

Vertical Geopolitics : Baghdad and After

Graham S. [Vertical geopolitics: Baghdad and after](#). Antipode 2004,**36** 1 12-23.

Stephen Graham

Global Urban Research Unit

School of Architecture Planning and Landscape

Newcastle University

s.d.n.graham@ncl.ac.uk

Introduction : Vertical Geopolitics and the Urbanization of Warfare

“Geopolitics is a flat discourse. It largely ignores the vertical dimension and tends to look across rather than to cut through the landscape. This was the cartographic imagination inherited from the military and political spatialities of the modern state” Eyal Weizmann (2002, 3).

“The orbital weapons currently in play possess the traditional attributes of the divine: Omnivoyance and omnipresence” Paul Virilio, (2002, 53)

Official US military and geopolitical strategy rests on the exploitation of a putative high-tech ‘Revolution in Military Affairs’ to deliver global pre-eminence against any currently existing military or ‘terrorist’ threat on the planet (see Shelton, 2000, Gray, 1997). This strategy, which is highly contested, centres on the exploitation of the United State’s massive global superiority in surveillance, information and targeting systems. These are intimately connected to systems of killing at a distance via increasingly intelligent, automated, and cyborgian machines (De Landa, 1991). The explicit objective of US strategy is to use these systems of power projection to achieve what the US military call ‘Full Spectrum Dominance.’ This is defined as “the ability of US forces [...] to defeat any adversary and control any situation across the full range of military operations” (Coates, 2002, 2, see Shelton, 2000).

Digesting the scenes of demolition and blood-letting in Jenin the month before, the US military columnist Richard Sinnreich wrote an article in the *Washington Post* in May 2003. Sinnreich speculated on the role of closely built urban spaces within this globe-spanning, 'network centric' model of US military hegemony. "As the United States' ability to detect and strike targets from remote distances grows," he wrote, "so also does an enemy's incentive to respond by locating his military forces in cities, where concealment and protection are easier." He predicted that, in a rapidly urbanizing world, "scenes such as those in Jenin are likely to become the rule rather than the exception in war."

Building on Sun Tzu's ancient dictum that "the worst policy is to attack cities" (1963, 78), such suggestions that rapid global urbanisation undermines the US 'Full Spectrum Dominance' strategy have been a recurrent feature of US military analysis since the end of the Cold War. Cities and urbanised terrain are widely portrayed in this discourse as arenas that limit the United States' expansivist economic and military project. In particular, they are seen to reduce the effectiveness of the United States military's expensively developed systems of aerial and space-based targeting and killing. Such discourses are fuelled by predictions of a 'coming anarchy' (Kaplan, 1994) of internecine urban warfare. They are also haunted by recent memories of superpower defeats on the streets of Mogadishu and Grozny

A vast research and development programme has been fuelled by such debates. This is tasked with developing the strategy, doctrine, tactics and technologies necessary for the US to extend its geostrategic hegemony into the nitty-gritty of so-called 'Military Operations

in Urban Terrain' (or 'MOUT'). The RAND analyst Russell Glenn, for example, argues that the US military must now "cleanse the polluted urban seas" to address 'terrorist' threats at home and abroad (2002). This is a difficult challenge, he argues. The complex, congested and contested terrain within cities limits the effectiveness of high-tech weapons and surveillance systems. It reduces the ability of US forces to fight at a distance. And it necessitates a much more labour, and casualty-intensive way of fighting than the US is used to these days.

In this rhetoric an awe-struck reaction to the scale and rate of urbanisation in many of the world's geopolitical conflict zones mixes with an extreme anti-urbanism. Anticipating a "new age of siege warfare," for example, the influential US Army commentator Ralph Peters (1996, 2) urges that attention should now be shifted way from what he terms "the sanitary anomaly" of the first Gulf war.¹

Peters goes on to argue that the 'conventional' doctrines used in the first Gulf war -- whilst infused utterly with the latest air and space-based electronic surveillance and targeting technologies -- actually originated in Cold war 'air and land battle' strategies. Emphasising the rapid movements of air and tank formations over and above open plains, such doctrines stressed the horizontal projection of power across an essential 'flat' and featureless geopolitical space. In such a paradigm, space was seen to be made up of

