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The Global Complexities of September 11th

John Urry

The New Yorkers felt that war in their own land was impossible. (H.G. Wells, *War of the Worlds*)

If Russia can be destroyed, the United States can also be beheaded. They are like little mice. (Osama bin Laden, quoted in Reeve and Foden, 2001)

Moral condemnation, the sacred alliance against terrorism are in direct proportion to the prodigious jubilation at seeing this global superpower destroyed. (Jean Baudrillard)

Terrorism is the dark side of globalization. (Colin Powell)

The World Trade Center is a living symbol of man's dedication to world peace. (Minoru Yamasaki, Chief Architect of WTC)

Complexity

DOES THE new physics of chaos and complexity enable us to make sense of those big, unexpected and awesomely significant events that seem to take the 'whole world' into a different dimension? Since the fall of the Berlin Wall in 1989 there have been various 'global events' when 'The Whole World is Watching' (Gitlin, 1980). This article is concerned with that particular moment on September 11th when the whole world watched the surreal and stranger-than-Hollywood event as planes with live passengers flew into and demolished two of the largest buildings in the world. The World Trade Center (WTC), a city in the air, which could contain up to 150,000 workers and visitors, was at two strokes bombed out of existence. It was by all accounts an 'uncanny' moment, when the distinction between

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fantasy and reality was effaced in the most astonishing of images, eclipsing Hollywood's 'best' or 'worst' moments in an apocalypse now at home, in the most prosperous and modern city the world has yet to imagine (see Davis, 2001: 38, on September 11th's uncanniness).

Can complexity theory generate productive metaphors for analysing various 'post-societal' material worlds that unpredictably and dramatically smashed into each other on September 11th? Complexity-theorist Brian Arthur argues that complexity is: 'beginning to develop metaphors . . . that, with luck, will guide the way these sciences are done over the next fifty years or so' (1994: 680). In this article special focus will be directed to those metaphors appropriate for examining the 'material worlds' implicated in the apparent 'globalization' of economic, social, political, cultural and environmental relationships. In the past decade, the social science of the global has extensively described many of these relationships. However, this social science has not analysed how emergent properties develop at the system level that are neither well-ordered *nor* in a state of perpetual anarchy. The social science of globalization has taken the global for granted and then shown how localities, regions, nation-states, environments and cultures are transformed in linear fashion by this all-powerful 'globalization'. Thus globalization (or global capitalism) has come to be viewed as the new 'structure', while nations, localities, regions and so on, are the new 'agents' (to employ conventional social science distinctions but given a global twist).

But September 11th shows the profound limitations of such a linear view of the global (and see Capra, 2002). This event shows that globalization is never complete. It is disordered, full of paradox and the unexpected, and of irreversible and juxtaposed complexity. Indeed September 11th shows that the linear metaphor of scales – such as those stretching from the micro level to the macro level, or from the local to the global – that has plagued social theory from its inception, should be replaced by an alternative metaphor of complex mobile connections. Such mobile connections are more or less intense, more or less social, more or less 'networked' and more or less 'at a distance' (Dicken et al., 2001: 102–4). Latour maintains that the social 'possesses the bizarre property of not being made of agency or structure at all, but rather of being a *circulating* entity' (1999: 17). There are many trajectories or mobilities that are neither macro nor micro but circulate between each, through 'speed; velocity; waves; continuous flow; pulsing; fluidity and viscosity; rhythm; harmony; discordance; and turbulence' (Dillon, 2000: 12).

There is therefore no top or bottom of the global, but many connections or circulations that effect relationality through performances at multiple and varied distances. Latour maintains that: 'there is no zoom going from macro structure to micro interactions . . . [since] both micro and macro are local effects of hooking up to circulating entities' (1999: 19). Overall, my argument here is one of 'relationality': 'No party to a relation is therefore a monadic, or molar, entity. Each is, instead, a mutable function of the character of the mode-of-being-related and its capacity for relationality'

(Dillon, 2000: 12). Relationality is brought about through a wide array of networked or circulating relationships implicated within different overlapping and increasingly convergent *mobile, material* worlds, such as those that collided so dramatically at the WTC.

