Sociology beyond Societies

Mobilities for the twenty-first century

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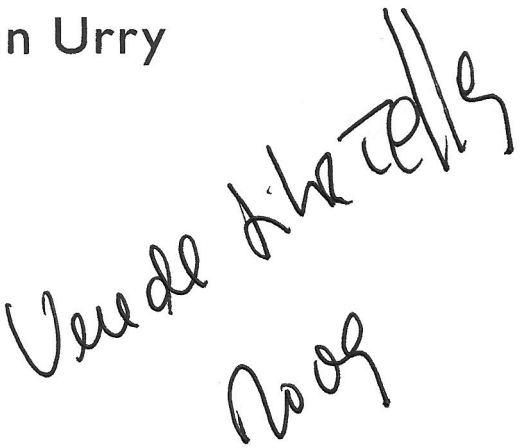

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Chapter 2

Metaphors

> The feudal ownership of land did bring dignity, whereas the modern ownership of movables is reducing us again to a nomadic horde.
>
> (E.M. Forster [1910] 1941: 141)

Introduction

Much of our understanding of society and social life is based upon, and reflected through, various metaphors. In this chapter the nature of such metaphorical thinking is examined. I suggest that sociological thinking, like any other form of thought, cannot be achieved non-metaphorically. As Sontag argues in *Aids and its Metaphors*, 'one cannot think without metaphors' (1991: 91). And although elsewhere Sontag seems to claim that science can be undertaken without metaphor, much of the history and philosophy of science has shown both the exegetical and the constitutive role that metaphors have played in the development of science.

Metaphor is used here in an inclusive figurative sense, to refer to the wide variety of modes of substitution of one figure into another; such a process suffuses language and meaning. This notion of metaphor contrasts with the original Aristotelian sense where metaphor, as giving a name to a thing that belongs to something else, is specifically distinguished from simile, analogy, synecdoche and metonymy. In contemporary linguistic and post-structuralist formulations metaphor is taken as generally integral to language and constitutive of human subjects. Hawkes summarises: '*All* language ... is fundamentally metaphorical ... Metaphor is a function of *language* ... it is the "omnipresent principle" of all language' (1972: 60).

Lakoff and Johnson further claim that metaphor, the understanding and experiencing of one kind of thing in terms of another, is not only a matter of language. Rather human thought processes much more generally are largely metaphorical (1980: 5–6). They argue that it is impossible to develop thought and existence outside of the many *Metaphors We Live By* (Lakoff and Johnson 1980). The human conceptual system is

metaphorically structured and defined. New meanings and realities are dependent upon diverse kinds of metaphorical thinking.

I presume in the following that all human thought, including the specific and abstracted practices of science/social science, involves metaphor. Indeed to seek to establish non-metaphorical thought itself involves forms of metaphorical substitution. I also presume that 'revealing' the metaphorical basis of diverse forms of thought is a major task and goal of social science. Also much theoretical debate consists in effect of the counter-posing of one metaphor against another with a variety of extra-scientific considerations determining the respective success of one metaphor over another.

However, I am not suggesting here that there are no procedures for assessing and evaluating different theories. Relativism, I take it, is a self-refuting position. Metaphors themselves vary greatly in their productivity, both for everyday dwelling and for scientific practice. Assessing the respective productivity of such different metaphors involves complex issues of meaning and interpretation. And this can certainly stretch the assessment of theories beyond the apparently relevant empirical data, beyond what Lakoff and Johnson term the 'myth of objectivism' (1980). However, empirical data, derived from various 'situated contexts', does constitute part of the process by which the appropriateness and fit of different metaphors are to be evaluated and implemented. There are good and bad metaphors and part of what is used to assess such metaphors are various kinds of empirical evidence, although the relationship between evidence and metaphors-as-theories is hugely mediated. More generally though we should consider just what circumstances lead theories to be accepted or rejected, when part of the appeal of any such theory is the metaphor(s) underpinning it. It is necessary to consider how much the development of theory is a matter of evaluating the plausibility of respective metaphors. For example, we should ask how long a good metaphor can preserve a theory from rejection; and what are the bases within the endless flux of social life that lead particular metaphors-as-theories to be, for the present, accepted or rejected.

In this book I seek to develop theories pertaining to social life which depend upon metaphors of network, flow and travel. It is clear that such theories are now more rhetorically persuasive because these metaphors appear to be going with the grain of much contemporary experience, with the perceived sense that global processes are producing a 'shrinking world'. This is particularly the case for many social science academics whose travelling networks flow, and periodically create, curiously intense 'small worlds' (Lodge 1983). Alternative theories that emphasise the enduring power of national societies, such as that of Hirst and Thompson, in turn rely upon the contrasting metaphor of the 'sovereign' nation-state that is enduringly able to resist the global market-place and the flows of international capital (1996).

I return subsequently to such metaphors. For the present we should consider why this power of metaphorical thinking has been difficult to grasp. Why have the social sciences not been more aware that different theories of society entail or presuppose metaphor, that being and thinking sociologically cannot be undertaken outside of metaphor? Partly this is because of the influence of a positivist view of science and the resulting obliteration of the metaphorical thinking that such as a history of the social sciences produces. Lakoff and Johnson argue: 'Objectivism ... misses the fact that human conceptual systems are metaphorical in nature and involve an imaginative understanding of one kind of thing in terms of another' (1980: 194). Analogous to Kuhn's account of the role of textbooks in the rewriting of the narrative of science, so social *science* has tried to disguise its non-scientific roots and origins. It has sought to present itself as having expunged anything that is metaphorical and/or metaphysical and hence outside the certainties of observational science (Kuhn 1962).

In sociology this forgetfulness about its metaphorical past particularly resulted from the widespread critique of functionalism and especially of the 'organic analogy' which underlay functionalist theory (see Isajiw 1968: chap. 5). In this metaphor, most famously articulated by Herbert Spencer, the workings of the social body are regarded as analogous to those of the human body; that as societies develop and grow there is, as with the body, an increase in the structured differentiation of specialised functions. The social body, like the human, is characterised by the interdependence and integration of the separate parts which together effect self-regulation; and that explaining any particular social institution is achieved by showing its contribution to the functioning of the social organism as a whole (Spencer 1893; Peel 1971: chap. 7).

In the 1960s and 1970s many western sociologists argued that this organic analogy was 'false', both as a particular metaphor, and on the general grounds that all metaphorical thinking is mistaken. Methodological individualists, otherwise sympathetic to Spencer's individualist advocacy of *laissez-faire*, argued that any statements about society presuming it to be an organic entity could be reduced to statements about individuals. Positivists advocated a science of laws and facts that were to be entirely tested by rigorous research methods, far removed in their eyes from metaphors of the social or the societal. Advocates of various brands of conflict theory sought to replace the metaphor of society as an organism, characterised by increases of structured differentiation, with analyses of the underlying 'reality' of progressively simplified and conflicting class or authority structures (see Rex 1961: 50, who talks of organic metaphor's 'pernicious' effects).

But in each case the denunciation of the organic metaphor was achieved through developing new metaphors, thus demonstrating that theoretical

debate often involves in part the counter-posing of one metaphor against another. Even Spencer's original advocacy of the organic metaphor had itself been developed in opposition to the metaphor of society as a 'mechanism' or 'manufacture'.

In the case of methodological individualism the metaphor of *exchange* was developed against that of organism and function. It was held that individuals employed sophisticated calculations of the costs and benefits of different kinds of 'social exchange'. Such utility-maximising individuals were seen as able, through their individual calculations and behaviours, to produce complex social patterns based on the presumed unintended effects of social exchange processes (see Homans 1961; Blau 1964).

In the case of positivism the metaphor that was counter-posed to the organic metaphor was that of *vision*. Science was seen to develop through the primary human sense of visual observation and anything that interferes with the requirement to establish the brute facts in 'our minds' eye' is presumed to be unscientific and to be rejected. Visual images constitute how science is to be constructed, organised, legitimated and distinguished from non-science (Hempel 1966).

