Risk and sociocultural theory:

new directions and perspectives

Edited by

Deborah Lupton

Contents

1   Postmodern reflections on 'risk', 'hazards' and life choices

Nick J. Fox

Introduction: risk, hazards and modernity

Before the era of modernity, *risk* was a neutral term, concerned merely with probabilities, with losses and gains. A gamble or an endeavour that was associated with high risk meant simply that there was great potential for significant loss or significant reward. However, in the modern period, *risk* has been co-opted as a term reserved for a negative or undesirable outcome, and as such, is synonymous with the terms *danger* or *hazard*. Thus the British Medical Association's (1987: 13) guide *Living with Risk* describes a hazard as 'a set of circumstances which may cause harmful consequences', while risk is 'the likelihood of its doing so'. Furthermore, this hazard/risk differentiation introduces a moral dimension, such that the perpetrators of risk may be held to account in some way or other (Douglas, 1992: 22–5). This chapter explores this dichotomy, and develops a postmodern position that challenges more traditional readings.

The science of risk calculation, assessment and evaluation is emblematic of modernism and its commitments to progress through rationalization: from the actuarial tables of life insurers to the risk analysis of those in the business of risk: the movers and shakers of capitalism (Hassler, 1993). In what might almost be a handbook for such entrepreneurial activity, Johnstone-Bryden (1995: 1), in a monograph sub-titled *How to Work Successfully with Risk*, offers a blueprint for 'how risks can be identified and reduced economically and effectively, before serious damage occurs'. Hertz and Thomas (1983: 1) describe risk analysis as methods which seek a 'comprehensive understanding and awareness' of the risks associated with a given setting.

Risk assessment, we are led to believe by such authors, is a technical procedure which, like all aspects of modern life, is to be undertaken through rational calculation of ends and means (Fox, 1991). Figure 1, based on an illustration of the process of risk assessment in a British government publication, suggests the 'simple, logical sequence of steps'

(Department of the Environment, 1995: 5) to be taken to identify and manage risk. This process of risk assessment has been widely applied to many areas of technology over the past half century (Carter, 1995: 135.) Within such a scenario, all risks may be evaluated and suitably managed, such that all may be predicted and countered, so risks, accidents and insecurities are minimized or prevented altogether (Johnstone-Bryden, 1995: 3; Prior, 1995).

Such accounts fail to problematize risk and its assessment. In response a range of social science analyses have been developed to offer a more critical approach, which address the socially constructed and historically specific character of such conceptualization of risk and its assessment. At the simplest level, we may conclude that 'risk is in the eye of the beholder':

Insurance experts (involuntarily) contradict safety engineers. While the latter diagnose zero risk, the former decide: uninsurable. Experts are undercut or deposed by opposing experts. Politicians encounter the resistance of citizens' groups, and industrial management encounters morally and politically motivated consumer boycotts. (Beck, 1994: 11)

In Beck's typification of contemporary western civilization as a 'risk society' (Beck, 1992, 1994), the proliferation of risks as a consequence of technological innovation has got out of control. The success of modernist instrumental rationality has led to an apparent solution through technology to every problem, ill or need. But alongside the development of technology, and – for those who may earn a living through such innovation – the accumulation of wealth, Beck suggests there is a concomitant accumulation of risks in undesirable abundance as a consequence of working with or consuming technology (1992: 22, 26). But, Beck goes on, risks 'only exist in terms of the (scientific or anti-scientific) *knowledge* about them. They can be changed, magnified, dramatized or minimized within knowledge, and to that extent they are particularly *open to social definition and construction*' (23, original emphases).

Furthermore, some people are more affected by the distribution and growth of risks, and there are winners and losers in risk definitions. Power and access to and control of knowledge thus become paramount in a risk society. This is the issue of *reflexivity* to which Beck alludes: society becomes a problem for itself (Beck, 1994: 8).

In risk issues, no one is an expert, or everyone is an expert, because all the experts presume what they are supposed to make possible and produce: cultural acceptance. The Germans see the world perishing along with their forests. The Britons are shocked by their toxic breakfast eggs: this is where and how their ecological conversion starts. (Beck, 1994: 9)

Description of intention

Hazard identification

Identification of consequences

Estimation of magnitude of   Estimation of probability
consequences   of consequences

Risk estimation   Risk evaluation ———— Risk perception

Risk assessment
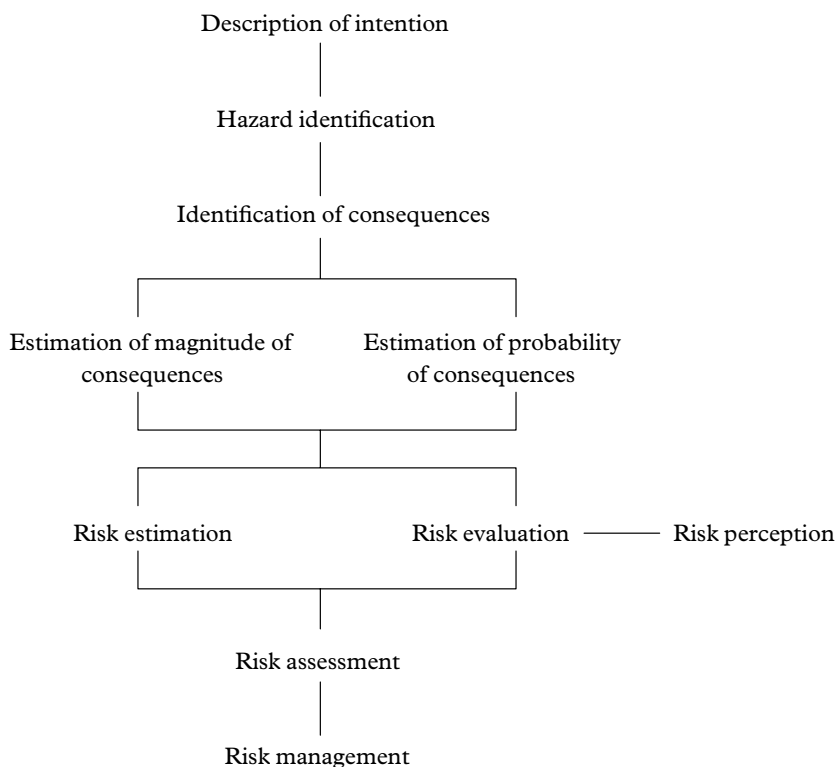
Risk management

Figure 1: From intention to risk management

This, for Beck (12), is both a crisis for society in the late modern period, an opportunity for social critique, and ultimately for a new emancipation coming in the wake of the failure of socialism to provide a resolution to the inequities of capitalism. Reflexivity challenges the old status barriers of class and control of wealth, creating new possibilities for coalition and organization.

