforts must be targeted to obstructing the conditions and social relations that foster terrorism, and second, that "intelligence" about networks recognizes the complexity and range of network dynamics and replaces locational with socio-spatial inquiry.

We frame our questions in terms of a network's sense of place and space, which are integrally related. The former represents a group's common meeting and recruitment ground, its "home"; the latter represents a group's capacity for growth and contraction and its resilience to change. Importantly, neither sense of place nor of space necessarily implies a latitudinal/longitudinal fix because sense of place may be symbolic or virtual, and understanding the dynamics of sense of space entails thinking about power relations across space and not necessarily in any one place. This is a relational perspective that focuses on connections between the nodes (people, localities), not the nodes themselves (Massey 1993). We do not suggest that individual people guilty of heinous terrorist acts should not be brought to justice; our intention, however, is to suggest that bringing specific terrorists to justice may be relatively inconsequential to the goal of subverting terrorism. While suicide bombings can only be enacted through the body—a sensationally individualized scale of terrorist activity—in the final analysis counter terrorism must come to terms with non-Western forms of violence performed at different scales (Keegan 1993) and, critically, the conditions that engender cultures of martyrdom. Such a culture is engendered and reinforced by social, cultural, economic, and political disenfranchisement in a variety of places outside the normal purview of military engagement, and it spreads and dissolves across space as political windows open and close. Such political windows entail threats to the existence of a group as well as relationships with other groups, be they other terrorist organizations or complementary support groups ranging from financial to drug networks. The complex dynamics of networks of networks with different histories and patterns of power relations requires unraveling to permit appropriate, context-specific, counterterrorist strategies.

Acknowledgments

This paper has benefited from the thoughtful and constructive comments offered by Michael Brown, Simon Dalby, Kumuda Dorai, Jamie Peck, and Dan Reff.

Endnotes

¹ Negative effects on local economies and people are especially likely in places with a history of dependency, though not necessarily so. Different types of production systems carry different implications, such as possibilities for investment in local institutions, upskilling programs, and the like (Dicken, Forsgren and Malmberg 1994; Ettlinger 1999; Florida 1996).

² This understanding of the development of terrorism (associated with multiple dimensions of disenfranchisement, and not limited to economic poverty) has relevance to a wide range of types of communities, including US slums bristling with terrorist-like violence among gangs. We interpret such violence as a last resort to conditions of

disenfranchisement that extend well beyond the economic realm and thus require solutions that also extend beyond the economic.

³ Our conceptualization is consistent with conceptions of citizenship that do not seek power "over" existing bodies of governance, but rather avenues towards changing the face of existing power through working with, rather than against, existing power holders (eg Alvarez, Dagnino and Escobar 1998); this view recognizes the potentially deleterious effects of working against rather than with government (eg Brown 1997). ⁴ See Ribeiro (1998) for a discussion of virtuality among resistance groups.

References

- Ahmad E (2001) Terrorism: Theirs and Ours. New York: Seven Stories Press
- Alvarez S E, Dagnino E and Escobar A (eds) (1998) Cultures of Politics, Politics of Cultures: Re-visioning Latin American Social Movements. Boulder: Westview
- Anderson B (1991) Imagined Communities: Reflections on the Origin and Spread of Nationalism (revised edition). London: Verso
- Bennet J (2002) An unusual new Palestinian "martyr": A woman. *New York Times on the Web* 31 January. http://www.nytimes.com (last accessed 31 January 2002)
- Bergen P L (2001) Holy War, Inc: Inside the Secret World of Osama bin Laden. New York: Free Press
- Boot M (2002) The Savage Wars of Peace: Small Wars and the Rise of American Power. New York: Basic Books
- Bosco F (2001) Place, space, networks and the sustainability of collective action: The "Madres de Plaza de Mayo". *Global Networks: A Journal of Transnational Affairs* 1:307–329
- Brodsky A E (2003) With All Our Strength: The Revolutionary Association of the Women of Afghanistan. New York: Routledge
- Brown M (1997) Radical politics out of place? The curious case of act up Vancouver. In S Pile and M Keith (eds) *Geographies of Resistance* (pp 152–167). New York: Routledge
- Burt R (1992) Structural Holes: The Social Structure of Competition. Cambridge, MA, Harvard University Press
- Bush G (2002) The National Security Strategy of the United States of America. Washington, DC: The White House
- Carr C (2002) The Lessons of Terror: A History of Warfare Against Civilians—Why it has Always Failed and Why it will Fail Again. New York: Random House
- Carrillo J V (1995) Flexible production in the auto sector: Industrial reorganization at Ford-Mexico. *World Development* 23:87–101
- Castells M (1983) The City and the Grassroots: A Cross-Cultural Theory of Urban Social Movements. Berkeley: University of California Press
- Castells M and Laserna R (1994) The new dependency: Technological change and socioeconomic restructuring in Latin America. In A D Kincaid and A Portes (eds) *Comparative National Development: Society and Economy in the New Global Order* (pp 57–83). Chapel Hill: University of North Carolina Press
- CIA (1996) Usama bin Laden Extremist Financier. Central Intelligence Agency
- Cutter S L, Richardson D B and Wilbanks T J (2002) The Geographical Dimensions of Terrorism: Action Items Research Priorities. Washington, DC: Association of American Geographers
- Cutter S L, Richardson D B and Wilbanks T J (2003) *The Geographical Dimensions of Terrorism*. New York: Routledge
- Dalby S (2002) Environmental Security. Minneapolis: University of Minnesota Press Der Derian J (2001) Virtuous War: Mapping the Military-Industrial-Media-
- Entertainment Network. Boulder: Westview

