



**Belinda Clayton**

## Rethinking Postmodern Maladies

**P**ostmodern views that examine any claim to objective truth with scepticism challenge the scientific foundations of western medicine. Concepts of health and disease have long rested upon humanist assumptions that grant human beings a place of privilege in the book of life. Yet modern medical technology is inadvertently calling into question the notion of an essential human nature, including the nature/culture dichotomy that has supported this assumption. Reflective of biotechnology's challenge to the nature/culture divide is the postmodern 'disorder', where biomedically definable diseases have been replaced by syndromes of unclear aetiology. This article considers the current proliferation of 'disorders' within a perspective that denies traditional Cartesian biomedical models. By considering postmodern maladies in terms of the shifting social paradigm in which they have emerged, mind/body dualism is no longer a satisfactory model of explanation.

### From a Postmodern Perspective

Contrary to the Durkheimian notion of social facts to which individuals are subject, this article suggests individuals and social facts are interwoven. It is fundamental for the purpose of this article to understand illness as meaningful only within the social, historical and/or linguistic context in which it has developed. This challenges the western biomedical modernist perspective by suggesting social life has a *real* effect on biology. This perspective views medical categories as social codifications. In other words, organic disruption does not constitute ill health prior to the social meaning it is given. Indebted to the poststructuralist tradition, postmodernism has embraced this disintegration of humanist traditions. Consequently, postmodern maladies question the foundation upon which the privilege of the rational as opposed to phenomenological explanations of reality are built.

The suggestion that knowledge is relative and any inherent 'meaning' is

reliant on the interdependence of binary systems provides a new framework with which to view disease. Disease is not an isolated entity, unanchored until confronted. It is the construction of a concept that has meaning by virtue of its interrelationship with the subject's social reality. The subject and the disease are constituted by and constituting one another. This article is an exploration of the mind and body united at the site of intersection between self and world; a notion reiterated by Halberstam and Livingston (1995: 19), who suggest 'Posthuman bodies are the causes and effects of postmodern relations of power and pleasure, virtuality, sex and its consequences.'

Postmodern theorists are critical of modernism's philosophical groundwork. Deconstruction of modernist assumptions of truth have allowed a greater intellectual freedom of thought; one inclined to relativity, not absolutes. Postmodernism in its backlash against views held dear to modernism embraces a greater tolerance of difference and/or the insignificant other, going so far as to deny the distinction at all. Disaffected with modernism's belief in rationality and science, and articulated in the philosophies of Nietzsche and later French poststructuralists Saussure, Derrida and Foucault, postmodernism has radicalized pre-existing notions of ultimate truth. By 'deconstructing' modernist systems of knowledge, and reworking the structure of our world in terms of 'intertextuality', new ideas about subjectivity have developed. The concept of 'meaning' has been fundamentally challenged by Derrida's consideration of the ambiguity of language. The inability of language to anchor truth, except in relation to the signified, has far-reaching implications, particularly as this notion undermines the certainty of origins and subsequently selfhood. If subjectivity is in a continual state of flux, the body and mind are unstable referents. Therefore, the body as a site of experiential metamorphic production is worthy of further investigation.

Testified in the array of 'psycho-somatic' disorders is the uncertainty of the boundary of self and other. In *The Precession of Simulacra* French cultural theorist Baudrillard suggests an underlying sense of melancholy inherent in postmodern experience is the result of a world of ambivalence. He writes of 'a liquidation of all referentials' (Baudrillard, 1983: 4), the result of an oversupply of images that replace previous notions of truth with a shallow world of simulation. This insecurity is marked by the way we feel about the world. 'Our age is characterised by invisible latent threats working quietly in the air we breathe and the bodies we inhabit' (Mansfield, 2000: 169–70). Consider the following: panic attacks, a fear of the outside; depression, a fear of life; chronic fatigue syndrome (CFS), a fear of carrying on; attention deficit hyperactivity disorder (ADHD), a fear of idleness; obsessive compulsive disorder (OCD), a fear of imperfection; anorexia nervosa, a fear of weight gain. Even deep vein thrombosis (DVT) is said to have its roots in the fear of flying (Hughes, 2002: 9)! The defining mood of postmodernism is fear, and nowhere is this sentiment so clearly articulated as through the text of the

body. Syndromes, disorders, disfunctions and phobias, are these labels merely a last ditch effort to retain a hold on a scientific reductionism that is slipping into dissolution? Greaves suggests that ‘The use of the word syndrome is an important link in this chain of thought because it provides what are seen as legitimate grounds for the belief that there must be a cause and hence a real disease’ (Greaves, 1996a: 8).