In contrast to this kind of approach, and at the 'cultural' end of the spectrum of social theories of risk, the work of anthropologist Mary Douglas has been influential. In the same way she had explored the apparently irrational behaviour of both 'primitive' and 'civilized' peoples (Douglas, 1966) concerning fears over pollution, she identified

the baffling behaviour of the public, in refusing to buy floodplain or earthquake insurance, in crossing dangerous roads, driving non-road-worthy vehicles, buying accident-provoking gadgets for the home, and not listening to the education on risks, all that continues as before. (Douglas, 1992: 11)

Douglas suggested that the reason such behaviour seems baffling is the failure to take culture into account. Using the typology of cultures developed by herself and Aaron Wildavsky (Douglas, 1996) based on the two dimensions of *grid* and *group* (reflecting degrees of social stratification and social solidarity respectively), she sought to illustrate how the risks one focused upon as an individual had less to do with individual psychology (the discipline informing rational-choice theory and the health-belief model) and more about the social forms in which those individuals construct their understanding of the world and themselves (Douglas, 1992:12). Further,

if the cultural processes by which certain societies select certain kinds of dangers for attention are based on institutional procedures for allocating responsibility, for self-justification, or for calling others to account, it follows that public moral judgements will advertise certain risks powerfully, while the well-advertised risk will turn out to be connected with legitimating moral principles. (Rayner, 1992: 92)

Three of the four possible combinations of high and low grid and group are identified by Douglas in her most recent work (and developed and explored in Rayner, 1992) as cultural backcloths to risk decisions and perceptions (the fourth – high grid/low group – comprises isolated, alienated individuals). Douglas suggests that the remaining three combinations can be seen in aspects of (late) modern culture. The low-grid/low-group culture is typical of the competitive environment of the entrepreneurial capitalist free-market, in which individuals are untrammelled by restrictive practices or rules. Also found in capitalist institutions are the high-grid/high-group cultures where Weber's 'iron cage' of bureaucracy has regulated and incorporated systems and structures for interaction. The third kind of culture, low-grid/high-group are collectivist, egalitarian groups, which Douglas and others have suggested are found in voluntary groups including the anti-nuclear movement and political and religious cults (Douglas, 1992: 77, Rayner, 1992: 89).

What is considered as a risk, and how serious that risk is thought to be, will be perceived differently depending upon the organization or grouping to which a person belongs or with which he identifies, as will the disasters, accidents or other negative occurrences which occur in a culture (Douglas, 1992: 78). The free-market environment (low grid and low group) will see competitors as the main risk, to be countered by good teamwork and leadership. In the bureaucratic culture (high grid and high group), the external environment is perceived as generally punitive, and group commitment is the main way to reduce risk. Finally, in the voluntary culture (low grid with high group), the risks come from external conspiracies, and group members may be suspected of treachery.

This typology has been developed and related to empirical examples. Thus, for example, Douglas (1992: 102–21) explores the impact of these cultural dimensions of stratification and solidarity upon individual health responses to HIV contagion. The emphasis in this culturalist model of risk perception upon the *social* construction of risk is highly relevant for the explorations that follow.

Three models of the risk/hazard opposition

At the beginning of this chapter, I remarked upon the etymological constructions of *risk* and *hazard* in modernist discourse. Having explored the different positions of realist and culturalist analysts (as exemplified by Beck and Douglas), I now want to look at this in somewhat greater depth to consider the differing perspectives that are possible concerning the ontological relation of a *risk* to a *hazard*. While there is potential overlap between perspectives, for heuristic purposes I shall consider three possibilities, the last of which being what I shall call the *postmodern* position, with its emphasis on the textual fabrication of reality. I shall use two realms as exemplars of the differing positions: discussions of risks associated with the workplace and with illegal drug use.

Position one: A risk maps directly on to an underlying hazard

The first position may be called realist or materialist, given the underlying ontology of a hazard as real and material. This is the approach identified at the beginning of the chapter as the mapping of a *risk* (that is, the likelihood of an unpleasant occurrence) on to a *hazard* (the circumstances that could lead to the occurrence). Thus the risks for health workers of contracting hepatitis or other blood-related diseases are directly related (amongst other things) to the hazard of working with sharps (hypodermic needles, etc.). The risk of side-effects from using illegal drugs derives from the pharmacological properties of these drugs. Given the existence of sharps in the work environment of a hospital nurse or doctor, or the pharmacological properties of drugs, there are associated probabilities of negative outcomes from working in such environments or using illegal drugs.

This is the position that is generally adopted in risk management and assessment literature, where the objective is risk reduction (for example Wells, 1996: 6; van Leeuwen, 1995: 3). Wells (1996: 1) describes a hazard as something which 'has the potential to cause harm'. Given the presence of the hazard, then, strategies are to be adopted to minimize

the likelihood (the risk) that the hazard will be manifested in an unpleasant outcome. The emphasis may be on individual education, individual or population prevention measures or corporate strategy. As such, the position is not inherently political, and may be co-opted to serve any or all of the different interests which may engage discursively with the perceived hazard, although often emphasizing an individualized approach to risk analysis. Thus, Johnstone-Bryden suggests that

People represent the real risk. Human greed, malice and error are the primary threats. It could be argued that almost every risk, perhaps even every risk, relates back to human error, or deliberate human actions. (Johnstone-Bryden, 1995: 57)

While the realist or materialist position may acknowledge that the level of risk offered by a hazard is based on subjective judgement (Anand, 1993), the one-to-one mapping of risk on to hazard means that, while

at no time will all of us agree on a single level of acceptable risk[,] . . . if people can agree upon the way risks are measured, and on the relevance of the levels of risk thus represented to the choices we must all make, then the scope for disagreement and dissent is thereby limited. (British Medical Association, 1987: vii)

Despite the different value perspectives of analysts (for example, from management, trade unions or pressure groups), the realist position establishes the potential for a formal process of scientific analysis of risks. I would suggest that such a claimed consensus over *how* to assess risk also creates the basis for moral judgements concerning implementation of risk-reduction procedures, and implicitly, a culture of blame (although, as Douglas' typology implies, who is blamed may depend on who is the analyst.)