This article is thus concerned with the systemic non-linear relationships of global complexity that transcend most conventional divides of social science and promote analyses of 'mobile connections'. Thus, the very large number of elements makes global systems unpredictable and lacking any finalized 'order'. There is only order 'on the edge of chaos'. Prigogine talks of the 'end of certainty' as the complexity sciences overcome what he calls the 'two alienating images of a deterministic world and an arbitrary world of pure chance' (1997: 189; see Capra, 1996; Byrne, 1998). Complexity repudiates the dichotomies of determinism and chance, as well as nature and society, being and becoming, stasis and change. Physical systems do not exhibit and sustain unchanging structural stability. Complexity elaborates how there is order *and* disorder within all physical and social phenomena.

Such elements of any system interact over multiple time-spaces. They are irreversibly drawn towards various 'attractors' that exercise a kind of gravity-effect. Interactions are complex, rich and non-linear involving multiple negative and especially positive feedback loops with ineluctable patterns of increasing returns and path-dependence. The elements within any such system operate under conditions that are far from equilibrium, partly because each element only responds to 'local' sources of information. But elements at one location have significant time-space distanced effects elsewhere through multiple connections and mobile trajectories. There is a profound disproportionality of 'causes' and 'effects'. Such systems possess a history that irreversibly evolves and in which past events are never 'forgotten'. Points of bifurcation are reached when a system branches, as many have argued of September 11th.

The nature of 'social order' is problematized by complexity theses. In the cybernetically influenced writings of Talcott Parsons, there is a hierarchy of values and norms that works through each society at all levels, a clear notion of social equilibrium, and strong negative feedback or steering mechanisms that can rapidly and effectively restore order. But the implication of complexity is that there never is such a clear and effective set of processes, and, indeed, that processes to restore order almost always engender further unforeseen consequences, often of a kind that take the society away from ordered equilibrium. Moreover, Talcott Parsons and the classical sociological tradition little considered the mobile patterning of social life, which problematizes the fixed, given and static notions of social order. Ordering, one might say, is always achieved 'on the move'. Moreover, it is never simply the outcome of *social* processes. As Law argues: 'the notion that social ordering is, indeed simply social also disappears . . . what we call the social is materially heterogeneous: talk, bodies, texts, machines, architectures, all of these and many more are implicated in and perform the social' (1994: 2).

Thus criss-crossing 'societies' are many systems in complex interconnections with their environments, there are many chaotic effects time-space-distantiated from where they originate, there are positive as well as negative feedback mechanisms that mean that order and chaos are always intertwined, there are self-organizing global networks and global fluids moving systems far from equilibrium, and there is never a social order accounted for by purified social processes. Such complexity-thinking enables the transcendence of determinism versus free will, especially through seeing material worlds as unpredictable, unstable, sensitive to initial conditions, irreversible and rarely 'societally' organized. Complexity brings out how 'liquid modernity' is unpredictable *and* irreversible, full of unexpected and irreversible time-space movements away from points of equilibrium (Bauman, 2000).

Power

Complexity also brings out how power is not a thing or a possession or a structure. Rather, power flows or runs, increasingly detached from specific territory or space. Power is non-contiguous. Bauman outlines such a 'post-panoptical' conception of power (2000: 10–14). Power is not necessarily exercised through real co-presence, as one agent gets another to do what they would otherwise not have done through interpersonal threat, force or persuasion. And power no longer involves the imagined co-presence of 'others' within a literal or simulated panopticon. Discipline is no longer about physical walls but rather about 'escape, slippage, elision and avoidance', the 'end of the era of mutual engagement' (Bauman, 2000: 11). Modern societies involved the mixing of citizenship with settlement, and thus co-presence within the confines of a specific territorially based society. But now the new global elite, according to Bauman, can rule: 'without burdening itself with the chores of administration, management, welfare concerns', even with disposable slave-owning without long-term commitment (2000: 13; see Bales, 1999, on 'disposable people'). Travelling light is the new asset of power. Power is all about speed, lightness, distance, the weightless, the global, and this is true of elites as well as those resisting elites, such as anti-globalization protesters or, of course, terrorists. Power runs in and especially jumps across different global networks and fluids (as Diken and Laustsen, 2001 elaborate).