Conflict theory involved replacing the metaphor of society as an organism, with that of society as an increasingly simplified and interest-based social *structure*. Structure was conceived of either as a dichotomy of one part lying over another (see Dahrendorf's conflict theory, 1959), or in terms of a building metaphor of base and superstructure (see Cohen 1978; Keat and Urry 1982: chap. 6).

So in each case, while sociology energetically sought to overthrow metaphorical thinking through its rejection of the organic metaphor, it developed new metaphorical ways of thinking. I will not interrogate all the current brands of social theory to show the general significance of such metaphorical thinking. However, for all the complexity of some theories of society they most depend upon quite simple figurative ideas drawn from other academic fields, especially biology, physics, geography and economics. To amplify this I will consider a recent reworking of Foucault which 'illuminatingly' brings out more general characteristics of especially visual metaphors for thinking about the social 'body'.

Stacey begins with Foucault's analysis of biomedical science and the nature of the clinical gaze (1997: 51–7). She interrogates his analysis of the mechanisms by which 'illness ... came to light ... in the visible ... but accessible space of the human body' (Foucault 1976: 195). She elaborates how modern biomedicine is both highly metaphorical and remarkably adept at covering up its figurative tracks. In the shift from what Foucault terms classificatory medicine to clinico-anatomical medicine, metaphors of space and vision were paramount. Clinico-anatomical medicine involves the reorganisation of the spatial metaphor, from one in which disease and the patient are spatially separate, to one in which the disease is viewed as a

spatially integral part of the patient. The disease is taken to be in the body and this presupposes the need for the clinical gaze, in order that the doctor learns to see, to isolate, to recognise, to compare and to intervene. Diseases are no longer classified according to homologous symptoms but to their visible *signs*, 'colours, variations, tiny anomalies, always receptive to the deviant' (Foucault 1976: 89), which designate the truth of the disease.

Such visual metaphors have become central to science. The eye develops as the depository and source of clarity. According to Foucault the clinic is the first effort to order science on the exercise and decisions of the visual gaze of the medical scientist. And clinico-anatomical medicine simultaneously naturalises its dependence upon these visual and spatial metaphors. Such a clinico-anatomical method:

> constitutes the historical condition of a medicine that is given and accepted as positive ... Disease breaks away from the metaphysic of evil ... and finds in the visibility of death the full form in which its content appears in positive terms.
> (Foucault 1976: 196; see also Stacey 1997: 56–7, especially on the non-spatial metaphors employed in acupuncture)

More generally from the seventeenth-century onwards, observation rather than the *a priori* knowledge of medieval cosmology was viewed as the basis of scientific legitimacy; and this subsequently developed into the foundation of the scientific method of the west. Sense-data is principally that produced and guaranteed by the sense of sight, by the 'sanitised methodological form of "observation" ' (Jenks 1995a: 3). Foucault shows in *The Order of Things* that natural history thus involves the observable structure of the visible world and not functions and relationships that are invisible to our senses (1970). A number of such sciences of 'visible nature' developed and these were organised around visual taxonomies, beginning with Linnaeus in 1735 (Gregory 1994: 23; Pratt 1992). Such classifications were based upon the modern epistème of the individual subject, of the seeing eye and the distinctions derived from metaphor that it can make. Foucault says that: 'man is an invention of recent date' (1970: 221, 312, 386); and such a 'man' is one who sees, observes and classifies as resemblance gives way to diverse modes of representation.

So what developed was a new visual epistemology which involved the fusing of seeing and believing, and seeing and saying (Stacey 1997: 56). This resulted in contemporary science that appears to be the very antithesis of metaphor, that naturalises its metaphors. But the histories of science and of biomedicine have in fact been based upon mental representations of the external world based on internalised visual images 'in the mind's eye' (Rorty 1980). And science only achieves this through concealing from our gaze just how its positive authority is figuratively constructed. Rorty

makes this clear: 'It is pictures rather than propositions, metaphors rather than statements, which determine most of our philosophical convictions ... the story of the domination of the mind of the West by ocular metaphors' (1980: 12–13; see Chapter 4 below).

In the next section I consider an array of metaphors that have recently become socially powerful. They are not ocular metaphors but rather involve the figurative use of exemplars, or icons or characteristics of mobility. I note various metaphors of travel, seeing how widespread they are within contemporary cultural analysis, so much so that various writers have characterised scientific work itself in terms of travel (as in Clifford's 'travelling theory': 1997). Metaphors of home and displacement, borders and crossings, nomads and tourists, have become familiar within public life and academic discourse.

But I go on to consider some other spatial metaphors, of region, network and fluid, developed in relationship to the mobilities of blood and the treatment of anaemia. I argue these provide a fruitful set of metaphors to be employed in the subsequent section concerned with globalisation and how to develop productive metaphors of the global. This is no simple exercise because the globe itself is a metaphor. Indeed there is no single 'globe' but rather different metaphors of the globe and globality. Central to notions of globalisation are various metaphors of the global which embody alternative presumptions of homogenisation/heterogenisation, of simplicity/complexity, of movement/stasis, of inclusion/exclusion and so on. I discuss the distinction between metaphors of scape and flow, and between a globe which includes and a globe which excludes human participants.

Metaphors of mobility

I begin though with Durkheim and his critique of the fluid, unstable, non-authoritative character of 'sensuous representations'. For him the problem is that such sensuous representations: 'are in a perpetual flux; they come after each other likes the waves of a river, and even during the time that they last, they do not remain the same thing' (Durkheim 1968: 433). For science it is necessary to abstract from these flows of time and space in order to arrive at concepts, which are, according to Durkheim, 'collective representations'. Durkheim views concepts as beneath this perpetual, sensuous, surface flux. Concepts are outside of time and change; they do not move by themselves. They are fixed and immutable and it is the task of science to reveal them, and not to be seduced by the endlessly changing 'sensations, perceptions and images' (Durkheim 1968: 432–4).

Game interestingly contrasts Durkheim's elaboration of the authority of the 'concept' and his rejection of the fluidities of sensuousness, with the deployment of metaphors of movement and flow widely found within

post-structuralist and feminist analyses of the body, and more generally of writing and sociality (1995). Many writers have developed metaphors of sea, river, flux, waves and liquidity (Bachelard 1983), while others have elaborated notions of the vagabond, the nomad, the pilgrim, the motel (Deleuze and Guattari 1986; Braidotti 1994). Such metaphors of course implicate both the theorist and theory since both are unable to stand, or to be developed, outside of these very movements. Subjects are constituted through the fluidities of especially writing. '*Différance* is incompatible with the static, synchronic, taxonomic, ahistoric motifs in the concept of *structure*' (Derrida 1987: 27).

In the following certain fluid metaphors will be elaborated. Unlike Durkheim I suggest that some such metaphors are in fact scientifically useful and not the product of a mere sensuousness (see Chapter 4 below on the senses). The emergence of such fluid metaphors results from transformations of collective representations in which the 'collective' is no longer purely the societal but extends within and beyond to where metaphors of the global are particularly pertinent.

But also *contra* post-structuralism, I suggest that it is possible to evaluate different metaphors for their scientific productivity. They can be set against each other and many kinds of empirical evidence can be deployed to evaluate their plausibility. We do not simply have to go with the flow, one might say. This ability to assess such images of flow will enable the evaluation of the empirical claims implicit in certain metaphors of flow. One particularly powerful metaphor in popular discourse concerns how the purity of particular national cultures is seen as being 'overrun by hordes of foreigners', moving in and contaminating the essence of each particular culture.