The reduction of reality to social, historical and/or linguistic constructions is considered deeply pessimistic. There are, however, other interpretations of postmodernism that embody more positive undertones. ‘Constructive postmodernism’ characterized in the writing of David Ray Griffin (1988) understands causality to be mutually dependent. This perspective focuses on the interdependence of systems and opposes dogmatic versions of rationality where one aspect of the dynamic precedes the other. This framework permits a conceptualization of disease that respects different traditions and replaces distinctions between nature and culture with notions of continuity. Even Baudrillard’s disaffection with the ‘world of hallucinations’ has the potential for a more positive reformulation of health and disease. Baudrillard says: ‘For if any symptom can be “produced”, and can no longer be accepted as a fact of nature, then every illness may be considered simulatable and simulated, and medicine loses its meaning since it only knows how to treat “true” illnesses by their objective causes’ (Baudrillard, 1983: 5). This challenge to the biomedical model of health may enable not only a more coherent understanding of our current biological afflictions, but the social world in which they manifest.

### The Challenge to Dualism

Cultural identity has long been a focus of sociological enquiry as cultural insights into subjectivity form the basis of knowledge. Regardless of the sociological methods used to theorize about the social, the ontological and epistemological assumptions upon which most theories rely are indebted to Aristotelian logic. However, postmodern maladies deny the logic that is committed to something necessarily being either ‘a’ or ‘b’. These distinctions are no longer relevant in an oscillating world where bodies and their histories, past, present and future are never clearly defined. The traditional definition of a self as a distinct and autonomous subject is becoming increasingly difficult to sustain. Retrospective analysis is always incomplete, always in a state of becoming. Similarly, ‘bodily forms are recognizable because they occupy the overlap between now and then’ (Halberstam and Livingston, 1995: 3). But essentially, what is at stake here is the philosophical construction of a theoretical distinction between the mind and the body. Descartes’ Cartesian legacy reinforced in western medicine is not a paradigm that will simply dissolve

into the abyss when the entire foundation of human knowledge is supported by this framework.

Western medicine has tended to focus on the body in terms of the causal interactions of divisible parts. It has successfully maintained this compartmentalization of the body by using the scientific model to sift, sort and categorize scientific investigation. Yet the idea that technology is a separate entity that humans can utilize to alter their experience of the world can no longer be an assumption, particularly when biotechnologies such as organ transplantation make it unclear where technology begins and the body ends or vice versa (Machado, 1998: 3).

As grand narratives are no longer consistent with the postmodern perspective, and small narratives have become the preferred alternative, validation of subjective experience is reflected in the emergence of 'relativistic' approaches to medicine. 'Clinical legitimacy [clinical success without scientific validation]', can be seen as a trump card that overrides 'scientific legitimacy'. 'It is the Shibboleth of a postmodern movement among GPs towards healing and the "art" of medicine as opposed to the "science" of medicine *per se*' (Eastwood, 2000: 95). Simultaneously at this time of holistic pursuit, there are moves to reinforce evidence-based medicine, reliant on induction and observation. Yet how can we define the concept of ill health against health, when the apparently stable demarcation between mind and body is no longer a taken-for-granted assumption? Particularly when the current array of 'clinically legitimate' cases of illness, such as DVT, bipolar disorder (formerly manic depression), ADHD, CFS, etc. produce themselves in such a way that cannot be sufficiently understood, except in terms of mind and body unity. How do Cartesian models of medicine explain the ability for multiple personality disorder (MPD) sufferers to switch physical characteristics such as eye colour when switching personalities (Talbot, 1996: 99)?