Position two: Hazards are natural, risks are cultural

In the second position, which might be called culturalist or constructionist, risks are opposed to hazards in the sense that while the latter are 'natural' and neutral, risks are the value-laden judgements of human beings concerning these natural events or possibilities. Within social science, this approach to risk has become more prominent. To focus again on Mary Douglas, despite her culturalist analysis which seeks to demonstrate that risks are perceived in a social context, she is keen to note that

the dangers are only too horribly real . . . this argument is not about the reality of the dangers, but about how they are politicized . . . Starvation, blight and famine are perennial threats. It is a bad joke to take this analysis as hinting that the dangers are imaginary. (Douglas, 1992: 29)

This position has been the basis for a corpus of sociological analyses of risk perception. Two main themes emerge, first concerning the differing types of 'knowledge' which inform perceptions of risk, and second, the moral dimension to risk and risk taking.

Concerning the constructed nature of 'knowledge', Thorogood (1995) surveyed patients' reflections on an imagined scenario of attending an HIV-positive dentist. She found patients keen to rely upon the professionalism of the dentist, not only to tell them if the (dentist) was positive for the disease, but also because it was the dentist who possessed the professional knowledge of the risks involved. In return, they judged themselves responsible for reporting to their dentist if they (the patients) were HIV-positive.

Thorogood's study also illustrates the moral character of such judgements. Her respondents made such remarks as '. . . he wears gloves, uses a mask and a sterilizing unit, all you would expect from a good dentist' or '. . . he is a particularly nice dentist, everything is covered up': the moral qualities of the dentist are indicative of her/his hazardousness. Rogers and Salvage (1988: 106) report the other side of the coin, when they describe the stigmatizing by her manager of a nurse who had received a needlestick injury, and was required to use a marked cup, saucer and plate, even prior to a test result for HIV. Failure to abide by societal norms or rules may lead to victim-blaming. As Carter argues

those groups facing danger which can be defined as 'other' often face controls which work in the interests of the powerful 'same'. Thus a range of social practices exist, connected with risk assessment, which historically have often targeted specific groups . . . the effect is to push the group into a space of danger – the place of the 'other'. Here they become a useful repository for our cultural ideas of danger. As long as we are 'good' . . . then danger is elsewhere. (Carter, 1995: 142–3)

Once again, such analyses can incline towards an individualization of risk assessment, and victim-blaming is particularly rife concerning aspects of life deemed societally deviant: for example, in the arenas of sexual behaviour and drug use. This moral dimension to risk assessment affects the allocation of resources within society to reduce the risks of various hazards. Risk reduction has costs attached to it, for society, for government, for industry or for individuals, and judgements must be made about the relative balance between costs and benefits (CCTA, 1994: 16). From the culturalist perspective what is required is a sociologically informed risk assessment, which can overcome the 'naiveté' of the technical scientific evaluation, and take into account the 'real world' of hazards, and how they impinge on the daily working lives of employees. Unfortunately, such a conclusion depends upon discovering

an Archimedean spot outside of culture upon which to stand, and such spots are notoriously hard to find!

Position three: Risk perceptions fabricate hazards

In addition to these two readings of the risk/hazard relationship, a third position is possible: the one which I shall call postmodern,[1] and which I wish to explore in this chapter. It moves beyond the culturalist or constructionist model, to argue radically that hazards are *themselves* socially constructed: created from the contingent judgements about the adverse or undesirable outcomes of choices made by human beings. These 'hazards' are then invoked discursively to support estimations of risk, risky behaviour and of the people who take the risks.

The first step in grasping what at first sight may appear counterfactual, comes in recognizing that, as Wells (1996: 6) puts it, the 'materialization of a hazard' is the result of identifying 'undesired or adverse events'. My lesson with advanced driving instructor Alan Oates illustrated that. For Alan, everything on the road was a *hazard*. What I thought was just a milk truck or a pedestrian crossing, turned out to be a hazard. That was the way he thought, and the result was safe – some would say, boring – driving. 'You're a top gear man, you always want to get into top gear even when approaching hazards,' said Alan. 'Safety must be the paramount consideration, even if you have to sacrifice a little time' (Fox, 1984).

To explore this further, let me consider the issue of health workers and infected sharps in some detail. Let us accept that discarded needles and other sharps that may have been infected by blood products exist as real objects. In and of themselves, these objects do not constitute a *hazard*. They become *hazardous* under certain circumstances, principally if conditions arise such that they may come into contact with and pierce the skin of a person in their vicinity. And we know this event is hazardous, not through some 'natural' quality of this event, but because we appraise it as undesired or adverse, based on bodies of knowledge about blood and the risks of infection associated with various blood-borne diseases such as hepatitis B and HIV. This cycle is illustrated in figure 2.

The transformation of an 'inert' object into one possessing *hazardous characteristics* (Wells, 1996) thus occurs only as a result of our evaluations of *risk*, that is, the likelihood of an adverse result from an incident. Such evaluation may be based on anecdote or personal experience of danger or security. More formally, it may be based on a particular 'discourse' (an authoritative body of knowledge): that of risk assessment. Thus it is
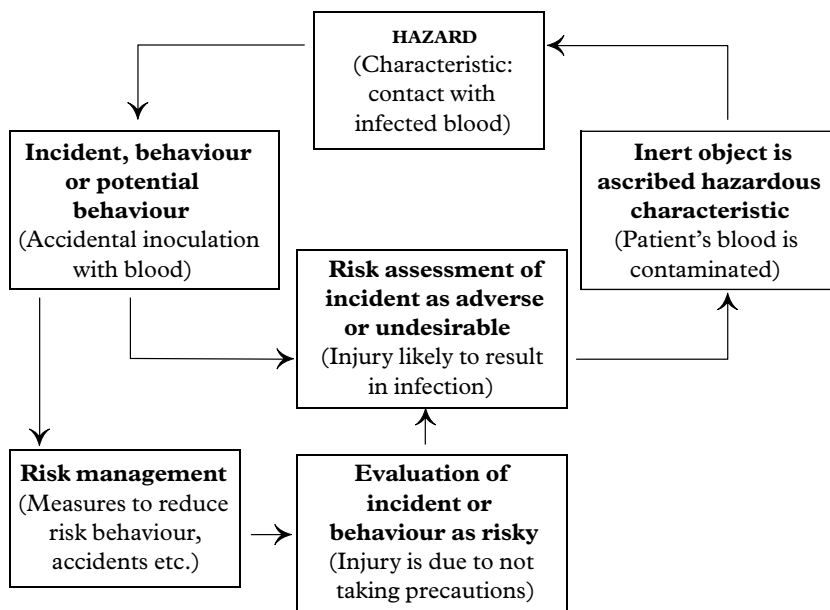
Figure 2: Risk assessment and the construction of hazards: contamination with infected blood

only in the analysis of *risks* that the *hazard* comes into existence: if the risk is assessed as zero or close to zero, the inert object would remain just that (regardless of whether it 'really' does possess hazardous characteristics).