Foucault famously described the shift from sovereign power to disciplinary power (1977). But now there are further shifts towards *informational and mediated* power. Citizenship and social order have always depended upon relations of mutual *visibility* between the citizen and the state. But by the 21st century citizens are subject to informational mediated power, forms of power that are complex in their mechanisms and consequences. First, such power is enormously technologized, with the development of vision machines, tens of thousands of satellites, bugs, listening devices, microscopic cameras, CCTV, the Internet and new computerized means of sharing information (see Lyon, 2001, on the post-September 11th surveillance effects).

Second, everyday life also increasingly involves speed, lightness, and distance, with the capacity to move information, images and bodies relatively unnoticed through extensively surveilled societies (such bodies transmuting from student to tourist to terrorist back to student and so on). Resistance to power is also mediated and highly fluid-like.

Third, such mediated power functions like an attractor. Within the range of possibilities, the trajectories of systems are drawn to ‘attractors’ that exert a gravity-effect upon those relations that come within their ambit. The global media exert such a gravity-effect, with almost the whole world both ‘watching’ and being seduced into being ‘watched’ (as with the videos of bin Laden). The attractor is rather like the game show *Big Brother* written onto the global screen.

And fourth, such power is mobile, performed and unbounded. This is its strength and its vulnerability. Attempted ordering by the most powerful can result in complex unintended effects that take the system away from equilibrium. In such unpredictable and irreversible transformations, mediated power is like sand that may stay resolutely in place, forming clear and bounded shapes with a distinct spatial topology, (waiting say to be arrested or bombed) or it may turn into an avalanche and race away, sweeping over much else in its wake. And, correspondingly, challenging that power is also hard, since bombing certain nodes of power cannot destroy the ‘lines of flight’ that simply flow like ‘packets’ in email systems, following different routings and getting around destroyed nodes. The power of the detested US is not anywhere in particular and so in a sense can never be eliminated, except perhaps by a nuclear winter that destroys all the informational and media power scapes across the world.

Wild and Safe Zones

The terror of September 11th, the slaughter of 3000 ‘innocents’, unpredictably emerged from one of the very poorest countries in the world, although, in 1998, Peggy Noonan, a former Reagan speechwriter, outlined the possibility of a terror attack on ‘The Great Satan, the United States’, and especially on Manhattan as its symbolic and material centre (reprinted 2001). And this attack is said to have irreversibly changed many parameters structuring global economic, social and political life as the 21st century unfolds. In that sense, September 11th illustrates Prigogine’s argument in *The End of Certainty*. On the one hand he says that we live in ‘a fluctuating, noisy, chaotic world’ that is based not on certitude but on varied possibilities (Prigogine, 1997: 127); and, on the other, systems are characterized by an irreversible arrow of time producing complex structures in which small events can, in very particular circumstances, produce large outcomes (1997: 26–7).

In particular, September 11th demonstrates the importance of ‘asymmetric threats’, that ‘wars’ are increasingly fought between hugely unequal powers but with the apparently weak able to inflict massive blows on the apparently powerful. It is almost the secular equivalent of ‘The first shall

be last, and the last shall be first.' Hence the desire to kill Americans, the 'first' in the world order, in order to make them last in that order. As the novelist Martin Amis writes: 'Terrorism is political communications by other means. The message of September 11th ran as follows: America it is time you learned how implacably you are hated' (quoted in *The Guardian*, 18 September 2001). Indeed the mightier the power, the greater the violence that can be inflicted. Global complexity is seen in the power of the powerless to be able to inflict the utmost violence upon the institutions of power, especially those bodies and buildings that symbolize the intense condensation of that power. The US cannot be defeated in conventional warfare but the ultimate 'weapon of the weak' is that of the combat suicide, to kill and to be killed and to spread the fear of killing throughout the society (Mann, 2001).