¹ Presumably 'sanitary' here must refer to the point of view of the US military; the experience of the War was far from 'sanitary' for the 100,000 Iraqi soldiers and 3,000 Iraqi civilians who got in the way of the cross hairs and were killed – see Virilio, (2002).

contiguous territories separated horizontally by geopolitical borders ; these spaces incorporated static and moving targets located (again horizontally) by grid-references (and, later on, Global Positioning System coordinates). These targets were then marked for aerial annihilation on traditional ‘flat’ paper-based or computerised maps. Whilst this power projection involved increasing vertical as well as horizontal dimensions – with aerial and satellite surveillance and targeting allowing the US to completely dominate – the key vector of power operated through the essentially horizontal geopolitics that was a key product of the extension and elaboration of modern nation states between the 18th and 20th centuries.

To Peters the virtually universal urbanization of geopolitical terrain serves to undermine this model of power projection and domination. “In fully urbanized terrain,” he writes, “warfare becomes profoundly vertical, reaching up to towers of steel and cement, and downward into sewers, subway lines, road tunnels, communication tunnels, and the like” (1996, 2). This verticality breaks down communication. It leads to an increasing problem in distinguishing civilians from combatants. And it undermines the awareness and killing power that high-tech sensors give to US combatants in the urban battlefield.

Like many of his colleagues, Peters’ military mind recoils in horror at the prospect of US forces habitually fighting in the majority world’s burgeoning megacities and urbanizing corridors.² To Peters, these are spaces where “human waste goes undisposed, the air is

² See also Rosenau, (1997), Spiller (2000). A hypothesis worth testing is whether this antiurbanism amongst the US military reflects

appalling, and mankind is rotting” (1996, 2). Here cities represent decay, anarchy, disorder and the post Cold War collapse of ‘failed’ nation states. “Boom cities pay for failed states, post-modern dispersed cities pay for failed states, and failed cities turn into killing grounds and reservoirs for humanity’s surplus and discards (guess where we will fight)” (1996, 3).

Peters highlights the key strategic role of urban regions starkly : “Who cares about Upper Egypt if Cairo is calm ? We do not deal with Indonesia – we deal with Jakarta. In our [then] recent evacuation of Sierra Leone Freetown was all that mattered” (1997, 5). Peters also candidly characterises the role of the US military within the emerging American neoliberal ‘empire’ (although he obviously doesn’t use these words). “Our future military expeditions will increasingly defend our foreign investments”, he writes, “rather than defending [the home nation] against foreign invasions. And we will fight to subdue anarchy and violent ‘isms’ because disorder is bad for business. All of this activity will focus on cities”.

Echoing Sinnreich, Peters, too, sees the deliberate exploitation of urban terrain by opponents of US hegemony to be a key likely feature of future war. ”The long term trend in open-area combat is toward overhead dominance by US forces” he observes (1996, 6). “Battlefield awareness may prove so complete, and precision weapons so widely-available and effective, that enemy ground-based combat systems will not be able to survive in the deserts, plains, and fields that have seen so many of history’s main battles.” As a result, he agrees with Sinnreich that the United States’ “enemies will be forced into cities and other complex terrain, such as industrial developments and inter-city sprawl” (1997, 4).

the wider anti-urbanism which is endemic within US culture and society.

To Sinnreich, Peters, and many other US military commentators, then, it is as though global urbanisation is a dastardly and cowardly plan to stop the US military gaining the full benefit from the complex, expensive and high-tech weapons that the military industrial complex has spent so many decades piecing together. Annoyingly, cities simply get in the way of the US military's technophilic fantasies of omnipotence. The fact that 'urbanized terrain' is the product of complex economic, demographic, social and cultural shifts that involve the transformation of whole societies seems to have escaped their rather paranoid eyes (see Graham, 2002).