I now turn briefly to some recent metaphors of mobility and travel that have infected contemporary social thought. Probably the most widespread is that of the nomad. Bauman for example talks of 'postmodern nomads' (1993a), while Deleuze and Guattari elaborate on the implications of nomads, external to each state, for what they term the war machine (1986: 49–53). Nomads characterise societies of de-territorialisation, constituted by lines of flight rather than by points or nodes. They maintain that 'the nomad has no points, paths or land ... If the nomad can be called the Deterritorialized *par excellence*, it is precisely because there is no reterritorialization *afterwards* as with the migrant ... ' (1986: 52). Such nomads present particular conflicts for states whose fundamental task is 'to striate the space over which it reigns ... not only to vanquish nomadism, but to control migrations and, more generally, to establish a zone of rights over an entire "exterior", over all the flows traversing the ecumenon' (Deleuze and Guattari 1986: 59). Virilio likewise describes the state as 'police': 'the gates of the city, its levies and duties, are barriers, filters against the fluidity of the masses, against the penetration power of the migratory

packs' (quoted Deleuze and Guattari 1986: 60). I return to Deleuze and Guattari in Chapter 8 when I consider how contemporary states are transformed through the proliferation of nomadic flows and smooth spaces that states increasingly struggle to 'police'.

More generally, nomadic deterritorialisation has been articulated as a way of challenging disciplinary limits and hegemonic cultural practices, to 'marginalize the centre' and especially the masculinist, imperial, white and academic cultures of the 'west' (see Kaplan 1996: chap. 2). Nomadism is associated with the notion that academic and political writing can itself be conceived of as a journey. In order to theorise one leaves home and travels. And according to Van den Abbeele there is no 'home' or fixed point from which the theorist departs and then returns (1980). The theorist is seen as travelling hopefully, neither being at home or away (see Cresswell 1997, for a review of such nomadic metaphors, including de Certeau 1984, and Deleuze and Guattari's rhizomatics, 1988).

Braidotti proposes a new 'interconnected nomadism' to develop multiple, transverse ways of thinking through the complex and diverse patterns of especially women's lives (1994). Feminists, she argues, should develop a nomadic consciousness. Nomadic is not used here literally to refer to patterns of world travel but rather to how the nomad as metaphor provides a critical consciousness that resists dominant cultural codes, especially those that are phallocentric.

However, many of Braidotti's examples do in fact rest upon actual mobilities between different places and hence upon diverse geographical dislocations. Indeed she notes that she does 'have special affection for the places of transit that go with travelling: stations and airport lounges, trams, shuttle buses and check-in areas. In between zones where all ties are suspended and time stretched to a sort of continuous present' (Braidotti 1994: 18–19). She does not explain how a nomadic consciousness could develop without a great deal of this corporeal mobility. Chambers refers to such a process as the *flâneur* becoming the *pláneur* (1990; and see Clifford 1997: 30–1, on the extensive mobilities of inter-war intellectuals and artists). Nor can nomadism be envisaged without virtual and object mobilities. Makimoto and Manners argue that we have entered a new nomadic age. Over the next decade, with digitisation, most of the facilities of home and the office will be carried around on the body or at least in a small bag, making those that can afford such objects 'geographically independent' (Makimoto and Manners 1997: 2). Such people will be 'free to live where they want and travel as much as they want' – they will be forced to consider whether they are settlers or really 'global nomads' (Makimoto and Manners 1997: 6). A rather different version of the nomad is to be found in Raymond Williams' 'nomad capitalism', a concept he deployed to analyse the UK coal-miners strike of 1984–5. He argues that this was caused by the 'logic of a new nomad capitalism which exploits actual

places and people and then (as it suits it) moves on ... real men and women know they are facing an alien order of paper and money, which seems all-powerful' (1989: 124).

Various commentators have however criticised some of these nomadic metaphors. Bauman dispenses with the nomadic metaphor on the grounds that actual nomads in fact move from place to place in a strictly regular fashion (1993a: 240). By contrast for Bauman, both the vagabond and the tourist are more plausible metaphors for postmodern times since they do not involve such regularised mobility. The vagabond, he says, is a pilgrim without a destination, a nomad without an itinerary; while the tourist 'pay[s] for their freedom; the right to disregard native concerns and feelings, the right to spin their own web of meanings ... The world is the tourist's oyster ... to be lived pleasurably – and thus given meaning' (Bauman 1993a: 241). Both vagabonds and tourists move through other people's spaces, they both involve the separation of physical closeness from any sense of moral proximity, and both set standards for happiness. For Bauman the good life has come to be thought of as akin to a 'continuous holiday' (1993a: 243).

Wolff criticises the masculinist character of many of these nomadic and travel metaphors since they suggest that there is ungrounded and unbounded movement; yet clearly different people have very different access to being 'on the road', either literally or even metaphorically (1993). As Cresswell notes, the postmodern nomad is 'unmarked by the traces of class, gender, ethnicity, sexuality and geography' (1997: 377). Clifford likewise struggles 'to free the related term "travel" from a history of European, literary, male, bourgeois, scientific, heroic, recreational, meanings and practices' (1997: 33). Jokinen and Veijola have also demonstrated the 'maleness' of many nomadic metaphors (1997). They show that certain male metaphors can be rewritten or coded differently. If they are so reconceptualised as paparazzi, homeless drunk, sex-tourist and womaniser, then they lose the positive valuation that they have typically enjoyed within mainstream nomadic theory. They also suggest that we should examine a variety of female metaphors of movement, including the prostitute, the babysitter and the *au pair*.

I turn finally to a couple of more specific metaphors of travel and travel encounters. Gilroy elaborates the chronotype of the ship, a living, micro-cultural, micro-political system in motion (1993: 4). This metaphor focuses attention in developing the hybrid 'Black Atlantic' culture of the middle passage of the triangular slaveship journeys; of the importance generally of circulation; of powerful images of the sea; and of the complex movement of peoples and artefacts across the Atlantic. Gilroy summarises:

> ships were the living means by which the points within that Atlantic world were joined. They were mobile elements that stood for the

> shifting spaces in between the fixed spaces that they connected. Accordingly they need to be thought of as cultural and political units ... they were ... a means to conduct political dissent and possibly a distinct mode of cultural production
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> (1993: 16–17; see also Chapter 6 below).

Clifford had argued for the chronotype or metaphor of the hotel lobby, a setting of time and space based upon being away from home, movement and unexpected encounter, in preference to those metaphors of home or dwelling which imply stasis and fixture (1997). However, he proceeds to critique the chronotype of the hotel as being nostalgic and masculinist (or rather gentlemanly); he recommends instead the chronotype or metaphor of the motel (see Morris 1988). The motel has no real lobby, it is tied into the network of highways, it functions to relay people rather than to provide settings for coherent human subjects, it is consecrated to circulation and movement, and it demolishes the sense of place and locale. Motels 'memorialize only movement, speed, and perpetual circulation' (Morris 1988: 3); they 'can never be a true *place*' and one is only distinguished from another in 'a high-speed, *empiricist* flash' (1988: 5). The motel, like the airport transit lounge, represents neither arrival nor departure but the 'pause' (Morris 1988: 41).

Having then considered a diverse array of metaphors of movement I want to systematise my argument here by drawing on a rather different resource, Mol and Law's analysis of the intersecting metaphors of regions, networks and flows (1994). These distinctions are developed to deal with a fascinating spatial question relating to contemporary biomedical science. If someone suffers from anaemia where should we think of that anaemia being located? Where in the body is it to be found? The answer is that anaemia is not anywhere in particular but is everywhere that blood travels to. There are blood vessels located throughout the body, forming an immense network enabling blood ultimately to reach every cell, and not just the larger bodily organs. Blood does not stay within the vessels that carry it since some blood cells migrate through the walls of blood vessels. Thus blood is characterised by a strange spatial pattern. It does not fit the structures or regions of conventional anatomy. Blood is a fluid moving through the extraordinarily complex networks of blood vessels in the human body and as a result it gets more or less everywhere in the body. It thus demonstrates a distinct topology that is not that of a definite structure.