How did this deadly and complex asymmetric warfare emerge? The strategy of liberal globalization, of the relatively unregulated growth of capitalist markets across the world, produced extraordinarily heightened levels of economic and social inequality (see Gray, 2001). Among the many effects of liberal globalization is the generation of 'wild zones' across the former USSR, sub-Saharan Africa, the Balkans, central America and central Asia. These zones are places of absence, of gaps, of lack. Such zones possess weak states with very limited infrastructures, no monopoly of the means of coercion, barely functioning economies often dependent upon commodifying illegal materials, an imploded social structure and a relatively limited set of connections to the global order. Mann terms these 'zones of turmoil' (2001: 61). In those zones charismatic leaders with alternative armies provide plausible solutions to such massive inequalities, especially those that seem to result from American domination over Islamic societies.

In cities in the 'West' socio-spatial inequalities often remain 'invisible' through the development of a 'splintering urbanism'. The invisibility of the 'other' is taken to the extreme in the 'gated' cities of north America (Diken, 1998; Graham and Marvin, 2001). There are gated communities, condominiums, shopping centres, theme parks, workplaces, campuses, airports, financial districts and so on. The gates separate out the safe zones from the wild and dangerous zones within the cities of the West, zones also produced by liberal globalization. Such zones of the ungovernable, the poor and the dispossessed are found in many cities, especially in the US. Gates effect separation often vertically (as in the WTC from the homeless beggars and addicts in the subway below) as well as horizontally (as with the Pentagon). The 'ring of steel' around the City of London provides such a physical and symbolic separation between zones, constructing a powerful 'city of control'.

Homi Bhabha more generally summarizes how: 'The globe shrinks for those who own it; [but] for the displaced or the dispossessed, the migrant or refugee, no distance is more awesome than the few feet across borders or frontiers' (1992: 88). And the power of those 'few feet' is seen at the Channel Tunnel, with asylum-seekers from many wild zones, especially Afghanistan, just unable by a few feet to get into the UK. Nightly pictures of Afghans

trying to jump onto Eurostar trains entering the Channel Tunnel evocatively illustrate the tiny physical ‘distance’ between the wild and the safe zones, but the simultaneously enormous social ‘distance’.

This splintering *and* proximity between the wild and safe zones resonate with 20th-century scientific thinking that has shown that space and time are not containers of entities that simply move along various dimensions (Capra, 1996). Space and time are ‘internal’ to the processes through which the physical world operates, helping to constitute the very powers that objects can be said to possess. Hawking summarizes how:

Space and time are now dynamic qualities: when a body moves, or a force acts, it affects the curvature of space and time – and in turn the structure of space-time affects the way in which bodies move and forces act. (1988: 33)

Thus there are multiple spaces and times; such spaces and times are internal to the powers of objects and space and time can be curved, stretched and turned back upon themselves.

And, increasingly, the time-space edges of the safe and the wild zones in the social world are coming into strange and dangerous new juxtapositions. The flows from the wild zones of people, risks, substances, images, Kalashnikovs and so on, increasingly slip under, over and through the safe gates, suddenly and chaotically eliminating the invisibilities that had kept the zones apart. Through money laundering, the drug trade, urban crime, asylum-seeking, arms trading, people smuggling, slave trading and urban terrorism, the spaces of the wild and the safe are chaotically juxtaposed, time-space is being ‘curved’ into new complex configurations. September 11th demonstrated this new curvature of space and time, as the few feet are dramatically transcended and the invisibility is no more. Suddenly, those from the wild zones rose out of that zone and struck at the vertical city that had previously been invisible, causing a single day’s loss of life through a terrorist attack greater than any previous single act outside of a ‘war’ between states or a civil war.