From 'Shock and Awe' to Street Corners: The Battle for Baghdad

This reflection on the US military's perceptions of urbanized space over the past two decades now needs to be placed against the (on-going) experience of the second Gulf War. Tying into this long-standing military discourse, much was made by western media during the build up to the invasion of Iraq of the ways in which Saddam Hussein's forces would try to exploit Baghdad as a verticalised defensive space to force a long and destructive siege-like war

There are signs that this was, in fact, attempted (if on a limited scale). Iraqi military leaders clearly changed tactics after the aerial annihilation of their forces in the open desert in 1991 (see Virilio, 2002). They may even have themselves tracked the US military's debates about the urbanization of war (much of which, after all, is available on the web --

see www.urbanoperations.com). Tariq Aziz, Saddam's foreign minister, argued in Autumn 2002 -- as the build up to invasion gathered pace and the heavy bombing started -- that "some people say to me that the Iraqis are not the Vietnamese ! They have no jungles of swamps to hide in. I reply, 'let our cities be our swamps and our buildings our jungles'" (quoted in Bellamy, 2003, 3). In many cases Iraqi defenders in Basra and Baghdad did try and burrow, and hide in the cities. They also tried to blend in with civilians and base themselves near hospitals and schools.

It is also very clear that the US military, believing that "the road to Baghdad lay through Jenin" (Justin Huggler, cited at <http://b-c.blogspot.com>, 31st March 2003), worked extremely closely with the Israeli Defense Forces prior to their attacks to glean all the latest tips on fighting in urban areas. They exchanged in many training visits and sent special observers to actually watch the battle of Jenin as it progressed. They built mock 'Muslim' cities (replete with 'mosques', washing lines, and typical 'Arab' houses) for joint exercises with Israeli soldiers. And they even bought 12 of the 60 ton D-9 bulldozers that the Israelis use so brutally (as at Jenin) to simply 'deurbanise' the built spaces that they feel compromise *their* verticalised military omnipotence in the occupied territories (see Graham, 2002, Weizmann, 2002).

With the benefit of hindsight, however, widespread predictions of a 'new Stalingrad' in and around the Baghdad now seem faintly absurd (see Norton-Taylor, 2003). For this war was one of the most one-sided in history (with the possible exception of the one in Afghanistan six months before). The mass destruction and aerial killing that rained down on Iraqi

civilians and military alike *within* their cities meant that very little sustained resistance was actually likely to occur whilst US forces invaded and occupied the City. Whilst the US military maintained its full, furious, coordinated killing power over the skies and the ground of Iraq -- and as Iraqi systems of infrastructure were progressively broken down -- even in the cities there was little space or scope to offer meaningful and sustained resistance.

Post-attack, US analysts have already celebrated the victory of their IT-based killing, which allowed targets to be destroyed almost as quickly as they were identified -- that is, in 'real time.' (Even in the first Gulf War, this could take hours because coordination, whilst computerised, was still not automated -- see Cain, 2003). This 'success' was further supported by a relaxation of both the rules of engagement, and the laws of war, to allow the full targeting of major cities with both 'precision' and unguided weapons -- including cluster bombs, 'bunker busting' bombs and depleted uranium munitions -- irrespective of the civilian carnage that inevitably followed (see Smith, 2002).

The implication of Baghdad, then, is that the urbanisation of terrain may not necessarily inhibit US military and geopolitical hegemony as much as was thought -- at least not in the formal times and spaces of war when the systems for distanced, verticalised killing are in full murderous flow. However, now that Basra, Baghdad and other Iraqi cities are occupied, the US and British military have now emerged, ironically, as much more vulnerable targets. Now that they are forced to occupy the streets of Baghdad -- a 'megacity' of six million people -- and other Iraqi cities over an extended period, the US military have to overcome their first instincts to project power and kill at a distance that is

safe (that is, safe for them). They have to control, and support logistically, complex and often unknowable urban spaces from within over extended periods of time. At the same time they must at least start to address the complex challenges of humanitarian, infrastructural and political reconstruction (at least of a US-Friendly regime).