- Dicken P, Forsgren M and Malmberg A (1994) The local embeddedness of transnational corporations. In A Amin and N Thrift (eds) *Globalization, Institutions, and Regional Development in Europe* (pp 23–45). New York: Oxford University Press
- Dicken P, Kelly P F, Olds K and Yeung H W-C (2001) Chains and networks, territories and scales: Towards a relational framework for analysing the global economy. *Global Networks* 1:89–112
- Ettlinger N (1999) Local trajectories in the global economy. *Progress in Human Geography* 23:335–357
- Ettlinger N (2002) The difference that difference makes in the mobilization of workers. *International Journal of Urban and Regional Research* 26:834–843
- Ettlinger N (2003) Cultural economic geography and a relational and microspace approach to trusts, rationalities, networks, and change in collaborative workplaces. *Journal of Economic Geography* 3:145–171
- Florida R (1996) Regional creative destruction: Production organization, globalization, and the economic transformation of the Midwest. *Economic Geography* 72:314–334
- Garner R (1992) Contemporary Movements and Ideologies. New York: McGraw Hill
- Goldman S L, Nagel R N and Preiss K (1995) Agile Competitors and Virtual Organizations: Strategies for Enriching the Customer. New York: Van Nostrand Reinhold
- Goranson H T (1999) The Agile Virtual Enterprise: Cases, Metrics, Tools. Westport, CT: Ouorum Books
- Grabher G (1994) The disembedded regional economy: The transformation of east German industrial complexes to western enclaves. In A Amin and N Thrift (eds) *Globalization, Institutions, and Regional Development in Europe* (pp 177–195). Oxford: Oxford University Press
- Granovetter M (1973) The strength of weak ties. American Journal of Sociology 78:1360–1380
- Granovetter M (1985) Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91:481–510
- Grant R M (1998) Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. In A Y Illinitch, A Y Lewin and R D'Aveni (eds) *Managing in Times of Disorder: Hypercompetitive Organizational Responses in Times* (pp 297–318). Thousand Oaks: Sage
- Gray C H (1997) Postmodem War: The New Politics of Conflict. New York: Guilford Gregory D and Urry J (eds) (1985) Social Relations and Spatial Structures. London: Macmillan
- Hedges C (2001) A powerful combatant in France's war on terror. *The New York Times on the Web* 24 November. http://www.nvtimes.com (last accessed 15 April 2002)
- Kaldor M (1999) New and Old Wars: Organized Violence in a Global Era.. Stanford: Stanford University Press
- Kaplan R (2000) The lawless frontier. *The Atlantic Monthly*. http://theatlantic.com/issues/2000/09/kaplan.htm (last accessed 4 January 2003)
- Katzman K (2001) Terrorism: Near Eastern Groups and State Sponsors 2001. Congressional Research Service Report to Congress, 10 September 2001
- Keegan J (1993) A History of Warfare. New York: Alfred A. Knopf
- Kretzmann J and McKnight J (1993) Building Communities from the Inside Out: A Path Towards Finding and Mobilizing a Communities Assets. Evanston, IL: The Assets-Based Community Development Institute, Institute for Policy Research, Northwestern University.
- Latour B (1996) On actor network theory: A few clarifications. *Soziale Welt* 47:369–381
- Lichtblau E (2002) US raids plots to send arms to Al Qaeda and others. New York Times on the Web 7 November. http://www.nytimes.com (last accessed 12 November 2002)