Thus, in a globalizing world, wild zones and safe zones have become highly proximate through the curvatures of space-time. There is ‘time-space compression’, not only of the capitalist world but also of the ‘terrorist world’. Wild zones are now only a telephone call, an Internet connection or a plane-ride away. Capitalist markets have brought the ‘whole world’ closer, and this is especially and paradoxically true of those bent on its violent destruction, and especially on destroying the dominance of ‘Americans’ within the global order.

In this particular ‘chaotic’ case, there was a small immediate cause, some knives, 20-odd suicide bombers and a number of planes that happened to be in the appropriate place and time. Unlike predictions of cyber-terrorism or bio-terrorism, this event involved fairly old technologies. The awesome power of the terrorist act stemmed, though, from the linking together of people, objects and technologies in a deadly non-failing network.

Using modest communication devices, 20 men, supported it seems by an extensive network, unleashed a unique 'war' against the US.

This is a strangely asymmetric war, not principally concerned with the obtaining of territory but focused on the killing of 'innocent' civilians. This is a 'complex' war where civilians, not armies, are the target. And this is why the American response has been a 'war on terrorism'. It is not that violent death is uncommon in the US, with phenomenal murder rates, almost daily schoolyard killings, massive death rates on the roads and so on. But such deaths are seen as individual, not involving an attack on the society as a whole. September 11th is viewed as the declaration of war upon the US and the response that that 'inevitably' produced is a global war on terrorism.

September 11th is also a war involving the attractor of mediated power. This attractor produces the sense that all is putatively visible, all are inside a kind of global panopticon. And it was from the society perhaps least drawn into this attractor of mediated power, Afghanistan, that astonishing media images emerged (see the visually amazing *September 11th, A Guardian Special*, 2001). Under the Taliban, TV had been banned and the main media event seems to have been an Afghan radio version of *The Archers*. And while there have of course been significant global media events since the fall of the Berlin Wall and the tanks in Tiananmen Square in 1989, none compares with what came out of Afghanistan, those planes flying into the WTC and the almost instantaneous collapse of two utterly massive 'modern' buildings. It is even suggested that the gap of 15–20 minutes between the flights crashing into the Twin Towers was designed to maximize the global media audience. So this was a media event of macroscopic proportions. This was 'war as theatre', a spectacle as the images moved instantaneously, simultaneously and irreversibly across the screens of the world, changing in a once-and-for-all way the image-making of violent death. There are around 1 billion TV screens worldwide, increasingly in public places as 'ambient television', and it is reasonable to assume that all those screens have on occasions shown those planes crashing into that WTC (see McCarthy, 2001). There is a kind of 'global screening' even for events stemming from unutterably poor societies.

Thus the wild and safe zones collided in the sky above New York on September 11th in a manner no one in the safe zones had precisely predicted. Of course, the zones also collide in Saudi Arabia where the US's obsession with the motor car and cheap petrol has generated the unholy alliance between American power and Saudi oil wealth.

Networks

It is generally argued in the 'West' that this collision of zones occurred because of the actions of a terrorist *network*, the al-Qaida (The Base). This 'global network' was able to combine together men, machines, information, technology, camps, training routines, commercial operations, drug monies and so on, to effect a network that enabled those 'gates' to be blown down

(see the documentation in HM Government, 2001; Gunaratna, 2002). However, that the organization involved is networked is generally accepted, with President Bush becoming something of an expert in 'network-centric warfare'. However, the notion of network here is too simple. There are two very different senses of networked relationships across the globe that need to be carefully distinguished (see Urry, 2002, for more detail).

First, there are *global networks* characterizing powerful entities such as McDonald's or Disney or Starbucks. These networks are tightly coupled and consist of complex, enduring and predictable connections between peoples, objects and technologies across multiple and distant spaces and times. Relative distance is a function of the relations between the components comprising that network. The invariant outcome of a network is delivered across its entirety in ways that overcome regional boundaries. Things are made *close*, time-space is curved through these powerful networked relations. Such a network of technologies, skills, texts and brands, ensures that the same 'product' is delivered in the same way across the network (Ritzer, 1998). And the branded restaurants or shops of such global networks constitute typical objects of protest for those involved in the anti-globalization movement, as they seek to *No Logo* the world (Klein, 2000).