Inevitably in this process distancing becomes proximity. Skies and armour plate must be withdrawn from for at least part of the day. Feet must be put on the ground. This exposes the US and British military as targets for a myriad of fighters, ex-militia and civilians armed with very ordinary weapons. The techno-fetishising rhetoric of the 'Revolution in Military Affairs' or 'Network Centric Warfare' -- with their implication, as Mike Davis puts it, that "the 'fog of war' -- the chaos and contingency of the battlefield -- can be dispelled by enough sensors, networks, and smart weapons" (2003, 2) -- must seem highly remote to a GI patrolling a Baghdad street in the middle of the night.

Given that there are no signs yet (at mid July 2003) of withdrawal, and even fewer of the construction of a viable state, the reality of nightmarish urban warfare may, for the US and the British, be just beginning -- at least in the parts of Iraq where their occupation is widely seen to be illegitimate. This nightmare may well thus be slow and attritional rather than massive and rapid. In mid May 2003 Bush declared the war "over." By July 30th the US armed forces had sustained 43 deaths (out of 158 overall deaths since the invasion). About 12 guerilla style attacks were occurring every day. This is the result of US and UK forces now being surrounded continuously by many people who (not surprisingly) are extremely angry at the carnage that they have been forced to endure, in their home city, at

the hands of the aggressor that now sits before them (an aggressor that many see as illegitimate).

In sum, we thus face the prospect of the 'Palestinianization' of Iraq (Khoury-Machool, 2003). No amount of 'full spectrum dominance' and aerial 'shock and awe' can address the deep-seated hatred and resentment that fuels such attacks. No measure of high-tech dominance can stop such local resistance amongst Iraqi people – both Saddam supporters and others – many of whom feel violated, humiliated and passionately angry about the invasion, occupation and devastation of their homeland ; the brutal (and on going) killing and incarceration of thousands of their compatriots (whether military or civilian) ; and the immiserated and repressed existence they are now forced to endure.

Whilst the mainstream western media have recently largely ignored civilian deaths, Iraqbodycount.net's estimats that, by on 22nd July 2003, between of 6073 and 7382 Iraqi civilians had died in the war (www.iraqbodycount.net)(with more being added virtually every day). Virtually every day more were being added as trigger-happy US forces continued their search for senior Ba'ath party members and for those undertaking guerilla attacks (on July 28th 5 innocent civilians were killed in one such raid at Mansur). In addition, tens of thousands of Iraqis have been terribly injured and maimed. The numbers of young conscripts killed will never be known (but must also run into many tens of thousands). We should also not forget that between 3070 and 3390 Afghanis have also been killed by the 'war on terror' (see <http://pubpages.unh.edu/~mwhero/d/>).

There is a brutal inescapable fact to realise here. In forcing 'regime change' through 'full spectrum dominance,' the inevitable messy carnage and mass killing is always going to fuel the deep hatreds and resentments – even when a brutal dictator is deposed. This will fuel guerilla resistance to occupation the installation of US friendly regimes and for many years to come and not just from fanatical supporters of the previous regime.

Above all, no amount of PR spin, propagandist journalism, or 'informational warfare' can obscure three realisations that are now spreading from critics of the war to many who previously supported it. First, this war is an essentially neocolonial, racist, hegemony-grabbing, killing spree pitching the world's greatest power against a militarily very weak one. Second, the war was organised and executed with little or no legal basis and using spurious and manipulated evidence on 'weapons of mass destruction' to achieve geopolitical goals that were defined by key members of the Bush regime prior to 9/11. And third, the war is being prosecuted with absolute contempt for all the principles of multilateral international politics developed so painstakingly over the previous half century. As Mike Davis argues, "for all the geekspeak about networks and ecosystems, and millenarian boasting about minimal robotic warfare, the United States is becoming a terror state pure and simple : a 21st century Assyria with laptops and modems" (2003, 3). The UK, mean while, is an ally that, in so obsequiously following this terror state, is rapidly destroying its own international credibility and doemstic sovereignty, as it becomes little more than a client state to the US (Leigh and Norton-Taylor, 2003).