Mol and Law employ this discussion of blood to interrogate the diverse spatial forms of social life. What are the equivalent metaphors of the social that their account of blood and anaemia suggest? There are three distinct metaphors of space or social topologies. First, there are *regions* in which objects are clustered together and boundaries are drawn around each

particular regional cluster. This topology of territorialisation is old, secure and familiar (see Lefebvre 1991). Second, there are *networks* in which relative distance is a function of the relations between the components comprising the network. The invariant outcome is delivered across the entire network that often crosses regional boundaries. Third, there is the topology or metaphor of the *fluid* as encountered in the case of blood. Mol and Law argue that with regard to these fluids that flow: 'neither boundaries nor relations mark the difference between one place and another. Instead, sometimes boundaries come and go, allow leakage or disappear altogether, while relations transform themselves without fracture. Sometimes, then, social space behaves like a fluid' (Mol and Law 1994: 643).

Mol and Law utilise this conception of a fluid space to describe the way in which anaemia is medically dealt with world-wide and especially the apparent differences between its clinical monitoring and treatment in the Netherlands as compared with various 'African' countries. They argue that there is no simple *regional* difference to be drawn between its monitoring and treatment in the Netherlands compared with Africa. Nor is there a single clinical *network* world-wide with elements that hang together through invariant relations, which have the effect of transporting what would seem to be the same 'anaemia' to both the Netherlands and to Africa. Rather Mol and Law argue that: 'We're looking at *variation without boundaries and transformation without discontinuity*. We're looking at flows. The space with which we are dealing is *fluid*' (1994: 658; original emphasis).

'Anaemia' then, like blood, can be seen as flowing in and out of different regions, across different borders, using diverse networks. It changes as it goes, although this is often in ways which are more or less imperceptible at the time. Anaemia as a illness is like a fluid, like blood, and is subject to transformation. Fluids are subject to mixtures and gradients with no necessarily clear boundaries. The objects generated may not be clearly defined. Normality is a gradient and not a clear absolute. In a fluid space it is not possible to determine identities nice and neatly, once and for all; nor to distinguish inside from outside. Various other fluids may or may not be able to combine together with each other. A 'fluid world is a world of *mixtures*' (Mol and Law 1994: 660). Fluids are not solid or stable or the only spatial types to be analysed here. Moreover, fluids can get around absences such as a laboratory in an African war zone and are contingent. In short, Mol and Law conclude:

> The study of fluids, then, will be a study of the relations, repulsions and attractions which form a flow ... So *how* does anaemia flow? How does it move between the Netherlands and Africa and back again? ... It may flow in people's skills, or as part of the attribute of

> devices, or in the form of written words ... And as it moves, it changes its shape and character.
>
> (1994: 664).

I have thus considered various metaphors of mobility, including the nomad, the vagabond, the tourist, the ship, the hotel, the motel and the transit lounge. Many of these are illuminating and I return to a number when considering various intersections of belonging and travelling. However, in order to develop more convincing analyses of the 'global' I have turned to the spatial metaphors of region, network and fluid.

Mol and Law bring out the power of these metaphors in relationship to anaemia, to account for the uneven and heterogeneous skills, technologies, interventions and tacit knowledges of those involved in its monitoring and treatment in clinics across the globe. The extent and power of such networks and fluids stretching across societal borders raise important questions about the power of societies ('regions'), to resist. Especially the fluid of 'anaemia' will take different forms as it gorges within, or trickles through, any particular region. Any such fluid can be distinguished in terms of the *rate* of flow, its *viscosity*, the *depth*, its *consistency*, and its *degree of confinement*. In the following section I shall consider some of the global equivalents of regions, networks and fluids, as I seek to develop some diverse metaphors of the global.

Metaphors of the global

The sociological concept of society is organised around the metaphor of a region, namely that 'objects are clustered together and boundaries are drawn around each particular cluster' (Mol and Law 1994: 643). Thus there appear to be different societies with their clustering of social institutions, and with a clear and policed border surrounding each society as region. In the following I shall examine how globalisation fractures this metaphor of society and hence problematises sociology's dominant discursive framework.

One way to study globalisation is through seeing it involved in inter-regional competition with 'society'. Globalisation could be viewed as replacing one region, the bounded nation-state-society of the 'west', with another, the global economy and culture. And as both economy and culture are increasingly globalised, so the old dominant region of society appears to become relatively less powerful. In the fight between these two regions it looks as though the global region will win out and defeat the societal region (see Robertson 1992). Behaviour and motivation are less societally produced and reproduced but are the effect of a more globally organised culture that increasingly breaks free from each and every society.

But this is only one way of understanding so-called globalisation. In the

following I argue that globalisation should not be viewed in this way, as one larger region replacing the smaller region of each society. Rather globalisation involves replacing the metaphor of society as *region* with the metaphor of the global conceived of as *network* and as *fluid*. It is this postulated replacement of one social topology with these others that constitutes the significance of globalisation. I show that the global presupposes the metaphors of network and flow rather than that of region (Brunn and Leinbach 1991; Lash and Urry 1994; Waters 1995; Albrow 1996; Castells 1996, 1997; Eade 1997). There has of course been an astonishing growth in the writings on globalisation from around 1989 (see Busch 1997).

Most obviously, the globalisation literature has described the wide variety of new objects, of new *machines and technologies* which dramatically compress or shrink time–space. Globalisation entails infrastructural developments routed literally or symbolically across societal borders. Such technologies include fibre-optic cables, jet planes, audiovisual transmissions, digital television, computer networks including the Internet, satellites, credit cards, faxes, electronic point-of-sale terminals, portable phones, electronic stock exchanges, high speed trains and virtual reality. There are also large increases in nuclear, chemical and conventional military technologies and weapons, as well as new waste products and health risks that are not simply caused within and treated within societies as 'regions'. These technologies carry people, information, money, images and risks. They flow within and across national societies in increasingly brief moments of time. In what Tom Peters calls the 'nanosecond nineties' a set of technologies has been implemented which generates new fluidities of astonishing speed and scale (1992; see Chapter 5 below on instantaneous time). These technologies do not derive directly and uniquely from human intentions and actions. They are intricately interconnected with machines, texts, objects and other technologies (Michael 1996). As suggested in Chapter 1, there are no purified *social* structures as such, only hybrids (Latour 1993).

Moreover, the appropriate metaphor to capture these intersections of peoples and objects is not that of a vertical structure. The metaphor of structure typically involves a centre, a concentration of power, vertical hierarchy and a formal or informal constitution. Castells argues, by contrast, that we should employ the metaphor of network, 'the unit is the network' (1996: 198). 'Networks constitute the new social morphology of our societies, and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power and culture ... the network society, characterised by the pre-eminence of social morphology over social action' (Castells 1996: 469).

Castells defines a network as a set of interconnected nodes, the distance between social positions are shorter where such positions constitute nodes

within a network as opposed to those which lie outside the particular network. Networks are to be viewed as dynamic open structures, so long as they are able to effect communication with new nodes and to innovate (Castells 1996: 470–1). Much economic geography has detailed the apparently increased significance of such networks within the contemporary economy, at the intra-firm level, at the inter-firm level and at the firm-community levels (see Amin and Thrift 1992; Cooke and Morgan 1993).

Network does not mean here simply *social* networks. This is because the 'convergence of social evolution and information technologies has created a new material basis for the performance of activities throughout the social structure. This material basis, built in networks, earmarks dominant social processes, thus shaping social structure itself' (Castells 1996: 471). Networks thus produce complex and enduring connections across space and through time between peoples and things (see Murdoch 1995: 745). They spread across time and space which is hugely important, since according to Law, if 'left to their own devices *human actions and words do not spread very far at all*' (1994: 24). Different networks possess different reaches or abilities to bring home distant events, places or people, to overcome the friction of space within appropriate periods of time. This requires mobilising, stabilising and combining peoples, actions or events elsewhere into a stable network (Latour 1987). Accountancy, for example, is particularly effective at reducing the variety of activities in distant regions to a common set of figures, the informational flow, that can be instantaneously translated back to other parts of the network and especially to its control and command headquarters (Murdoch 1995: 749). Networks are thus in and of space, they are temporal and spatial as I discuss in subsequent chapters (on 'actor-networks', see Law and Hassard 1999).