### The Problem with Genetics and the Nature Debate

Predictably, the human genome project has taken precedence over other medical sciences in the pursuit of categorically determining the increasingly elusive essence of humanity (Fox-Keller, 1992: 292). The ardent hunt for the total DNA sequence that aims to establish an indisputable human nature is progressing relentlessly. Molecular biology, the study of molecular structures and their interactions within living organisms, is the postmodern version of microbiology (in as much as it reflects the current thinking). It is a branch of science that has been responsible for the recent discovery of the genetic code. However, it is also a reflection of the paradigm shift we are immersed in. This new perspective has evolved largely as a result of the dissolution of academic boundaries, a melding of physics and biology, especially as many of the key

figures behind the deciphering of the human genome had their backgrounds in the natural sciences (Capra, 1982: 117). However, even with the spectacular results that have been achieved in the field of genetics, the Cartesian view is still the only framework within which biological research is undertaken. The limitations imposed by reductionist models are becoming apparent when trying to understand whole, multicellular organisms such as human beings. Emphasis on molecular structure, the basic biological building blocks, fails to take into account *how* these structures interrelate and communicate, and *why* they switch on and off as they do. This point is neatly summarized by Sheldrake as he metaphorically compares the body's as yet unexplainable ability to assemble a self-organizing system as 'rather like delivering the right materials to a building site at the right times and expecting a house to grow spontaneously' (Sheldrake, 1991: 107).

What are the social implications when the mechanistic view of the body, privileged in genetic research, encompasses the entire field of medicine? The term 'genetic disease' covers an array of disorders that are no longer limited to genetic diseases but also include 'abnormalities' within the genetic discourse (Yoxen, 1984: 49). The sequencing of the human genome does not equate humanity with a DNA sequence, as there is no singular human genome. There can be no genetically 'normal' human being, as each individual sequence differs, and all human beings carry susceptible genes and 'abnormal' genes. In fact, we are constituted by genes that are more or less diseased, and the question, what triggers the physical expression of these features coded in our genes, remains unanswered.

The task of science is to define humanity by identifying difference. At present, this search is in terms of genetics. Genetics is essentially a mechanistic view of health and disease. However, it is the revelation that genetics plays only a relatively small and unpredictable role in the manifestation of disease that reinforces the interconnection of nature and culture. From the social perspective, the notion of genetic destiny has been absorbed into the public consciousness. 'Genetics' has itself become a cultural icon, 'One that has assisted in the production of powerful images that endow the gene with a complexity of meanings that have altered the way we think about ourselves' (Love, 2001: 112). Western society is immersed in perpetual fear of giving life to a looming genetic defect. Lifestyle choices that may contribute to genetic mutation manifest as a pathology of guilt for individuals who failed to adhere to society's insistence on self-discipline and surveillance. What types of diseases will we begin to witness as a result of the 'genetic construction', the silent but deadly time bomb that each and every one of us must carry within us. Our fate is no longer confined to the external forces alone, but perceived in the internal operations as well. We imagine ourselves to be immersed in a constant state of threat from all avenues. Yet as immunologist Miroslav Holub's findings suggest, 'it is an illusion to think that we survive viral and

bacterial threats by eliminating them, in fact we survive by incorporating them into our bodies. Gene fragments from organisms that caused previous devastating plagues like the Black Death have been found in the genetic make-up of modern humans' (Holub, 1997: 114).

Ironically, in pursuit of human essentialism this mind/body dichotomy may be the vehicle for the revelation of its mythic structure. Even with current understandings of health and disease in terms of genetics, findings suggest that the dominant assumption of disease as an external entity is possibly too narrow. Evelyn Fox-Keller suggests that genetics may well be the science that dissolves the nature/culture dichotomy in medicine, where 'culture has become subsumed under biology' (Fox-Keller, 1992: 297). However, the result of such postmodern discourse does not eliminate the distinction between binaries, it shifts it, says Fox-Keller: 'the demarcation between culture and biology (or between nature and nurture), is now made by the demarcation between normal and the abnormal' (Fox-Keller, 1992: 298).

The promise of defining humanity with genetic technology is as elusive as ever. Even with 'progress' in the science of 'genetic disease' there has been 'no persuasive evidence linking any psychiatric disease to a single locus' (Robertson, 1989: 222). Molecular biology is faltering to understand disease and human identity solely in terms of our biological nature. Instead, there is a reversion to posthuman discourse that disallows for biology to be 'scientifically' defined as 'natural' but instead a nodal intersection of metamorphosing cultural discourses. As Halberstam and Livingston suggest: 'the time has passed when resistance could effectively be imagined in terms of a sovereign, local, man's-home-is-his-castle body. Instead, biology is revealing itself as an "interdependence of networks" and a production of a site of "control strategies"' (Halberstam and Livingston, 1995: 2). Rethinking boundaries in terms of fluidity is a concept at the core of this article. Adherence to strict binary distinctions can no longer provide a sufficient framework to explain social phenomena, particularly disease. If the 'nature' of disease cannot be understood in terms of immutable characteristics, then the concepts of disease and health cannot be confined to biomedical explanations. The body is the site of the social, where self and world intersect. It is a mistake to believe that pathogens 'out there' are entirely accountable for ill health when we reconsider disease as a reflection of the culturally interactive experience.