Deepening Verticalisation : From the City to the Urban Underground

The instinct to technologise and distanciate their killing power – to deploy their technoscientific dominance to destroy and kill safely from a distance in a virtualised ‘joystick war’– has been the dominant ethos of US military culture and politics for a two century or more (see Franklin, 1988). We should not be surprised, then, that on-going US casualties in the emerging guerilla war in Iraq have failed to knock what Sherry calls this deep ‘technological fanaticism’ off course (1987, chapter 8). For the US military’s fears, and denials, of an urbanising modernity in majority world conflict zones are paralleled by a further, intensified, verticalization of geopolitics. This time, however, the key connection is between trans-global, near instantaneous killing power, operating on the fringes of outer space, and deep, subterranean, terrestrial space. As an attempt to back up its ‘full spectrum dominance’ and its absolute superiority in the technologies of vertical surveillance and distanciated killing, the US military industrial complex is now planning a possible nuclear assault on the last vestige of concealment : the urban underground.

George Bush’s 2002 Nuclear Posture Review suggests that the US will soon restart nuclear testing and that it is also considering a first strike nuclear policy (Squitieri, 2003). Frustrated that their conventional ‘bunker busting’ bombs can not penetrate deep into the protected underground spaces built deep into the bedrock within alleged ‘rogue nations,’ the US regime is planning a new range of nuclear weapons. These are designed to bring even these deep spaces within the destructive orbit of US air and space hegemony. The discourse generated by the announcement of these weapons resonates with the wider one surrounding urbanisation : how unfair for the enemy to withdraw into protected capsules

deep underground when the United States has so expensively developed the technologies of geosynchronised annihilation for surface and open warfare ! (The fact that the US is the bunker-builder *par excellence* seems to escape this analysis).

“Without having the ability to hold those [underground bunker] targets at risk”, suggested J.D. Crouch, Bush’s assistant Secretary of Defense, in February 2002, “we essentially provide sanctuary” (quoted in Squitieri, 2003, 2A). *USA Today* reports that deep bunkers “have become rogue nations’ weapon of choice for putting their weapons beyond the reach of the world’s mightiest military force” (sic.; op cit, 2A). The inability of the US to destroy Saddam Hussein’s deep bunkers during Gulf War II is clearly a powerful driver of this sense of palpable anger that globe-spanning US power can be defeated by the simple act of digging and pouring concrete.

With such legitimisation a major R and D programme is now in full swing to develop nuclear ‘bunker busting’ bombs that will allow the instant annihilation of any (alleged) bunker complex, anywhere in the world, within a very short time of targeting. In spring 2003 the House of Representatives and the Senate approved the development of a “Robust Nuclear Earth Penetrator” and are trying to settle their differences on over-turning a long-standing ban on the development of nuclear warheads of 5 kilotons or less. A specific target is North Korea where advanced tunneling technologies and equipment are allegedly being used to construct massive underground complexes which are currently immune to US surveillance and weaponry.

The spectre of such weapons brings with it a complete reversal of the nuclear test ban ; a worrying level of hypocrisy in these times of nuclear proliferation ; and the frightening prospect of routine nuclear first use by the US. There are obviously also huge risks that they will be targeted mistakenly. But such weapons, and the surrounding doctrine, bring further nightmarish dangers. To actually destroy an alleged military complex 1000ft underground, for example, the Stanford physicist Sidney Drell has estimated that a 'bunker busting' nuclear warhead would need to be at least 100 kilotons in size (or more than six times the size of the Hiroshima bomb). Even if it was exploded deep underground, such a bomb would release over 1.5 million tons of radioactive fallout into the atmosphere with a capacity to kill or devastate a huge urban population (ibid.).

These fantasies of verticalised omnipotence must be understood within the context of the longer term military strategy of the Pentagon. The planning now driving air and space doctrine in Washington envisages, within the next 25 years, complete and near-instantaneous global reach of a whole arsenal of automated, remotely piloted, killing systems from bases within the continental USA (Borger, 2003). In the 'Falcon' project, for example -- short for 'Force Application and Launch from the Continental United States' -- major defence corporations have already placed bids to undertake design work on a range of unmanned aerial and space vehicles that would be the new automated near-space strike force. Such remotely piloted vehicles, it is projected, will fly at 10 times the speed of sound and deliver 12,000 pounds of weapons -- including the possible nuclear bunker-killing bombs -- anywhere in the world within 2 hours from the 'home' US territory. At a

stroke such technologies would take away the need for the United States to have air bases any where outside the boundaries of the US.