By contrast with the immutable mobiles of accountancy, the networks of measurement of haemoglobin levels is less secure (Mol and Law 1994: 647–50). Mol and Law ask how it is possible to produce regional maps of such comparative haemoglobin levels (which are analogous to accountants producing regional maps of the relative profitability of different plants of a global company). They argue that this requires a network constituted across many different regions, comprising appropriate technologies, measuring machines and people with suitable medical and technical skills.

There are two points to emphasise here. First, such a network is problematic to establish because in parts of the world, such as poor African countries, there are inadequate numbers of machines to undertake the measurement of haemoglobin levels, and even where they do exist they may not be appropriately maintained. Thus Mol and Law say that on occasions there is a 'failing network', that the network does not work. Haemoglobin measurement is not immutable (see Latour 1990, on the power of the immutable mobile). As devices and techniques move from

centre to periphery 'their truths become progressively less reliable' (Mol and Law 1994: 652). Second, where a successful network is established across a number of regions, this transforms the configurations of space and time that are no longer regional. In a network established for measuring haemoglobin levels two hospitals can be close together even if they are hundreds of kilometres away from each other. They are nodes within that network, just as two hub airports can be close together in the network of air travel, even if they are apparently located thousands of miles apart. It is necessary to map different networks and to consider areas of dense networks, of sparse networks and of blanks (Brunn and Leinbach 1991; Lash and Urry 1994: 24).

I now return to globalisation and develop the distinction between scapes and flows. *Scapes* are the networks of machines, technologies, organisations, texts and actors that constitute various interconnected nodes along which the flows can be relayed. Such scapes reconfigure the dimensions of time and space. The following are the main scapes:

- transportation of people by air, sea, rail, motorway roads, other roads
- transportation of objects via postal and other systems
- wire and co-axial cables
- microwave channels used by cellular phones
- satellites for radio and television
- fibre-optic cable for telephone, television and computers.

Once particular scapes have been established, then individuals and especially corporations within each society will normally try to become connected to them through being constituted as nodes within that particular network. They will seek to develop their own hub airport or at least have regular flights to such airports; they will wish their local schools to be plugged into the Internet; they will try to attract satellite broadcasting; they may even seek to reprocess nuclear waste products, and so on. Between certain nodes along some scapes extraordinary amounts of information will flow, of financial, economic, scientific and news data and images, into which some groups are extremely well plugged-in while others are effectively excluded. What becomes significant is what Brunn and Leinbach term 'relative' as opposed to 'absolute' location (1991: xvii). This creates novel inequalities of flow which are constituted as 'tunnels', as opposed to the inequalities of stasis. Graham and Marvin maintain that what is involved here is a rewarping of time and space by advanced telecommunication and transportation structures, as scapes pass by some areas and connect other areas along information and transport rich 'tunnels' (1996: 60).

Certain of these scapes are in part organised at the global level. Organisations involved in the globalisation of scapes include the UN, the

World Bank, Microsoft, CNN, Greenpeace, EU, News International, the Oscar ceremony, the World Intellectual Property Organization, UNESCO, IATA, the ILO, the Olympic movement, Friends of the Earth, Nobel Prizes, Bandaid, the Brundtland Report, the Rio Earth Summit, the European Court of Human Rights, British Council and the English language and so on. These 'organisations' themselves employ most of the machines and technologies that facilitate time–space compression.

By contrast with the structured scapes, the *flows* consist of peoples, images, information, money and waste, that move within and especially across national borders and which individual societies are often unable or unwilling to control directly or indirectly. These flows create new inequalities of access/non-access which do not map on to the jurisdictions of particular societies. Such flows generate for late twentieth-century people, new opportunities and *desires*, as well as new *risks*. Such risks include: the spread of AIDS throughout most of the world over the past 15 years; the growth of environmental risks moving across national borders such as the flows of 'nuclear monsters'; the loss of national sovereignty as various global scapes and flows by-pass national governments; a tendency for the homogenisation of the culture of different places; and being exiled from one's country of origin or finding that one is an asylum seeker with very limited rights of residence in the country that one lands up in.

At the same time, however, globalisation allows people new opportunities and new activities to develop. These include: relatively cheap overseas travel; the ability to buy consumer goods and lifestyles from across the world (such as Mexican food, Indian rugs, African jewellery, south American coffee); the opportunities to communicate with people in many countries through the use of the Internet; the ability to form 'new social groups' which are often opposed to, or provide alternatives from, aspects of globalisation; the possibility to participate in global cultural events such as the World Cup or listening to 'world music'; and the reinforcing of certain kinds of local identity, as in the pronounced rediscovery of many ethnic traditions and identities.

These flows thus produce the hollowing out of existing societies, especially as a plethora of 'sociations' have developed, concerned to reflect upon, to argue against, to retreat from, to provide alternatives to, to campaign for, these various flows, often going beyond the limits of the societal 'region'. This generates within any existing 'society', a complex, overlapping, disjunctive order, of off-centredness, as these multiple flows are chronically combined and recombined across times and spaces often unrelated to the regions of existing societies, often following a kind of hypertextual patterning. Such flows across societal borders makes it less easy for states to mobilise clearly separate and coherent *nations* in pursuit of goals based upon society as region. These configurations weaken the power of the societal to draw together its citizens as one, to govern in its

unique name, to endow all with national identity and to speak with a single voice of the nation-state. We do not inhabit a risk society with its implied fixities of a 'regional' institution and social structure. Rather we inhabit an indeterminate, ambivalent and semiotic risk culture where the risks are in part generated by the declining powers of societies in the face of multiple 'inhuman' global flows and multiple networks (Lash 1995). With globalisation the flows of information and image are apparently of heightened significance and this produces different kinds of control. As has been said of Japan: 'network-type systems emphasise a type of human control that involves *inducement or persuasion by manipulating information* rather than a method of control that depends upon power-based or contractual political action' (cited in Dale 1997: 33).

I have so far talked rather generally of global networks and flows which criss-cross the regional borders of society, thus bringing out some aspects of the 'de-territorialisation' of contemporary social life (see Lefebvre 1991: 346–8, on the 'de-territorialised' banking system). I will now make these notions rather more precise, bearing in mind the discussion of blood and anaemia above. I distinguish between *global networks* and *global fluids*.

Numerous 'global' enterprises, such as American Express, McDonalds, Coca-Cola, Disney, Sony, BA and so on, are organised on the basis of a global network (see Ritzer 1992; 1995; 1997). Such a network of technologies, skills, texts and brands ensures that more or less the same product is delivered in more or less the same way in every country in which the enterprise operates (if not exactly the same product; no pig products being served in McDonalds in Muslim countries). Such products are produced in predictable, calculable, routinised and standardised environments, even where there is franchising. These companies have produced enormously effective networks with few 'failings' (unlike some African testing of haemoglobin levels). An African McDonalds will be every bit as 'good' as an American McDonalds! Such networks depend upon allocating a very large proportion of resources to branding, advertising, quality control, staff training and the internalisation of the corporate image, all of which cross societal boundaries in standardised patterns so sustaining the network. Distance is measured in terms of the time taken to get to the next McDonalds, the next Disney park, the next BA hub airport and so on, that is, from one node in a global network to the next.

McDonaldisation thus involves new ways of organising companies on a global scale with a minimum of central organisation (American Express or Disney Parks are similar examples). McDonaldisation produces new kinds of low-skilled standardised jobs for especially young people (McJobs), new products such as Big Macs or the simulated Chicken McNuggets which radically alter people's eating habits, and new social habits world-wide such as eating standardised fast food from take-out restaurants ('grazing').