On the basis of genetic evidence that suggests 'the actual genomes of any two individuals will differ as much as three million bases' (Fox-Keller, 1992: 294), is it true to claim the existence of fixed 'natural' laws? When the assumed stable referent, the 'other', is no longer considered stable, can anything be objectively identified when identity is dependent on the relation to the 'other'? As genetic research stakes out its final claim to biological determinism, it may inadvertently find it fails to secure such an ambitious assertion.

## The Inseparability of Nature and Culture

There is an assumption that diseases are value-free objective facts, yet as models of health vary widely from culture to culture, and from era to era (Capra, 1982), transhistorical universal notions of health are unconvincing. However, there is one characteristic common to all concepts of disease, namely that disease manifests from the interrelationship of humans with their environment. Diseases of the past, such as measles and small pox, flourished due to high population densities and the very worst of human diseases, tuberculosis, influenza, cholera, typhoid and polio manifested as a result of human-animal co-habitation (Porter, 1997). The modern western world and its modern western diseases similarly reflect this interrelationship. Current threats such as AIDS, Ebola, heart disease and degenerative diseases question not only if the claim 'medicines triumph over disease' (Porter, 1997: 30) was premature but whether such a symbiotic relationship between society and environment could ever be severed.

The humanist project dependent on a stable subjectivity is no longer an unquestioned assumption. The ability of the human body to produce a reflection of an individual's social reality is a display contrary to scientific reductionism. Observations do not interpret themselves, they require an interpreter. An interpreter is a complex and subjective instrument inseparable from the social conditioning from which it is constituted. As the genetic scientist observes the human DNA under a microscope, and 'reads' the book of life, is it not the scientist who is reading one's self? Is it not DNA looking at DNA? Subsequently, can the biomedical model unquestionably deny the possibility that the world interprets itself and is the subject of its own interpretations, interconnected and self-reflexive? At a fundamental level, objective science and modernist theories that support allopathic medicine are seriously thrown into question when physics reveals paradoxes such as 'reverse causality', the proposition that causality itself is context dependent, born of an interconnecting and self-reflexive world (McGuire, 1996: 7).

This rethinking is a profound assertion in many ways, leaving no branch of knowledge unaffected. In particular, it suggests that the most accurate and relevant locus of knowledge is the body, not the mind, for the posthuman body is a phenomenological subject, a subject whose metamorphic display of cultural and social experience is perhaps the most accurate narrative of the social reality. I am not suggesting a privilege of the body over the mind, as my argument depends on their intrinsic connection. I am suggesting a re-evaluation of the foundation that has supported the mind and its rationality as the *only* valid means to knowledge, especially when postmodern maladies suggest the body displays the text of the dynamic vacillation of the subject with the world.

## Hysteria, the Postmodern 'Syndrome'

Theoretically, medicine has severed the relationship of self and world, or mind and body. However, the body's mutable nature, brought clearly to the fore with rapid changes in science and technology, has prompted a reconsideration of these 'facts'. Sociological reassessment concludes that 'facts' are only 'facts' because of the certain value societies have placed on particular 'truths'. Scientific facts are beginning to be understood as the result of social forces operating inside and outside the scientific community. This article challenges the idea that social facts are things external to the individual. Contrary to Durkheim's suggestion that social facts are external to individuals (Durkheim, 1982), recent shifting social attitudes suggest that individuals participate fully in the creation of their experiences. The confusion that currently exists over what essentially defines an illness is evidence of the confusion over 'facts'. The proliferation of 'hysterical' and overtly psychosomatic illnesses of postmodernity, such as CFS, OCD, ADHD, panic attacks and depression, has defied medical specific definitions. Although hysteria is not a recent phenomenon, as it was the ancient Greeks who first labelled the condition, and an exclusively female one at that (Fancher, 1996), terms being used to describe these contemporary hysterics, such as 'syndrome', embody an apprehension to commit to absolutes as in the past. As recently as 1973, the American College of Psychiatrists regarded homosexuality as a disease. It is not coincidental that the amendments to this classification have taken place at a time when long-held previous assumptions about the world are being fundamentally challenged.