These systems scale up the model of the unmanned, low altitude 'Predator' aircraft that are already being used to assassinate alleged 'terrorists' (and whoever happens to be close by) in the Yemen, Afghanistan and Iraq whilst being 'piloted' from a Florida air base 8 or 10,000 miles away. This video game-like killing, without the 'pilot' even leaving the ground, is the logical extension of US military strategy in which entertainment, simulation and high-tech killing blur into an inseparable whole (Der Derian, 2001). This approach also has clear advantages for US military personnel. "At the end of the work day", one Predator operator recently boasted during Gulf War II, "you walk back into the rest of life in America" (quoted in Newman, 2003).

Conclusion : Inscribing a 'Geopolitics of Verticality'

As 'Full spectrum dominance' meets global urbanisation, a clear rethinking of the nature of US 'hyperpower' is now required as an element within the broader re-theorisation of strategic power. Instead of the classical, modern formulation of Euclidean territorial units jostling for space on contiguous maps, geopoliticians now need to build on the work of Virilio and Deleuze, to further inscribe the vertical into their notions of power. Such a (geo) 'politics of verticality' (a term developed by the architect Eyal Weizmann in 2002 to describe the architecture of the Israeli-Palestinian war) would face at least four challenges.

First, adopting a fully three dimensional view of space-time, it would need to place the globe-spanning and real-time killing power of 'network centric warfare' in to the context of the verticalization of territory that comes with urbanization and the growth of underground complexes. As Paul Virilio (1992) has argued the city and warfare have mutually constituted each other throughout urban and geopolitical history. Now, however, this occurs as electronic technologies of instantaneous, verticalised power interpenetrate and (attempt to) control or destroy urban territories from afar -- a process that seems to bring with it a new age of the (underground) urban fortress or bunker. But we should remember, however, that even within the US military, these strategies are always contested. Many within the 'grunt culture' of the US Marines and Army, for example, are sceptical about the usefulness of high-tech, distanciated warfare. And, as US casualties mount in Iraq, and the vast cost and scale of occupation becomes increasingly clear, complex institutional and political battles are underway which may even make the position of the architect of the invasion, US Defense secretary, Donald Rumsfeld, untenable.

Second, it would need to inscribe the contemporary geopolitical imagination with a paradigm which addresses the ways in which global air and space power are used to marshal geopolitical access to, and control over, key underground resources (Iraqi and central asian oil, Palestinian water, etc.) to fuel the ecological demands of western urban complexes.

Third, a vertical geopolitical imagination would need to address the ways in which the distanciated verticalities of surveillance, targeting and real-time killing confront the

corporeal power of resistors to US hyper-power in ways that break down and implode conventional separations of 'national' and 'international', 'military' and 'civil', 'domestic' and 'foreign'. Here geopolitical verticalization meets an intense telescoping of spatial scales, as the body interpenetrates with the globe (Smith, 2002). After all, post 9/11, Predators now fly over US cities as well as Middle Eastern ones (Bishop and Phillips, 2002). The US military practice urban warfare in US cities, as well as in Kuwait and Israel, so that they can react against mass, urban unrest in the 'Homeland,' as they did in the 1992 LA. Riot.³

Finally, a geopolitics of verticality would need to analyse the ways in which the full might of US military communications, surveillance and targeting systems are now being integrated seamlessly into American civil and network spaces, as well as into transnational ones, as part of the 'Homeland Security' drive. The evaporation of the line between law enforcement and military power associated with Bush's 'war on terror' means that anti-globalisation protestors, Internet-based social movements and civil demonstrators now face the same kind of verticalised and virtualised electronic and military power and surveillance that is such a key feature of the United State's geopolitical expansion strategy in Afghanistan, Iraq (and who knows where else as the 'permawar' rolls on and on...) (see Warren, 2002, York, 2003).