This model of hazard creation is at odds with received wisdom concerning the hazard/risk relationship. In figure 1, hazards are prior to risks. What is argued now is that the selection of various 'inert' objects, procedures or humans as 'hazards' must itself depend upon some prior judgement, otherwise risk assessors would be faced with an insurmountable task of sifting through every element of an environment or context. Indeed, the impossibility of assessing every risk prospectively is reflected in the realities of risk analysis, which is sometimes faced with the consequences of a previously unidentified risk (Suter, 1993: 313). Without some system of prioritization, analysis of risk would be absurdly long-winded, as analysts would forever be suggesting the most far-fetched, though potentially fatal, events to be avoided by safety precautions. Inevitably, risk assessment must begin with some prior knowledge about the world, what is 'probable' and what 'unlikely', what is 'serious', what is 'trivial' or seemingly 'absurd'. Such judgements may derive from

'scientific' sources, or may depend on 'common-sense' or experiential resources; either way, the perception of a hazard's existence will depend on these judgements. How the judgement is made (that is, what is counted as evidence to support the assessment), is relative and culturally contingent.

This process of the construction of hazards can be seen in another study of health workers and contamination by blood, in which Grinyer (1995) explored 'expert' and 'lay' views on the prevention of accidental contact with blood products. While the hospital authorities issued guidelines to staff, needlestick accidents had occurred, and staff were doubtful about how feasible it would be to avoid these incidents based on the guidelines. Grinyer found when she reported some accidents involving sharps and blood products, management denied her data's validity (40). She concluded that such unwillingness to recognize lay knowledge about hazards undermined risk reduction policies.

Not only are risk perceptions multi-dimensional, but, at any given time, people are managing a number of different agendas which may conflict with the official ones and can be contradictory. Official information is only one of a number of different routes through which a hazard is understood. Powerful social forces shape the way in which information is perceived and acted upon . . . which may be underestimated by those responsible for risk assessment. (Grinyer, 1995: 49)

Following Wynne (1992), Grinyer argues that 'expertise' is often held by the lay actors, while expert knowledge is usually based only upon 'scientific evidence', and the latter is often privileged when it comes to what counts as a hazard. In another study of risk assessment (of pesticide manufacture), Wynne suggested that

scientific risk analysis did not avoid, and could not have avoided, making social assumptions in order to create the necessary scientific knowledge. It was *conditional* knowledge in that its validity depended, *inter alia* upon the conditions in this embedded social model being fulfilled in actual practice . . . Each party, both scientists and workers, tacitly defined different actual risk systems. They built upon different models of the social practices controlling the contaminants and exposures. (Wynne, 1992: 285–6, original emphases)

Wynne's argument is that technical or scientific discourses tend to make claims to objectivity while they tell the public how 'stupid and irrational they are' (286). This is not arrogance, but a failure by the 'experts' to recognize the contingency of their own position. Both sociologists and risk analysts have recognized that the credibility of evidence concerning whether an object is hazardous and the perceived 'relevance' of such evidence are weighed differently depending on perspective (Callon, 1986; Suter, 1993: 22, 40). This explains the failure of different groups to agree on risks: not because they interpret the data in different ways

(the culturalist position set out earlier), but because they have different data: their differing knowledgeabilities prevent them from agreeing what is to count as evidence of a hazard. It is not just outlooks on *risks* that are dependent on social milieu, but also world views on *hazards* themselves. *Both risks and hazards are cultural products*.[2]

Unlike the previous analyses, in which hazards are assumed to be the 'natural' underpinning of cultural attributions of risk, in this postmodern position the 'risky' quality of the environment is constructed from prospective assessment of the circumstances under which objects become hazardous (see figure 2). Such predictions both establish 'hazards' and may create a subjectivity in people of being 'at risk' (and evaluations of which behavioural choices are 'safe' and which are 'risky'). In the rest of this chapter, I shall use this postmodern understanding of risk and hazard to explore issues of choice, first in relation to health at work and second to the use of the drug Ecstasy. Before that, I shall look in some detail at the issue of 'health' itself, which necessarily underpins any perspective on behaviour in relation to risks to health.

A postmodern perspective on 'health'

Were health an absolute, then the creation of a subjectivity which would tend to encourage 'healthy' living (i.e. behaviour minimizing health risks) could be accepted as non-problematic. However, health is now rarely defined simply as an absence of illness. For the World Health Organization (WHO, 1985), health is a state of 'complete physical, mental and social well-being', while Wright (1982) suggests an anthropological phenomenology of 'what it is to function as a human'. Canguilhem (1989) sees health and illness as positive and negative biological values, and Kelly and Charlton call health a 'neutral idea relating to non-pathological physical functioning and the fulfilment of ordinary social roles' (1995: 83). Illness is a 'notion of increasing dependency' for de Swaan (1990: 220), and Sedgewick identified illnesses as socially constructed definitions of natural circumstances which precipitate death or a failure to function within certain norms (1982: 30).

We saw earlier the moral dimension to attributions of 'risk', which are generally seen as the negative pole of an opposition to a desired state of 'safety'. Such moral positions are political, in that they ascribe rights and responsibilities to those subjected to them, and require actions in line with these rights or responsibilities. The human subject of risk analysis is drawn into a *subjectivity* as 'risky' and perhaps culpable. Similarly, all these definitions of health (be they medical or sociological)

have a politics associated with them, all try to persuade us to a particular perspective on the person who is healthy or ill.

Modernism, it has been argued, is a project of *mastery* which begins with a process of definition and then – through reason and via the application of technology – controls and changes a phenomenon (typically, in this case, from 'ill' to 'healthy'). The modernist *responsibility to act* replaces any concern with the justice of the action in and of itself (Bauman, 1989). This responsibility, White suggests, always requires one, at some point, to fix or close down parameters of thought or ignore or homogenize at least some dimensions of specificity or difference among actors (1991: 21).

White goes on to argue for a postmodern politics which substitutes the responsibility to act with a *responsibility to otherness*. By this he means an engagement with others which encourages differentiation rather than prescribing a particular value against which the other should be evaluated. In relation to issues of 'health' and 'illness', a responsibility to otherness suggests a radically different kind of response to others from that entailed by a biomedical or even biopsychosocial notion of health. Differentiation and transformation are involved, so rather than a static notion of human 'being', this kind of engagement is concerned with potential: with 'human becoming'. I have coined the term *arche-health* (Fox, 1993) and elaborated on its features (Fox, 1995, 1998) to denote this sense of health as concerned with 'becoming other' or transformation.