Second, by contrast, there are various *global fluids*, drawing here on Bauman's concept of 'liquid modernity' (2000). These networked fluids include world money, automobility, global media, digitized information, the Internet, social movements, travelling peoples and, most relevantly here, international terrorism (Urry, 2002: Ch. 4). Such global fluids travel along various routes but may escape, rather like white blood corpuscles, through the 'wall' into surrounding matter, effecting unpredictable consequences. Fluids move according to certain novel shapes and temporalities, breaking free from linear, clock-time. Such fluids act on local information, but where local actions are – through countless iterations – captured, moved, represented, marketed and generalized, often impacting chaotically upon hugely distant places and peoples. Such fluids demonstrate no clear point of departure, just deterritorialized movement, at certain speeds and at different levels of viscosity, with no necessary end-state or purpose. This means that such fluids create their own context for action rather than being 'caused' by context. These fluids roam the globe, possessing the power of rapid movement, across, over and under many apparent regions, disappearing and then reappearing, transmuting their form, cropping up like the islands of an archipelago, unexpectedly and chaotically. They can appear both horizontally and vertically, arriving not from the wild zones of the subways of New York, but also, astonishingly, from the air as planes or as bio-materials.

Indeed al-Qaida has already been likened to a self-organizing system 'on the edge of chaos'. It is said that the 'amorphousness of al-Qaida not only makes it difficult to hunt down its members and pin blame on individuals: it also means it does not necessarily have the same form from day

to day, a clear beginning or end' (see Meek, 2001). Indeed, it is suggested that: 'what they receive from bin Laden and his associates is less specific orders and training than a clear, simple ideology, which they are expected to go out into the world and put into practice on their own' (Meek, 2001). One implication of conceptualizing this network as a global fluid is that fluids are hard to defeat because they are made up of very different self-organizing elements that regularly change their shape, form and activities. Such mutating capacity renders the network 'invisible', if, on occasion, awesomely present. It might be claimed that this entity is more 'global' than many global companies that are global networks and not global fluids.

One consequence of the fluid and turbulent nature of global complexity is that each state: 'is actually becoming more, rather than less, important in developing the productive powers of territory and in producing new spatial configurations' (Swyngedouw, 1992: 431; Mann, 2001). This can be seen in the intense diplomatic effort to form the US-led global coalition against terrorism, as well as the more general growth of a state-sponsored 'fear economy' (Davis, 2001: 45). Indeed, there has been an enormous expansion of nation-state structures, bureaucracies, agendas, revenues and regulatory capacities since the Second World War, in order to deal with multiple and overlapping global fluids that move across borders through time-space in dizzying, discrepant and transmuting form (for example, as with 'terrorists'). States are anyway becoming more diverse, such as the US, the EU *and* Taliban 'states' (Weiss, 1998: Ch. 7).

Further, with the flows of informational and mediated power, states seek to protect their brand upon the global stage. In the US, the New York skyline has been key to that brand. As King wrote presciently some years ago:

Recognizing that New York is imagined, imaged, through its Manhattan skyline . . . attention needs to be focused on the central importance of the materiality and visibility of the building, in constituting and representing not only the city, but also the nation, as well, indeed, as the world. (King, 1996: 101)

Indeed, it is those states with the most powerful brands that have, like those companies with the most powerful commercial brands, most to lose if they cannot guarantee the safety of their own citizens, companies or visitors. In a complex world order, it can be the most powerful who have the most to lose, at least relatively, as Thompson shows in the case of the complexities of scandal (2000).