³ Perversely, such exercises have even been proposed as local economic development initiatives ; it has even been suggested that certain decaying central cities might be taken over as permanent urban warfare training sites 'populated' by prisoners.

Note

Thanks to Gearóid Ó Tuathail for comments on an earlier draft.

References

Bellamy C (2003) If the cities do not fall to the Allies, there may be no alternative to siege warfare. *The Independent*, 28 March:3

Bishop R and Phillips J (2002) Unmanning the homeland. *International Journal of Urban and Regional Research* 26(3):620-625

Borger J (2003) America to build super weapons. *The Guardian*, 31 June:1

Cain A (2003) The transformation of air and space power in operation Iraqi freedom. *Air and Space Power Journal*, Summer, Available at www.airpower.maxwell.af.mil/ June 2003

Coates K (2002) Full spectrum dominance: Locating the opposition. Available at www.russfound.org May 2003.

Davis M (2003) Slouching toward Baghdad. Available at <http://www.tjm.org/articles/msg00037.html> June 2003.

DeLanda M (1991) *War in the Age of Intelligent Machines*. New York: Zone Books

Der Derian J (2001) *Virtuous War: Mapping the Military-Industrial-Media-Entertainment Complex*. Boulder, Co.: Westview

Franklin H B (1988) *War Stars: The Superweapon and the American Imagination*. Oxford: Oxford University Press

Glenn R (2002) Cleanse the polluted urban seas. Available at www.rand.org June 2003

Graham S (2003) Lessons in urbicide. *New Left Review* 19 (New Series) January February:63-78

Gray C (1997) *Postmodern War : The New Politics of Conflict*. London: Routledge

Kaplan R (1994) The coming anarchy. *The Atlantic Monthly*, February:123-143

Khoury-Machool M (2003) Losing the battle for Arab hearts and minds. *Open Democracy*. Available at opendemocracy.net, June 2003

Leigh D and Norton-Taylor R (2003) We are now a client state. *The Guardian*, 17 July: 23

Newman R (2003) The joystick war. U S News, 19 May. Available at www.usnews.com June 2003

Norton-Taylor R (2003) Saddam aims to drag allies into a new Stalingrad, says British forces' chief. *The Guardian*, 11 March:3

Peters R (1996) Our soldiers, their cities. *Parameters*, Spring:1-7

Peters R (1997) The future of armored warfare. *Parameters*, Autumn:1-9

Rosenau W (1997) 'Every room is a new battle': The lessons of modern urban warfare. *Studies in Conflict and Terrorism* 20:371-394

Shelton H (2000) *Joint Vision 2020*. Washington D C: U S Government Printing Office

Sherry M (1987) *The Rise of American Air Power: The Creation of Armageddon*. New Haven: Yale University Press

Sinnreich R (2002) A hard look at Jenin. *Washington Post*, 7 May, A21

Smith N (2002) Scales of terror: The manufacturing of nationalism and the war for U S globalism. In M Sorkin and S Zukin (eds) *After the World Trade Center* (pp 97-108). New York: Routledge

Spiller R (2000) *Sharp Corners: Urban Operations at Century's End*. Fort Leavensworth, Ka: Staff College Press

Smith T (2002) The new law of war: Legitimizing hi-tech and infrastructural violence. *International Studies Quarterly* 46:355-374

Squitieri T (2003) Bush pushes for new nukes. *USA Today*, 7 July:A1-A2

Sun Tzu (1963) *The Art of War*. New York: Oxford University Press

Virilio P (2002) *Desert Scree : War at the Speed of Light*. London: Athlone

Warren R (2002) Situating the city and September 11th: Military urban doctrine, "pop-up" armies and spatial chess. *International Journal of Urban and Regional Research* 26(3):614-619

Weizmann E (2002) The politics of verticality. *Open Democracy*. Available at www.openDemocracy.net June 2003

York J (2003) Bush administration hell-bent on “permawar”. *New Humanist.com*. Available at www.newhumanist.com/permawar.html July 20 2003.