Arche-health is a process, not a state, which – in its commitment to 'becoming other' or transformation – resists attempts to impose a unifying identity (e.g. patient, man, foreigner, wife) on a thing or a person. It is most explicitly *not* intended to suggest a natural, essential or in any way prior kind of health, upon which the other healths are superimposed. It is not supposed to be a rival concept of health. Indeed the reason for using this rather strange term is in homage to Derrida's (1976: 56) notion of *arche-writing*, which is not writing but rather the system of difference between concepts which makes language possible.[3] Similarly, *arche-health* refers to the differences and the diversities which enable us linguistically to generate the ideas of 'health' and 'illness', terms which *can* reflect the dynamic, fluctuating character of the organism but which all too often are recruited as static conceptions which codify and evaluate that organism.

As a process of differentiation and transformation, *arche-health* (which is at the same time *arche-illness*) dissolves the opposition health/illness, offering in its place a flux and a multiplication of meaning. *Arche-health* can be seen in the active choice-making behaviour of people as they

engage with their bodies, their bodies' functions and the efforts of doctors to normalize those functions. For carers, it is the process of reaching out to others, of opening up possibilities and choices which a disease or disability closes down (Fox, 1995).

In sociological analysis, the notion of choice is unfashionable, perhaps even regarded as politically incorrect and reactionary. Both Marxist and Weberian traditions emphasized the constraints on action to be experienced by agents, while a Foucauldian understanding of the construction of the self has described a human subject seemingly incapable of resistance (Lash, 1991, 1994). Poststructuralist approaches (including those engaging with feminism) have sought to re-introduce discussions of how it is possible to refuse the totalizing effects of discourse (Butler, 1990; Cixous, 1990; Deleuze and Guattari, 1984, 1988), and the notion of *arche-health* as a resistance to stasis, a becoming, articulates with these writings.

Risks – and particularly health risks – are intimately tied up with choices (Hertz and Thomas, 1983: 3). If we acknowledge the constructed nature of 'health', we see how the subjectivity which arises from any definition is based in a partial truth grounded in some claim or other concerning what it is to be a human being, or have a body, or be part of a community, or whatever. This is where choice comes in, although not in an individualistic, rational-actor sense, implying a voluntaristic model of action. Rather, choice may be exerted negatively, in a refusal or resistance, as well as positively in affirmations. Choices may be temperamental or unconscious, or collective, as opposed to rational or individual. But such choosings are processual, and are associated with *arche-health* in that they are a becoming rather than a state of being. I will illustrate this argument concerning risk and choice with two examples.

Health risks and choices at work

Here is an extract from my study of surgical work (Fox, 1992), and the hazards of blood-transmitted infection. A consultant surgeon, Mr T, and I talked during a procedure which, he had indicated, involved risks from the patient's blood.

MR T: Never a month goes by that we don't nick ourselves with a scalpel or other instrument, and I suppose we should be concerned about the risk, but we don't generally do anything.

RESEARCHER: I suppose the gloves offer some protection?

MR T: Yes, once a week I tear a glove, so they may help.

RESEARCHER: Do you take precautions when you have a patient who might be a risk?

MR T: Well, it's only if there is inoculation of blood that it's a problem.
RESEARCHER: What about blood spray into the eyes?
MR T: That can be a danger, I suppose. I often wear lenses (binocular magnifiers) so they have a double use. (Fox, 1992: 29)

Mr T, as with other surgeons studied, seemed quite casual about hazards present in his work environment. He could take various actions to reduce these if he wished but all had costs associated with them (not do the operations, invoke complicated precautions which would inhibit his freedom to operate as he wished). Ultimately he made choices to continue to do a job that he wanted to do, trying to take extra care where he perceived a higher risk. Work for Mr T was not simply something into which he was coerced, it was the result of a series of choices which he and his associates made on a daily basis.

Conversations with an operating department manager added support to this understanding. While nursing students and nursing auxiliaries needed counselling concerning health risks, this informant told me, 'higher-grade' staff were able to cope with risks because of their 'professionalism'. Thus the choices made by grades of nursing staff were based on their different perspectives on their work and responsibilities to others. Similarly, Mr T was *active* in his living out of a set of activities which are called 'work' and which impinged upon certain facets of the continuity of that life called 'health'. He made positive and negative choices concerning how he acted and how he saw himself in relation to his work setting and his associates and patients. His evaluations of hazards were based in these complex choices and perceptions, weighings of costs and benefits, and were part of his continual becoming-other: the *arche-health* of his unfolding life.

For Mr T to be able to define his 'health' in this much broader sense of being free to choose how he lives and works, he re-defined the hazards which his choices might lead him to encounter. His choice to work with patients others might see as 'high-risk' resists the kind of cycle of hazard construction set out in figure 2: he does not wish to accept the judgement that his behaviour is risky, as this would limit his actions. But if he assesses the risks involved as low (perhaps drawing on evaluations of his skill and the use of protection as evidence), the infectious body's hazardous characteristics are minimized, the hazard evaporates and it becomes more-or-less an inert object again (see figure 3).

Risks, choices and the use of Ecstasy

The recreational drug MDMA, commonly known as Ecstasy, E or X, and used world wide by millions of people as a mood enhancer, has
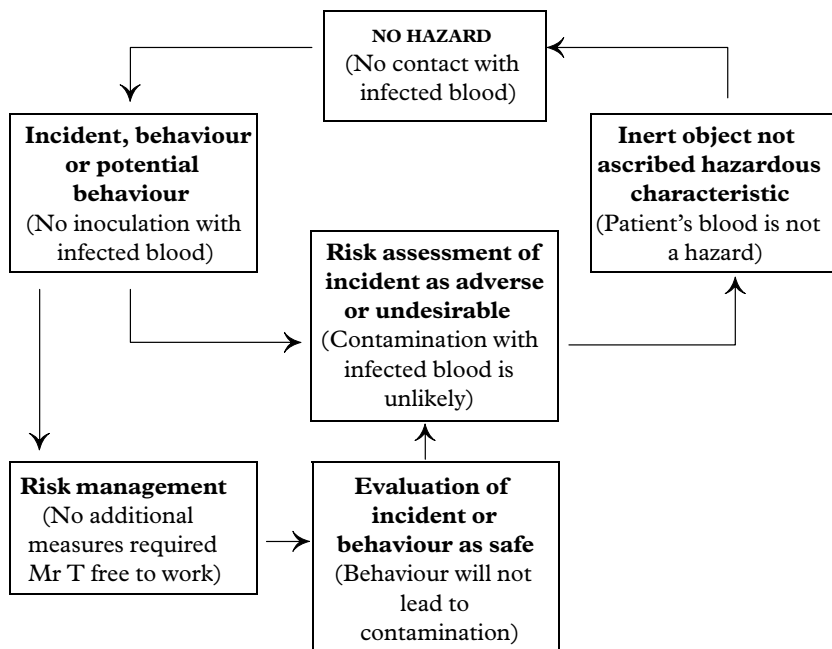
```
                    ┌─────────────────────┐
                    │     NO HAZARD       │
                    │ (No contact with    │
                    │  infected blood)    │
                    └─────────────────────┘
```