In this era of psychosomatic production where we fail to explain illness in terms of mind/body dualism, postmodern disorders could all be grouped under the term 'hysteria', especially in the Freudian sense of an 'intrapsychic conflict', where he initially claimed different aspects of one personality competed for mutually exclusive goals that manifested in somatic symptoms (Fancher, 1996: 375). However, like Elizabeth Bronfen, who in her book *The Knotted Subject* moves away from the predominantly historical and typically gendered explanations that Freud later alluded to, I draw focus to her embrace of 'a traumatic rather than a sexual etiology of hysteria' (Bronfen, 1998: xiii). Trauma in a postmodern sense is not the disruption of an otherwise stable psyche, but rather an unbounded experience of constant disaffection providing the backdrop for postmodern subjectivity. Hysterical subjectivity is postmodern subjectivity. Medical anthropologist Cecil Helman (1994) explores the way different cultures shape their suffering. He has found that a universal 'language of distress' is evident in the conversion of psychological disturbances into physical symptoms typically expressed as fatigue and listlessness.

When disease and health are perceived in direct relation to the cultural

and social formations in which they evolve they clearly fit the hysterical mould. Symptoms mirror the psychosocial conditions of experience and produce a subjectivity that escapes the clutches of reductionist medical diagnosis. Ill health can only be defined against a cultural construction of health. The stability of this construction is an illusion. However, belief in its reality has produced the appropriate bodily contradictions, mutations and confrontations to uphold this mythic border of health. As we become increasingly sceptical of notions of stable entities, these dichotomies are dangling precariously. Melancholia, now referred to as depression, associated with the disaffection of the postmodern promises of technological, scientific, cultural and social innovation, has no known location. Nor does it represent itself as the result of an original trauma as Freud and Charcot suggested. It permeates the entire psyche, and cannot be articulated within traditional medical discourse. Although hysteria was always elusive, and 'consistently shown as cheating the rules of the medical game' (Bronfen, 1998: 115), the increase in psychosomatic disorders gives credibility to the shifting paradigm that views the mind and body holistically. Helman reiterates this point when he describes culture-bound disorders where particular organs are preferential for particular cultures. In France, there is the *crise de foie* (liver), whereas in Iran it is *narahatiye qalb* or heart distress. Britain prefers disorders of the bowel, and in Australia, I would suggest the organ of choice for women would be the breast. Is breast cancer the manifestation of a society's obsession with stereotypical femininity, an inescapable focus of western culture?

Perhaps the most telling 'symptom' of postmodern anxiety is the unrelenting focus on the conditions that reflect the greater mood: first, heart attack and associated heart conditions, second, personality disorders such as schizophrenia and MPD. According to Greaves, their reality is due to the metaphorical reflection of the current social mores. 'These two conditions have come to be described in common parlance as a "split personality" and a "heart attack" respectively, both graphic expressions of assaults on the integrity of individuals one on the mind and the other on the body' (Greaves, 1996b: 81). They are sustained by the self-reflexive nature of disease, a reciprocation that is ensured by the process of identification and projection.

From this perspective, the body can be understood as latent potentiality, always in the process of becoming. It cannot be caught and objectively claimed, as it is always reworking itself according to its cultural/biological interconnection. Much has been written about the female hysteric, however another telling sign alluding to the interconnection of the self and world is the emergence of the male hysteric. Although Jean Martin Charcot was the first physician to claim male hysteria as a condition in the late 19th century, it has been widely ignored until recently. At present, there is either a re-emergence or an unveiling of cases whereby males are susceptible to the same 'hysterical' symptoms as females. In the case of ADHD, males outnumber

females, 10 to 1 (Diller, 1999). Is this phenomenon western culture attempting to narrate a new understanding of the role of the 'male' in this uncertain world?