These global networks produce not only predictable material goods and

services, but also calculable and controllable simulations of experiences apparently 'more real than the original' (Ritzer 1997; Eco 1986; Baudrillard 1983). Such simulations of historical sites, underwater swimming, ancient tribes, 'traditional dances', Indian reservations and so on, are produced through global networks. Much tourism involves an ecstatic spiralling search for further and ever more bizarre inauthentic simulations produced by, and within, the safe modern environments of global networks (Ritzer 1997: 108–9). Ritzer argues that people increasingly want their tourist and leisure experiences to be as 'McDonaldized as their day-to-day lives' (1997: 99). This McDisneyisation of the tourist industry on a global scale involves the power of non-human mechanical, audio, electronic technologies to be able to produce homogeneous, calculable and safe experiences wherever they are to be consumed.

Interestingly, these attempts to create such a global network can also be found within oppositional organisations such as Greenpeace. Like other global players it devotes much attention to developing and sustaining its brand identity throughout the world. Greenpeace's brand identity has 'such an iconic status that it is a worldwide symbol of ecological virtue quite above and beyond the actual practical successes of the organisation' within particular societies (Szerszynski 1997: 46).

In some of the earlier globalisation literature attention was principally directed to such global networks and to the ways in which they appeared to generate cultural homogenisation. This was also associated with what has been called the 'American century', where globalisation and homogenisation were to be viewed as its final triumphant expression (Taylor 1997).

However, recent attention has been directed instead to global fluids, to the remarkably uneven and fragmented flows of people, information, objects, money, images and risks across regions in strikingly faster and unpredictable shapes. The emphasis of a sociology of fluids (as opposed to networks) would be upon heterogeneous, uneven and unpredictable mobilities. The following are the main characteristics of such global fluids (see Deleuze and Guattari 1986, 1988; Lefebvre 1991; Mol and Law 1994; MacCannell 1992; Augé 1995; Kaplan 1996; Shields 1997b). They:

- demonstrate no clear point of departure or arrival, just de-territorialised movement or mobility (rhizomatic rather than arboreal)
- are channelled along particular territorial scapes or routeways which can wall them in
- are relational in that they productively effect relations between the spatially varying features of a scape which would otherwise remain functionless
- move in particular directions at certain speeds but with no necessary end-state or purpose

- possess different properties of viscosity and, as with blood, can be thicker or thinner and hence move in different shapes at different speeds
- move according to certain temporalities, over each minute, day, week, year and so on
- do not always keep within the walls – they may move outside or escape like white blood corpuscles through the 'wall' of the scape into tinier and tinier capillaries
- power is diffused through these various fluids into very many often minute capillary-like relations of domination/subordination
- power is exercised through the intersection of various fluids working on diverse senses
- different fluids spatially intersect in the 'empty meeting grounds' of the non-places of modernity, such as motels, airports, service stations, the Internet, international hotels, cable television, expense account restaurants and so on

I shall now illustrate the importance of such fluids through three brief case-studies, of computer systems in France and the US; 'western' goods in the former 'Eastern Europe'; and the diverse forms of opposition to the very processes of globalisation. Each example shows the power of these diverse social fluids of peoples and objects criss-crossing national borders and resulting in heterogeneous, overlapping and unintended effects within across various national societies.

The first example concerns the French Minitel computer system (see Castells 1996: chap. 5 on the following). The videotext Minitel system has been based within the borders of France and resulted from initiatives by the French national state to develop its domestic electronic industries. It was started in the mid-1980s and by the mid-1990s was used by one-third of the French population. Each French household was offered a free Minitel terminal (based on limited video and transmission technology) instead of the usual telephone book. Many businesses and other services became available on the Minitel, including sex chat lines. Minitel was thus established as a national system organised by the French nation-state, and based on the ordered character of the telephone book and homogeneous tariffs wherever one lived in France. The French system was thus based upon a national network in which the same service was delivered to all subscribing households in the same form whatever one's address. The national or societal network eroded differences of space and linked all subscribers in the same national pattern.

However, Minitel's technology was proving out-of-date by the mid-1990s. Its terminals were not those of the normal computer systems. Also the system's architecture was based upon a hierarchy of server networks and this meant that it possessed little capacity for horizontal

communication and for generating flows across national borders. In the end it became necessary to provide a way of linking these Minitel terminals (at a price) to the international Internet, and this has now been provided. Minitel has thus become yet another network plugged into the ungoverned, anarchic and generalised system of the Internet which links at least 44,000 networks with 100 million or so users worldwide. The Internet demonstrates the social topology not of a network, but of a fluid.

The Arpanet or Internet system was developed by the US military and designed to enable military communications to continue in the event of a nuclear attack. This security from attack was achieved through developing a computer network independent of the various military command and control centres. The crucial innovation was that of 'packet-switching', that messages should be broken down into equal sized units, these packets would make their own way to their destination, and then be combined when they had arrived (Rheingold 1994: 74). Different parts of the same message could flow along different routeways and then be recombined. Message units were able to find their own routes, flowing as sub-divided packages and hence if any part of the system were eliminated through enemy attack, the messages would still arrive. There is no vertical hierarchy and if any particular node is inoperative the network routes around it. Rheingold summarises: 'If you build a message-passing network on this scheme, and use computers to do the routing, you can build a network that will survive as node after node is blasted away' (1994: 74).

The transformation of this military-based system into the hugely fluid potentially global Internet also resulted from initiatives by American scientific and research networks (especially at UCLA, MIT, Harvard), and by more countercultural efforts to produce a computer network with universal (horizontal) public access (see Rushkoff 1994). For example, students were responsible for 'inventing' the modem in 1978 and the Web browser Mosaic in 1992. These were key moments in the development of a personal computing counterculture. As Castells notes: 'the openness of the system also results from the constant process of innovation and free accessibility enacted by early computer hackers and the network hobbyists who still populate the net by the thousands' (1996: 356). The Internet has developed into a system enabling horizontal communication which cannot be controlled or effectively censored by national societies. It is one of the clearest examples of how a technology invented for one purpose, military communication within the US in the event of a nuclear attack, chaotically evolves into purposes wholly unintended by those inventing and developing it.

Thus by the end of the twentieth century the Internet is a metaphor for the social life as fluid. It involves thousands of networks, of people, machines, programmes, texts and images in which quasi-subjects and quasi-objects are mixed together in new hybrid forms. Ever-new computer

networks and links proliferate in unplanned and mixed patterns. In such a fluid space it is not possible to determine identities once and for all, since a fluid world is a world of *mixtures*. Messages 'find their way', rather like blood does through multiple capillaries. Fluids can get around absences. Such computer networks are not solid or stable and are hugely contingent. Plant describes hypertext programmes and the Net as 'webs of footnotes without central points, organizing principles, hierarchies' (1997: 10; see Chapter 3 below).

The second case-study concerns the significance of various flows connected with the collapse of communist state regimes in 'Eastern Europe' (see Braun *et al.* 1996). Following the Second World War, the individual societies of central and eastern Europe constructed exceptionally strong frontiers both from the 'West' and, most strikingly, from each other. Cultural communication into and out of such societies was exceptionally difficult. The Cold War chilled culture as well as politics. So although such societies were internationally linked via the hegemony of the USSR (economically via COMECON and politically and militarily via the Warsaw Pact), there was a parallel emphasis upon cultural involution and the reinforcement of strongly reinforced national networks that sought to produce uniform patterns of especially consumption. It constituted an interesting social laboratory based upon the 'society'.

But what happened was that regional frontiers of each society were transgressed, to be got around through various fluid-like movements. The attempt to maintain or perhaps to freeze the peoples and cultures of 'Eastern Europe' could not be sustained. The Berlin Wall was of course the most dramatic example of this attempted preservation of the peoples of a society. But through the 1960s, forms of communication and later of leisure travel did in fact increase. Both peoples and especially objects began to flow across the carefully constructed borders, often involving what has been termed the 'invisible hand of the smuggler' (Braun *et al.* 1996: 1).