Figure 3: Mr T's re-assessment of the risks and hazards of contamination with infected blood

The diagram shows the following boxes connected by arrows:

- **NO HAZARD** (No contact with infected blood)
- **Incident, behaviour or potential behaviour** (No inoculation with infected blood)
- **Risk assessment of incident as adverse or undesirable** (Contamination with infected blood is unlikely)
- **Inert object not ascribed hazardous characteristic** (Patient's blood is not a hazard)
- **Risk management** (No additional measures required Mr T free to work)
- **Evaluation of incident or behaviour as safe** (Behaviour will not lead to contamination)

been associated with a number of fatalities and a range of other less serious health consequences. Its relative newness as a street drug also means that long-term consequences of its use are unknown: it has been linked to chronic changes in neurotransmitter activity and certain other morbidities (Green and Goodwin, 1996). While the death rate from acute effects cannot be easily calculated due to lack of figures about usage, most users will be aware of well-reported cases of deaths following use of Ecstasy. Supporters of the drug counter such stories, arguing that risks are small, and usually associated with the context of ingestion rather than the drug itself. Thus the independent researcher Saunders suggests:

to say that a person died from Ecstasy is never the full story any more than saying that someone died of drink: like alcohol, Ecstasy can be used without any harmful effect. In both cases, death is due to the indirect effects which can be avoided if you are aware of the dangers and look after yourself. The difference is that the dangers of being drunk are well known and recognised, while the dangers resulting from Ecstasy use are far less known. Far from saving young people from harm, much of the so-called drugs education has confused users by

trying to scare them, rather than explain the dangers and how to avoid them. (Saunders, 1995)

I am not concerned to debate the 'safety' of Ecstasy, nor with how statistics are used to argue for or against its use. Rather, I am interested to see how users evaluate this evidence, and what affects the choices of hundreds of thousands of people to use Ecstasy on a regular basis. The reason for choosing this example derives from the unequivocal evidence that pure MDMA (that is, Ecstasy which has not been cut with other drugs or toxic substances) produces a highly pleasurable experience. For instance, one respondent on a web site devoted to the study of Ecstasy[4] commented:

The Ecstasy was *unbelievable* and the music was even better. The people there were lovely, the vibe was alive and growing! I spent the night in heaven, meeting people, hugging and dancing my brains out . . . I was moved into such a deep state of trance, the music, the lights, the vibe from the beautiful girl dancing across from me . . . it was perfect!

Ecstasy offers the possibility of a release from the alienation of everyday life.

We were liberated from the chains that bound us for that night. It was an experience of absolute freedom. We danced, talked, laughed and revelled with the world. When we arrived home at night, we gathered in the family room and spoke to the camcorder. The next day when we watched the video we could not believe how different we seemed – so relaxed, happy and natural. Why couldn't life always be like this?

The following responses indicate the kinds of judgements used by those taking the drug for the first time:

I am a 30 year old first time trier, having resisted the influence to do so for all my 20s on the basis that I was too old and it would be unnecessary/dangerous to do so. What bollocks. I stayed up all night with no fatigue and great enjoyment both emotionally, socially, physically and a little spiritually.

I researched this drug before I did it to find out as much as I could about its possible side effects, dangers, other people's experiences, good or bad, everything that I thought might help me in my decision, and made a decision to do it. I believe that knowing what I was doing and going into it with a positive outlook and in an environment that I was comfortable in helped this to be the transforming experience that it was for me.

The night that we took the E, I was feeling very stressed out and in a bad mood. I had told my older brother and wife what I was planning to do, and they had some very harsh criticisms to offer as they felt that it was dangerous. I personally did not know much about E, but I trusted my boyfriend S who had done a lot of research on the topic and was careful about what he put into our bodies.

These comments could be read as lay risk assessments, and in a sense, that is what they are. Gillian Taberner's research (personal

communication) supports the premise that what is happening here is an active choice-making concerning the possibilities facing these users: each is weighing the desirable outcomes of taking the drug against negative consequences. Her informant Andrew said:

People are becoming more open-minded about it because a lot of people are taking it. Virtually everybody knows someone who takes Ecstasy or has taken it and they're still alive, still having a good time.

Such choices are processual, continually re-thought. Another respondent, Zoe, wondered:

Do you think when you get older you get, like I think I'll get more concerned about my body as well. It feels like when you're young it's OK because you've got control over most things but when you're older you think . . .

When the risks outweigh the attractions, Ecstasy becomes a *hazard*, while for those respondents who decide to take the drug, its possible hazardousness is side-lined, and the drug is seen as an opportunity to experience a desired state.

In the previous section I discussed the surgeon's *arche-health*: the becoming-other which resulted from his active choice making. Similarly, we can see the choices made by these users of Ecstasy as a manifestation of their *arche-health*. Ecstasy is an integral part of the lives of many young people (Power, Power and Gibson, 1996: 78) and to take it is to experience a highly desired set of consequences. The choices of people to use E reflect a desire to incorporate the experiences available through using the drug, or to affirm particular facets of users' self-identity (Beck and Rosenbaum, 1994). To perceive Ecstasy as a hazard is not part of the world view of those positively inclined toward its psychological effects: instead it is a means to a highly rated objective. The bias of pro-Ecstasy commentators in assessing the evidence of risk reflects this differing world view: one in which the spiritual and psychological highs of Ecstasy use far outstrip the risks identified by medical researchers (Rushkoff, 1994; Jordan, 1995). Buchanan's research on teenagers' perceptions of drugs supports this. Notions of harm or illegality are relatively insignificant for many users: 'whether or not drug use is harmful, and/or whether it is against the law, the more important and overriding concern for those at high risk appears to be the issue of individual choice' (Buchanan, 1991: 330–1).