Lincoln B (2003) Holy Terrors: Thinking about Religion after September 11. Chicago: University of Chicago Press

- Massey D (1993) Power geometry and a progressive sense of place. In J Bird, B Curtis T Putnam, G Robertson and L Tickner (eds) *Mapping the Futures: Local Cultures, Global Change* (pp 56–69). New York: Routledge
- May J and Thrift N (eds) (2001) *Timespace: Geographies of Temporality*. New York: Routledge
- Meyer D R (1998) Formation of advanced technology districts: New England textile machinery and firearms, 1790–1820. *Economic Geography* (extra issue for the 1998 annual meeting of the Association of American Geographers):31–40
- Miller B A (2000) Geography and Social Movements: Comparing Antinuclear Activism in the Boston Area. Minneapolis: University of Minnesota Press
- Mishra P (2001) The making of Afghanistan. The New York Review of Books 168:18–21
- Mishra P (2002) The Afghan tragedy. The New York Review of Books 169(1):43-49
- Mustafa D (2002) Terrorism and hazards research: An agenda for an oppositional engagement. In B Wisner and M Fordham (eds) *Radix—Radical Interpretations of Disaster*. http://online.northumbria.ac.uk/geography_research/radix/wtc7.html (last accessed 28 April 2003)
- Perry M (1999) Small Firms and Network Economies. New York: Routledge
- Pile S and Keith M (1997) Geographies of Resistance. New York: Routledge
- Powers T (2002) The trouble with the CIA. The New York Review of Books 169(1):28–32
- Preiss K, Goldman S L and Nagel R N (1996) Cooperate to Compete: Building Agile Relationships. New York: Van Nostrand Reinhold
- Ribeiro G L (1998) Cybercultural politics: Political activism at a distance in a transnational world. In S Alvarez, E Dagnino and A Escobar (eds) *Cultures of Politics, Politics of Cultures: Re-visioning Latin American Social Movements* (pp 325–352). Boulder: Westview
- Risen J and Johnston D (2002) Intercepted Al-Qaeda e-mail is said to hint at regrouping. *New York Times on the Web* 6 March. http://www.nytimes.com (last accessed 6 March 2002)
- Rohde D (2002) Qaeda uses teeming Karachi as new base, Pakistanis say. *New York Times on the Web* 1 November. http://www.nytimes.com (last accessed 11 November 2002)
- Rose G (1993) Feminism and Geography: The Limits of Geographical Knowledge. Minneapolis: University of Minnesota Press
- Routledge P (1997) A spatiality of resistances: Theory and practice in Nepal's revolution of 1990. In S Pile and M Keith (eds) *Geographies of Resistance* (pp 68–86). New York: Routledge
- Routledge P (2000) Our resistance will be as transnational as capital: Convergence space and strategy in globalizing resistance. *Geojournal* 52:25–33
- Sachs S (2001) An investigation in Egypt illustrates Al-Qaeda's web. New York Times on the Web 21 November. http://www.nytimes.com (last accessed 21 November 2001)
- Schmidtt E and Dao J (2001) Use of pinpoint air power comes of age in new war. New York Times on the Web 24 December. http://www.nytimes.com (last accessed 7 January 2003)
- Sen A (1992) Inequality Reexamined. Cambridge, MA: Harvard University Press
- Sheridan J H (1993) Agile manufacturing: Stepping beyond lean production. *Industry Week* 242:30–38
- Sheridan J H (1996) The agile web: A model for the future? *Industry Week* 245:31–35Smith N (1990) *Uneven Development: Nature, Capital and the Production of Space*.Cambridge, MA: Blackwell

- Soja E (1989) Postmodern Geographies: The Reassertion of Space in Critical Social Theory. London: Verso
- Taber R (1969) The War of the Flea: A Study of Guerrilla Warfare—Theory and Practice. New York: The Citadel Press
- Taylor V (1989) Social movement continuity: The women's movement in abeyance. American Sociological Review 54:761–775
- Uzzi B (1996) The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review* 61:674–699
- Uzzi B (1999) Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review* 64:481–505
- Young I M (2000) Inclusion and Democracy. New York: Oxford University Press