Objects of the 'West' became used and talked about in multiple informal ways, helping the citizens of such societies to form new bases of personal identity, new ways of collectively remembering and new images of self and society. Many citizens went to inordinate lengths to learn about and to acquire objects that seemingly represented western taste, objects that were immutable in their westernness. Because there was little chance to develop identity within work or politics so it has been argued many people poured their energies into both high (books) and low (pop memorabilia) culture and especially the material objects which symbolised or captured new cultural identities. Braun *et al.* argue that these 'socially constructed desires did, in fact, play a larger role in the implosion of state socialist systems of Europe than any political ideology' (1996: 2).

In particular these central and east European economies had been organised around the primacy of industrial production and the restriction

of consumer demand, somewhat akin to the relative short-term wartime austerity in the 'west'. But such restrictions upon the scale and variety of consumption were not freely assented to; indeed the more restricted the choices, especially by comparison with what appeared to be happening in the 'west', the greater the importance consumer goods or their substitutes acquired for individuals and for various social groups. Waters summarises: 'perhaps a majority[,] of the populations embraced consumer culture on the basis of glimpses of life in the West ... The "velvet revolutions" of the late 1980s can be viewed as a mass assertion of the right to unlimited privatized consumption' (1995: 143).

'Shopping tourism' to the 'west' developed on a large scale in the 1970s and 1980s. This involved diverse, overlapping and intersecting flows, resulting in the arrival of objects in these countries often then sold on through local social networks. These further raised people's expectations of the wealth and consumer riches of the 'west'. Such objects constituted significant cultural markers. Braun *et al.* argue that the multiple flows of people in search of various material objects flowing from other cultures were a key feature of societies in which barriers to consumption were constituted as official state policy (1996: 6). The objects sought for could often be relatively valueless in the west (beer mats), but if that was all that was available then that is what people creatively endeavoured to obtain.

There are a number of ways in which flowing objects thus functioned within the history of the present of eastern Europe. There was simply a fascination with consumer goods, with distinctions of style and taste and more broadly with shopping as an intensely pleasurable activity – to be able to shop was a powerful desire. There was a process of generating 'cult' products such as American jogging shoes or western books, as well as a more general belief that the 'west' set the standard for what was appropriately 'classy'. Travel to other countries and especially to the 'west' always involved extensive purchases of consumer goods, both for family-members but especially to sell on to others. There was also extensive smuggling of goods by tourists, lorry drivers and others who used social networks on their return to sell their goods which marked out the sophistication of the 'west' and the presumed failure of the 'east'. The flows of shoppers, tourists, travellers, black marketers, smugglers and so on, combined with particular consumer objects and modes of transportation, undermined these severely bounded 'societies'. These societies did not possess the social power to stem the inevitable march of goods, services, signs, images and people across some of the most powerfully policed of national borders.

This account also shows the way in which apparently the same object can possess quite different cultural biographies in different contexts. This is shown in Kopytoff's description of the biography of a car in Africa, as opposed to that of apparently the same physical object in France. Its biog-

raphy reveals how it was acquired, from whom money was obtained to pay for it, the relationship of seller to buyer, the uses of the car, the identity of its frequent passengers, the garages where it may be repaired, the movement of car from owner to owner and the final disposition of its remains (Kopytoff 1986: 67).

The third example concerns the paradoxical way that global flows engender multiple forms of opposition to their various effects. Many groups and associations are energised by passionate opposition to the institutions and flows of the new global order. Globalisation generates its opposition, although there is little agreement on the causes and consequences of global disorder. Such a resistant order to global institutions is fragmented and disparate. It includes the Zapatistas in Mexico, the American Militia and the Patriots more generally, Aum Shinrikyo in Japan, many environmental NGOs, the women's movement concerned with the impacts of the global marketplace upon women and children in developing countries, New Age-ists, religious fundamentalisms and so on. All oppose aspects of the new global order and are organised around what Castells terms 'resistance identities' (1997: 356). They are virtual communities which 'exist only to the extent that their constituents are linked together through identifications constructed in the non-geographic spaces of activist discourses, cultural products and media images' (Rose 1996: 333). And partly through their practices of resistance to the flows they themselves serve to 'de-totalise' each national society. Castells argues that: 'civil societies shrink and disarticulate because there is no longer continuity between the logic of power-making in the global network [global fluids in my terminology here] and the logic of association and representation in specific societies and cultures' (1997: 11).

Moreover, such groups routinely employ the machines and technologies of globalisation in order to construct and reproduce appropriate flows. Castells terms the Zapatistas the 'first informational guerrillas' since they particularly deploy computer mediated communication and the establishment of a global electronic network of solidarity groups (1997: chap. 3). Similar widespread use of the Internet is to be found amongst the American Patriots who believe that the Federal state is turning the US into a part of the global economy and destroying American sovereignty and local customs and culture.

Thus there are very varied flows of peoples and objects. These identities of resistance, as with the East European example, are often mediated through consumer purchases. Burgess describes new forms of global cultural politics which focus upon the Amazonian rainforest: 'the alliance between actors, musicians, Brazilian Indians, population music promoters, conservation organisations, the media industry and mainly young consumers who buy records to support the campaign against the destruction of the Amazonian rainforest' (1990: 144; Elton John's *Candle in the*

Wind would be another example of resistant identities resulting from consumer purchase).

These flows of consumer goods relate more generally to changes taking place in what it is to be a 'member' of organisations in the emergent global age. Membership has typically been thought of in terms of joining organisations that then provide various rights and duties to their members. Such organisations were structured through vertical hierarchies. Trade unions were the classic model of this pattern based upon a vertical social structure.

But what is now happening is that new 'organisations' have developed which are much more *media*-ted through various global fluids. People can imagine ourselves as members (or supporters) of such organisations through purchases, wearing the T-shirt, hearing the CD, surfing to the organisation's page on the web, buying the video of iconic figures and so on. Objects can provide for that sense of vicarious or fluid 'network-membership'. This may connect to the development of what elsewhere I have described as a polling culture where people are interpellated as consumer-citizens through being polled about pertinent issues. They do not need to be members for the views of people to be surveyed, measured, reported in the media and consumed (see Macnaghten and Urry 1998: chap. 3). Indeed at least some of the time people can think of themselves as 'members' of organisations which they do not join (such as the world community, Friends of the Earth), or where they merely identify with a global brand that flows in and across national borders, such as Greenpeace (Szerszynski 1997; see Chapter 7 below).

So what seems to be developing are various fluids, with no clear points of arrival or departure. They can involve resistance, opposing states and corporations and their attempts to manage, regulate and order protest. They appear to be producing something of a cosmopolitan civil society with no originating subject, no agreed on objects which are to be contested and no necessarily progressive utopias of the future (see Held 1995: chap. 10, on the notion of democracy as 'transnational'). Such a cosmopolitan civil society begins to free itself from the overarching societies of the contemporary world. It ushers in an immensely heterogeneous civil society, a civil society which is as much materially constituted as it is social, and which may be able to act at very considerable distances through deploying unexpected and unpredictable global scapes and flows. However, for all the power of global fluids, 'members' of organisations will intermittently come together to 'be with' others in the present, in moments of intense fellow-feeling. These moments will include festivals, business conferences, holidays, camps, seminars or sites of protest (Szerszynski 1997; Boden and Molotch 1994, on the compulsion to proximity).

Castells generalises how: 'subjects ... are not built any longer of the basis of civil societies, that are in the process of disintegration, but as

prolongation of communal resistance' particularly to various global processes (1997: 11; all emphasised in original). However, I have so far used the terms globe, global or globalisation without much further reflection. Global has been employed as an unproblematic adjective, normally in front of region, network or flow. I have not yet interrogated just what kind of metaphor is involved in the noun from which the terms, global and globalisation, derive, namely the globe itself.