Those who would control the use of Ecstasy must therefore recognize the impact that it has upon the subjectivity of users, and how far the psychological, emotional and spiritual attractiveness of a drug counters perceived risks (Amos *et al.*, 1997). This point is important, because while the decision by a surgeon to operate despite objective assessments

of risk from infection may be seen as altruistic and laudable, the decisions of people to use substances which have risks associated with them is more likely to be judged as foolhardy and culpable. In both cases, this analysis suggests a perspective which emphasizes choice, but in the case of Ecstasy use, this kind of analysis is less likely to be favoured. My point, however, is the same for both situations: that people's behaviour must be seen not as based upon differential judgements of risk, but within the context of world views which may deviate very greatly from that of the 'expert' risk assessor.

Discussion: risks and opportunities

I have used two disparate examples in this chapter to unpack the constructed nature of hazards. They were chosen to illustrate the active process of becoming which is part of human lives in settings which may seem very different: comparing the relatively constrained arena of work with the relatively unconstrained leisure context of illegal drug use.

The intention has been to suggest a way of thinking about the hazard/ risk dichotomy which is not supplied in either the 'realist' or 'culturalist' perspectives. While building on the insights of the culturalist position (that risks are culturally constructed), it moves beyond what might thus be seen as a culture/nature opposition. In the 'postmodern' position, risks are not absolutes, but neither are the 'hazards' which are supposedly the circumstances which constitute risks. It turns out (in this position) that nature is constructed through the lens of culture. This position bears some resemblance to Woolgar's (1988) argument that even such 'natural entities' as subatomic particles and the continent of America are 'invented' rather than 'discovered' inasmuch as the concepts are produced in a social process and satisfy certain cultural requirements in order to be accepted as real. The position developed from poststructuralism, with its emphasis on *textual* construction of reality, is more sceptical about a direct relationship between cultural contexts and the natural entities which are constructed, acknowledging the intertextual character of such reality construction, which is both complex and always an unfinished project (Curt, 1994: 36).[5] What is hazardous is often likely to be highly contested, and the kinds of situations concerning hazard assessment explored by Wynne (1992) bear this out.

If the very character of the environment in which we live (and this includes our bodies) is constructed in texts, and these texts are contested between different 'authorities', risk analysis is a deeply political activity. The identification of hazards (and the consequent definition of what is a

risk), can easily lead to the valorization of certain kinds of living over others. In a 'risk society', notions of health and work will be – in part – dependent upon what is seen as a risk or a hazard. Social perceptions of health and work will in turn contribute to the on-going construction of 'risk' itself. We implicitly evaluate certain actions or situations in terms of the consequences for others or ourselves and label these actions or situations as more or less threatening to our physical, psychological or moral integrity.

'Risk', like 'health' is a concept which contributes to how we think about modern life. These concepts are tied up with the values of a culture and the moral rights and responsibilities of members of that culture, and as such are implicated in how people understand themselves as reflexive, ethical subjects. Because these conceptions are contingent, the subjectivities which are created around risk, health and work are also relative: if this means that we are constrained by cultural constructions of subjectivity, it also means we can resist. The analysis which has been offered in this chapter offers a perspective on 'risk taking' as the active process of choosing as life unfolds: a *becoming-other* and a resistance to discourse. In a somewhat different context, concerning the rights of old people in care, the group Counsel and Care have argued that because a person is living in a protective environment, that does not diminish the human right to take risks (Counsel and Care, 1993: §2, 1). Of course, such a notion of a human right is essentialist, but it may be argued similarly that the autonomy of the human individual – within or without the workplace – cannot be simply denied because she or he is apparently behaving in a way judged to be risky. The implications of such a position are that it is neither sufficient to point to phenomena and claim they are hazardous (because such claims are always dependent upon the partial evidence deemed relevant by the claimant), nor to assume that by making such claims one is necessarily acting in the interests of those whom one may be trying to assist.

In conclusion, I have been concerned in this chapter to establish a basis upon which people may resist authoritative statements about how humans should behave. This postmodern perspective on risks and hazards is not intended to challenge the critiques of industrial production as often injurious to the bodies, minds and spirits of individuals. However, it does suggest that 'health' should be understood as constituted in the unfolding lives of individuals with their own choice-making agendas for living and dying. The *becoming-other* of body, mind or spirit is processual: differently formulated and in the right circumstances, a *risk* to 'health' can be an *opportunity* for transformation and renewal.

NOTES

1 Poststructuralism (and its more political cousin, postmodernism) are approaches which theorize the social world as created through the interplay of multitudinous 'texts' (that is, symbolic systems which are communicative of meaning, may or may not be authoritative 'bodies of knowledge', and may be actual written texts or any other set of signs – including social practices). The work of construction never ends, is continually subject to challenge and re-interpretation, and is the realm within which power is manifested. The association between power and knowledge has been variously explored by poststructuralists including Derrida, Foucault and Lyotard and has been applied influentially in feminist scholarship. For an evaluation of these positions in relation to sociology and health, see Fox (1993).

2 What I am saying here is not that bad things do not happen as a result of certain incidents. However, I feel it is necessary to emphasize this contingency of what is to be considered hazardous. Suter (1993) points out that human health cannot be taken as the 'gold standard' for environmental risk analysis, as this assumes that human health equates with biological protection more generally. Even if human health is taken as a standard, its applicability is not absolute: for the executioner, the lethal characteristics of electricity or narcotics are not *hazards*, they are the functional characteristics to be exploited. In such circumstances, a lethal outcome is not adverse or undesirable for all concerned: the incident is 'real', its hazardousness depends upon point-of-view.

3 Saussurean linguistics suggests that concepts only have meaning (identity) because they can be contrasted with what they are not. Efforts to establish meaning without recourse to difference are doomed, because one concept always leads to another (a kidney is 'bean' shaped, a bean is 'kidney' shaped), *ad infinitum*. Because identity depends on difference, it can never be an absolute or final, but must exist in dynamic relationship with other elements in a system.

4 These responses may be found at web site address: http://obsolete.org/index.html

5 Intertextuality is a key concept in poststructuralist theory, concerning the 'play of one text on another'. Reading a text is not a passive process but an active one of transformation: in effect, a re-writing. The social world is constructed from the collision of myriads of texts: as they collide they alter each other, and there is never a final absolute reading. This perspective explains both the indeterminacy of the continually re-interpreted social world, and the possibility to resist (to re-write) authority.

REFERENCES

Amos, A., Gray, D., Currie, C. and Elton, R. (1997) Healthy or druggy? Self-image, ideal image and smoking behaviour among young people. *Social Science & Medicine*, 45(6), 847–58.

Anand, P. (1993) *Foundations of Rational Choice under Risk*. Oxford: Clarendon.