Each society within global complexity is thus confronted with an astonishing array of self-organizing networks, fluids and 'polities', striating the space around and across their frontiers. States shift away from governing a relatively fixed and clear-cut national population that is resident within its territory and constitutes a relatively unchanging community of fate, an 'organized capitalism' (Lash and Urry, 1987). Shifts towards global networks

and fluids transform the space beyond each state they seek to striate. For Habermas: “globalization” conjures up images of overflowing rivers, washing away all the frontier checkpoints and controls, and ultimately the bulwark of the nation itself” (2001: 67). States thus are forced to act as regulators, or *gamekeepers*, of networks and fluids predominantly generated through the unpredictable consequences of many other economic, social and political entities, including especially globally organized terrorist networks. This is the new ‘other’ to contemporary states and has led to novel notions of warfare sometimes termed ‘swarming’ (see Dillon, this issue). Castells describes this new fluid, networked military mobility:

This ‘non-linear’ warfare eliminates the notion of a front line, and represents a high-tech version of the old tradition of guerrilla struggles. This ‘network-centric’ warfare . . . is entirely dependent upon robust, secure communication, able to maintain constant connection between the nodes of an all-channel network. (2001: 161–2)

Attractors

I have noted that complexity analyses various attractors. Barber describes one such an attractor, that the global system is increasingly locked into a relationship between the consumerist ‘McWorld’ on the one hand, and the identity politics of the patriarchal ‘Jihad’ on the other (1996). There is a ‘new world disorder’ in which McWorld and Jihad depend upon, and globally reinforce, each other, drawing a huge array of other relations into its orbit. Together they constitute a ‘strange attractor’: ‘the dialectical interaction between them suggests new and startling forms of inadvertent tyranny that range from an invisibly constraining consumerism to an all too palpable barbarism’ (Barber, 1996: 220). Thus existing notions of citizenship, justice and democracy are drawn into and transformed through the strange attractor of McWorld versus the Jihad. This attractor exerts an increasingly powerful gravity-effect upon very many sets of social relations. For those outside McWorld and the Jihad, the attractor polarizes the global system, forcing individuals, places and nations into one side or the other, as each reinforces and strengthens the other.

Indeed, this attractor has generated an astonishing set of events since September 11th. These include a global coalition of former enemies united against the Jihad; a ‘clash of civilizations’ with many Muslims driven to support September 11th; an economic downturn as McWorld consumers go on a consumption-strike; the end of the belief in the benign quality of liberal, deregulated globalization; a greatly enhanced risk or fear culture, with new risks being generated and mediatized almost every day; an apparent flight *from* mobility as typically mobile Americans have been immobilized (hence the call for ‘patriotic tourism!’); some pressure to develop non-petroleum fuel systems to alter the ‘colonial’ and troubling relationship between the US and Saudi Arabia, the seat of Mecca; very significantly enhanced state-legitimated surveillance systems or ‘control

creep' (with the Republican nationalization of US airport security!); new computer games that simulate capturing bin Laden; an old-fashioned bombing campaign against a fluid and mostly invisible terrorist target; and the apparent elimination of the Taliban regime (see materials in *Sociological Research Online* 6[3] and *New Left Review* Nov./Dec. 2001).

These complex processes take the global system further from equilibrium. Indeed, the apparently 'successful' military campaign, which may be the only way to stop the mutating of terrorist networks, will not re-establish a pre-September 11th state. That state has been lost in what Gray calls 'an intractably disordered world' (2001). Before September 11th there was a peace that was not a peace, there has now been a war that is not a 'war' between sovereign nation-states, and there is a world on the edge of chaos not at all at peace with itself. This is a complex world, unpredictable yet irreversible, fearful and violent, disorderly but not simply anarchic.