Globes and spheres

I turn to Ingold's examination of 'globes' and 'spheres' in the context of contemporary environmentalism (1993a). He points out that there is something paradoxical about the phrase which has come to be enormously widely used in scientific, political and policy debates, namely, *global environmental change*. Environment typically means something that surrounds and always involves a relationship with that which is surrounded. One cannot exist without the other. However, in relationship to the globe it is unclear what is meant by such an 'environment'. Of course there is the biosphere which surrounds the globe and which is partly the focus of contemporary environmental concern, as in Lovelock's Gaia hypothesis (1988). However, as Ingold argues, also implicit in global environmental change is a notion of our globe that is under environmental threat. But if so how, or in what senses, can humans be surrounded by the globe? The globe does not surround us. Indeed to think of the earth as a global environment signals the culmination of a process of separating humans from the earth (Ingold 1993a: 31).

Ingold proceeds to discuss the distinction between globes and spheres, to consider different metaphors of the earth and hence of those processes which increasingly criss-cross localities and societies. He points out how familiar the image of the globe is to us, from models, photographs taken from spaceships and satellites and moving images employed on television, film and so on. But in fact since almost no-one has seen, let alone touched, heard or smelt the globe, this is obviously not based on direct human sensing of the 'globe'. Life is lived at very close proximity to the earth's surface and hence there is no direct global perception or experience with which to connect. Ingold summarises: 'the world imaged as a globe, far from coming into being in and through a life process, it figures as an entity that is, as it were, presented to or confronted by life. The global environment is not a lifeworld, it is a world apart from life' (1993a: 32).

Cosgrove has shown how contemporary conceptions of the globe have particularly drawn upon the Apollo 17 photograph of the 'whole-earth' taken in 1972 (1994). He explores how this picture of the earth has become an ideological and marketing icon of immense power. It has been used *inter alia* by computer companies and airlines who emphasise the

global reach of their activities; by environmentalists who emphasise the loneliness and fragility of the earth in the blackness of space and hence the need for planetary stewardship; and by the American government who saw the American Apollo mission as the crowning achievement of mankind's [sic] universal destiny. This photograph of the globe demonstrates the incredible power of visual representations that are reproduced and circulated on a vast scale, turning up in multiple and directly competing discourses (see Chapter 7 below).

This notion of the world as a solid and opaque globe, a world that at best is only seen, can be compared with that of the world as a series of concentric spheres. A sphere is hollow and transparent and can be experienced from within. The spherical view is inward-looking, centrifugal and experienced through listening rather than only through sight. The medieval world, as well as various tribal societies, conceived of the world as a series of inclusive spheres. Ingold suggests that the movement from spherical to global metaphors is one in which the world is increasingly distant from the matrix of lived experiences based upon the diversity of the senses (1993a; see Chapter 4 below). The persuasive power of the global metaphor stems from a dominant visualism. This has constructed and reproduced the alleged dichotomy between what is global and what is local. The presumed power and significance of the former stems from how visual images dominate other kinds of sensory mediation.

In particular the environment came to be understood as global and hence opposed to the environment as local. Ingold argues that the difference between the global and local is not one of degree or scale but of kind. The local is not more limited or narrowly focused than the global. Rather it rests upon a different mode of apprehension: 'one based on an active, perceptual engagement with components of the dwelt-in world, in the practical business of life, rather than on the detached, disinterested observation of a world apart' (Ingold 1993a: 40). To see the environment as global is to collude in a privileging of the global ontology of detachment over the local ontology of engagement – it is to celebrate technology, intervention, expert management and the relative disempowerment of the local people.

A good example of the limitation of global thinking is the analysis of 'local knowledges and practices' which can challenge the explanatory power of the global technical and natural sciences. Such sciences often rest upon social assumptions that mean that the predictions of the theory derived from the laboratory do not work out in particular 'real world' circumstances. The laboratory is itself a very particular social and natural setting and the lay public may be better informed about the scientific understandings that will apply within their places of work or residence. They may be in that sense better 'scientists'. In the case of the effects of the fallout from Chernobyl upon sheep farming in the English Lake District, Wynne summarises:

> Although the farmers accepted the need for restrictions, they could not accept the experts' apparent ignorance of their approach on the normally flexible and informal system of hill farm management. The experts assumed that scientific knowledge could be applied to hill farming without adjusting to local circumstances ... Experts were ignorant of the realities of farming and neglected local knowledge.
>
> (Wynne 1991: 45).

What this shows is the importance of identifying and analysing local social practices, often in some sense based on local knowledges, which mediate forms of global scientific knowledge. Implicit in western models of science is a process of global standardisation, which often means that scientists will ignore the particular local conditions and the forms of local knowledge relevant to the appropriate assessments of risk.

There are in conclusion two further points to add to this analysis of the power of, and the deficiencies of, the metaphor of the globe. First, the development of global thinking itself involves a process of cultural interpretation, partly because, as we have seen, the globe itself is not straightforwardly experienced by any of our senses. This process of construction can be seen in relationship to *global* environmental change. Elsewhere it has been shown that there is not an already formed and causally powerful environment that in and of itself can generate global environmental change (Macnaghten and Urry 1998). The development of a global environmental crisis is not simply the product of the globalisation of risks.

Rather a range of diverse environmental 'bads' came to be viewed as operating on a global scale that presumes that many people living in diverse societies could imagine themselves as inhabiting one earth and subject to risks shared by everyone (partly as a result of the Apollo photograph). This global imagined community thus stems from a variety of economic and cultural processes (see Wynne 1994). By 1970 in the US and some parts of Europe, attention began to be drawn to a much wider range of problems that were apparently threatening the environment, including nuclear radiation, pesticide use, vehicle emissions, and other systemic forms of air and water pollution. These events began to generate a sense of a more general crisis of environmental bads, bads moving across national borders and potentially invading everyone's body, rather than more sporadic and geographically isolated excesses. Various organisations and governments began to refer to the global character of these risks, to suggest that they were threatening the entire 'spaceship earth' which now could be visualised (see Cosgrove 1994). It was argued that such risks were interconnected elements of a general global crisis rather than having separate causes and geographically specific consequences.

Second, in his analysis of the global and the local Ingold seems to

presume that there is something about the concept of the local that is non-metaphorical. He presumes that the local really exists and is characterised by geographical propinquity, a set of overlapping work and residential patterns, clear boundaries that mark off each local and a profound sense of embedded dwellingness (1993a). But what Ingold does here is to set up a reformulated *gemeinschaft*, only this time it is to be contrasted with a kind of global *gesellschaft*. The deployment of the term local is in part metaphorical – its use invokes the notion of clearly bounded communities within which intense social relationships are characterised by belongingness and warmth. Such local relationships are taken by Ingold to be embedded and involving all the senses, by contrast with the visually-dependent conception of the separate 'globe'. This 'globe' is taken to be waiting out there to be acted upon and in which, as Cosgrove argues about the Apollo photograph, 'it is hard to keep faith with the local because [of] the photograph's erasure of human signs' (1994: 290; Ingold 1993a: 41).

Conclusion

I have thus shown just how widespread metaphorical thinking is within the social sciences. Further metaphors to be encountered in subsequent chapters include global village, glacial time, relays of power, diasporas, strangers, mapping, exploration, gardening, gamekeeping and so on. A key point about many of these metaphors in sociology is that they are spatial. They confer upon social phenomena, through analogy or metonymy, the presumed characteristics of various spatial entities (the globe) or of mobilities through space (see Gibson-Graham 1997, on the consequences for 'geography' of the recent popularity of spatial metaphors).

I have particularly considered metaphors of movement and suggested that notions of network and fluids can illuminate the 'global'. One further issue that this raises concerns what we might call the nature of social edges, of how to think through what happens when social processes meet, and with how they are traversed. To use the terminology of 'society' criticised in the last chapter, how should we conceptualise through metaphor where it is that one society stops, how do we know that it has stopped, what is over the edge, what is the nature of non-society and what is society's 'other'?

In the next chapter I consider the diverse kinds of travel alluded to in this chapter, of corporeal travel, the mobility of objects, virtual travel and imaginative travel, mobilities that pass over the edges of society, through and into the 'other'.