Bauman, Z. (1989) *Modernity and the Holocaust*. Cambridge: Polity Press and Basil Blackwell.

Beck, J. and Rosenbaum, M. (1994) *Pursuit of Ecstasy: the MDMA Experience*. Albany, NY: State University of New York Press.

Beck, U. (1992) *Risk Society: Towards a New Modernity*. London: Sage.

(1994) The reinvention of politics: towards a theory of reflexive modernization. In Beck, U., Giddens, A. and Lash S., *Reflexive Modernization: Politics, Tradition and Aesthetics in the Modern Social Order*. Cambridge: Polity.

British Medical Association (1987) *Living with Risk*. Chichester: John Wiley.

Buchanan, D. R. (1991) How teens think about drugs: insights from moral reasoning and social bonding theory. *International Quarterly of Community Health Education*, 11(4), 315–32.

Butler, J. (1990) *Gender Trouble*. London: Routledge.

CCTA (1994) *Management of Project Risk*. Norwich: HMSO

Callon, M. (1986) Some elements of a sociology of translation: the domestication of the scallops and St Brieuac fishermen. In Law, J. (ed.), *Power, Action and Belief* (Sociological Review monograph 32). London: Routledge & Kegan Paul.

Canguilhem G. (1989) *The Normal and the Pathological*. New York: Zone Books.

Carter, S. (1995) Boundaries of danger and uncertainty: an analysis of the technological culture of risk assessment. In Gabe, J. (ed.), *Medicine, Risk and Health*. Oxford: Blackwell Publishers.

Cixous, H. (1990) The laugh of the medusa. In Walder, R. (ed.), *Literature in the Modern World*. Oxford University Press.

Counsel and Care (1993) *The Right to Take Risks*. London: Counsel and Care

Curt, B. C. (1994) *Textuality and Tectonics*. Buckingham: Open University Press.

Deleuze, G. and Guattari, F. (1984) *Anti-Oedipus: Capitalism and Schizophrenia*. London: Athlone.

(1988) *A Thousand Plateaus*. London: Athlone.

Department of the Environment (1995) *A Guide to Risk Assessment and Risk Management for Environmental Protection*. London: HMSO.

Derrida, J. (1976) *Of Grammatology*. Baltimore, MD: Johns Hopkins University Press.

Douglas, M. (1966) *Purity and Danger: an Analysis of Concepts of Pollution and Taboo*. London: Routledge & Kegan Paul.

(1992) *Risk and Blame: Essays in Cultural Theory*. London: Routledge.

(1996) *Natural Symbols*. (New Edition) London: Routledge.

Fox, N. J. (1984) L of a time with the advanced drivers. *In Camera*, 3 (December), 8.

(1991) Postmodernism, rationality and the evaluation of health care. *Sociological Review*, 39(4), 709–44.

(1992) *The Social Meaning of Surgery*. Buckingham: Open University Press

(1993) *Postmodernism, Sociology and Health*. Buckingham: Open University Press.

(1995) Postmodern perspectives on care: the vigil and the gift. *Critical Social Policy*, 15(3/4), 107–25.

(1998) The promise of postmodernism for the sociology of health and

medicine. In Scambler, G. and Higgs, P. (eds.), *Modernity, Health and Medicine*. London: Routledge.

Green, A. R. and Goodwin, G. M. (1996) Ecstasy and neuro-degeneration. *British Medical Journal*, 312, 1493–4.

Grinyer, A. (1995) Risk, the real world and naive sociology. In Gabe, J. (ed.), *Medicine, Risk and Health*. Oxford: Blackwell Publishers.

Hassler, J. (1993) Variations in risk – a cause of fluctuations in demand? Seminar Paper 532. Stockholm: Institute for International Economic Studies.

Hertz, D. B. and Thomas, H. (1983) *Risk Analysis and its Applications*. Chichester: Wiley.

Johnstone-Bryden, I. M. (1995) *Managing Risk*. Aldershot: Avebury.

Jordan, T. (1995) Collective bodies: raving and the politics of Gilles Deleuze and Felix Guattari. *Body & Society*, 1(1), 125–44.

Kelly, M. and Charlton, B. (1995) The modern and the postmodern in health promotion. In Bunton, R., Nettleton, S. and Burrows, R. (eds.), *The Sociology of Health Promotion*. London: Routledge.

Lash, S. (1991) Genealogy and the body: Foucault/Deleuze/Nietzsche. In Featherstone, M., Hepworth, M. and Turner, B. S. (eds.), *The Body*. London: Sage.

Leeuwen, C. J. van (1995) General introduction. In Leeuwen, C. J. van and Hermes, J. L. M. (eds.), *Risk Assessment of Chemicals*. Dordrecht: Kluwer Academic Publishers.

Power, R., Power, T. and Gibson, N. (1996) Attitudes and experiences of drug use amongst a group of London teenagers. *Education, Prevention and Policy*, 3(1), 71–80.

Rayner, S. (1992) Cultural theory and risk analysis. In Krimsky, S. and Golding, D. (eds.), *Social Theories of Risk*. Westport, CT: Praeger.

Rogers, R. and Salvage, J. (1988) *Nurses at Risk. A Guide to Health and Safety at Work*. London: Heinemann.

Rushkoff, D. (1994) *Cyberia*. London: HarperCollins.

Saunders, N. (1995) The Leah Betts Story. Published at WWW address: http://obsolete.org/index.html.

Sedgewick, P. (1982) *Psychopolitics*. London: Pluto.

Suter, G. W. (1993) *Ecological Risk Assessment*. Chelsea, MI: Lewis Publishers.

Swaan, A. de (1990) *The Management of Normality*. London: Routledge.

Thorogood, N. (1995) 'London dentist in HIV scare': HIV and dentistry in popular discourse. In Bunton, R., Nettleton, S. and Burrows, R. (eds.), *The Sociology of Health Promotion*. London: Routledge.

Wells, G. L. (1996) *Hazard Identification and Risk Assessment*. Rugby: Institute of Chemical Engineers.

White, S. (1991) *Political Theory and Postmodernism*. Cambridge University Press.

WHO (1985) *Targets for Health for All*. Geneva: World Health Organization.

Woolgar, S. (1988) *Science: The Very Idea*. Chichester: Ellis Horwood.

Wright, W. (1982) *The Social Logic of Health*. New Brunswick, NJ: Rutgers University Press.

Wynne, B. (1992) Risk and social learning: reification to engagement. In Krimsky, S. and Golding, D. (eds), *Social Theories of Risk*. Westport, CT: Praeger.