Note

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References

- Arthur, B. (1994) 'Summary Remarks', in G. Cowan, D. Pines and D. Meltzer (eds) *Complexity, Metaphors, Models and Reality*, Studies in the Sciences of Complexity Proceedings, vol. 19. Santa Fe, NM: Santa Fe Institute.
- Bales, K. (1999) *Disposable People: New Slavery in the Global Economy*. Berkeley: University of California Press.
- Barber, B. (1996) *Jihad vs McWorld*. New York: Ballantine.
- Bauman, Z. (2000) *Liquid Modernity*. Cambridge: Polity.
- Bhabha, H. (1992) 'Double Visions', *Artforum* January: 82–90.
- Byrne, D. (1998) *Complexity Theory and the Social Sciences*. London: Routledge.
- Capra, F. (1996) *The Web of Life*. London: HarperCollins.
- Capra, F. (2002) *The Hidden Connections*. London: HarperCollins.
- Castells, M. (2001) *The Internet Galaxy*. Oxford: Oxford University Press.
- Davis, M. (2001) 'The Flames of New York', *New Left Review* 12: 34–50.
- Dicken, P., P. Kelly, K. Old and H. Yeung (2001) 'Chains and Networks, Territories and Scales: Towards a Relational Framework for Analysing the Global Economy', *Global Networks* 1: 89–112.
- Diken, B. (1998) *Strangers, Ambivalence and Social Theory*. Aldershot: Ashgate.
- Diken, B. and C.B. Laustsen (2001) 'Zones of Indistinction – Security, Terror, and Bare Life', Dept of Sociology, Lancaster University mimeo.
- Dillon, M. (2000) 'Poststructuralism, Complexity and Poetics', *Theory, Culture & Society* 17: 1–26.
- Foucault, M. (1977) *Discipline and Punish*. London: Allen Lane.
- Gitlin, T. (1980) *The Whole World is Watching*. Berkeley: University of California Press.

- Graham, S. and S. Marvin (2001) *Splintering Urbanism*. London: Routledge.
- Gray, J. (2001) 'The Era of Globalisation is Over', *New Statesman* 24 September.
- Gunaratna, R. (2002) *Inside Al-Qaeda: Global Networks of Terror*. New York: Columbia University Press.
- Habermas, J. (2001) *The Postnational Constellation*. Cambridge: Polity.
- Hawking, S. (1988) *A Brief History of Time*. London: Bantam.
- HM Government (2001) *Responsibility for the Terrorist Atrocities in the United States, 11 September 2001*, HMG Website (<http://www.statistics.gov.uk/>).
- King, A. (1996) 'Worlds in the City: Manhattan Transfer and the Ascendance of Spectacular Space', *Planning Perspectives* 97–114.
- Klein, N. (2000) *No Logo*. London: Flamingo.
- Lash, S. and J. Urry (1987) *The End of Organized Capitalism*. Cambridge: Polity.
- Latour, B. (1999) 'On Recalling ANT', in J. Law and J. Hassard (eds) *Actor Network Theory and After*. Oxford: Blackwell/Sociological Review.
- Law, J. (1994) *Organizing Modernity*. Oxford: Basil Blackwell.
- Lyon, D. (2001) 'Surveillance after September 11', *Sociological Research Online* 6(3).
- McCarthy, A. (2001) *Ambient Television*. Durham, NC and London: Duke University Press.
- Mann, M. (2001) 'Globalization and September 11th', *New Left Review* 12: 51–72.
- Meek, J. (2001) 'Why the Management of a Danish Hearing-Aid Maker May Hold the Key to Stopping bin Laden', *The Guardian* 18 October.
- Noonan, P. (2001) 'Stay God's Hand', *The Times* 16 October.
- Prigogine, I. (1997) *The End of Certainty*. New York: The Free Press.
- Reeve, S. and G. Foden (2001) 'A New Breed of Terror', www.guardian.co.uk/wtccrash/story 12 Sept.
- Ritzer, G. (1998) *The McDonaldization Thesis*. London: Sage.
- Swyngedouw, E. (1992) 'Territorial Organization and the Space/Technology Nexus', *Transactions, Institute of British Geographers* 17: 417–33.
- Thompson, J. (2000) *Political Scandal: Power and Visibility in the Media Age*. Cambridge: Polity.
- Urry, J. (2002) *Global Complexity*. Cambridge: Polity.
- Weiss, L. (1998) *The Myth of the Powerless State*. Cambridge: Polity.

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