As gender differentiation becomes less defined, disorders such as male phantom pregnancies known as 'couvade syndrome' have begun to emerge. Is it coincidental that these syndromes have developed alongside the cultural feminization of men evident in classifications such as the 'SNAG' - sensitive new age guy? Although women have twice the risk of developing an anxiety disorder of men, unprecedented numbers of men are suffering from typically female disorders such as body dysmorphic disorder (BDD), anorexia, bulimia, depression and CFS. In the case of OCD and panic disorder, males and females are affected equally (De Silva and Rachman, 1998). There are also suggestions that the number of male sufferers would in fact be higher, had they reported their cases, as women traditionally report their illnesses to doctors to a greater extent. The extreme manifestation of all such psychic disorders is suicide. There has been an alarming increase in the rate of youth suicide over the past 30 years particularly in western countries such as Australia and especially for males aged 20–4 years (Berman and Jobes, 1995), born and bred within the postmodern culture.

### Conclusion

This article has attempted to secure the body as the site of a dialogic interpretation of the past and future simultaneously. This notion is being reinforced in other areas of research such as quantum mechanics where the current view of causality 'means that the past does not determine the present but instead that the present seems to be a result of a "transaction" or "agreement" between the past and the future' (McGuire, 1996: 7). Halberstam and Livingston (1995: 1) suggest 'The existing medical/aesthetic disciplinary monopoly over "the body" is being challenged.' I would suggest this challenge is evident in postmodern disorders that display phenomenological notions of 'meaning', and knowledge denying the separation of the cultural from the natural. Such a challenge suggests the primary locus of knowledge be in the body's display of the 'present', the body constituted from a constantly fluxing past and future.

Nothing is as fundamentally shattering to allopathic medicine as the proposition posed by the posthuman body that challenges the Cartesian assumption of an autonomous self and demands a rethink of notions of subjectivity based on a mind and body split. This article has attempted to reconceptualize preexisting notions of subjectivity that are upheld by its antithesis, objectivity. We are subjective expressions of society at large. By validating subjectivity as a bodily perception of reality we no longer privilege objectivity and the construction of this binary division is no longer assumed. By

understanding postmodern maladies as a reflection of the social, we embrace phenomenological knowing. Merleau-Ponty (1968) spoke of a knowledge that cannot be possessed. This type of knowledge is experience, and experience denies the distinction between self and other, mind and body, nature and culture. This knowledge is born in the relation between the binaries. The binaries allow for difference, for without them there would be just one. However, it is the combination of distance and proximity, that is always shifting as reflected in culturally specific diseases.

The search for absolute truth that has driven science perpetually since the philosophy of ancient Greece can no longer rest on an essential nature of humanity. Sociologically, the general agreement has always tended towards this plasticity of human nature. It is only recently that this denial of human 'instinct' or 'predisposition' is being validated in the scientific realm and hence gaining credibility. Rationality in science has limited our understanding of individuals and society, most evidently in the area of medical science. Necessarily notions of subjectivity are shifting towards more sociological conceptualizations, in order to fit the current shifting paradigm that questions absolutes. The postmodern world of flux and flow denies claims of certainty as does the postmodern 'syndrome'. Similarly, this shift in social perception ensures an unprecedented challenge to western medicine's objectification of disease. But more importantly, postmodern maladies confront the rationality behind the theoretical distinction between nature and culture and reveal the dichotomous relationship between self and world to be a fabrication.

### Acknowledgements

The writer acknowledges the inspiration of Vicki Kirby and the encouragement of Frances Lovejoy, both of the School of Sociology, University of New South Wales.

## References

- BAUDRILLARD, J. (1983) 'The Precession of Simulacra', in J. Fleming and S. Lotringer (eds) *Simulations*, trans. Paul Foss, Paul Patton and Philip Beitchman, pp. 1–13. New York: Columbia University Press.
- BERMAN, A. L. and JOBES, D. A. (1995) 'Suicide Prevention Adolescents', *Suicide and Life Threatening Behaviour* 25: 143–54.
- BRONFEN, E. (1998) *The Knotted Subject: Hysteria and its Discontents*. Princeton, NJ: Princeton University Press.
- CAPRA, F. (1982) *The Turning Point: Science and the Rising Culture*. New York: Simon and Schuster.
- COBB, J. B. (1998) 'The Re-Enchantment of Science: Postmodern Proposals', in R. Griffen (ed.) *Constructive Postmodern Thought*. Albany: SUNY Press.
- DE SILVA, P. and RACHMAN, S. (1998) *Obsessive Compulsive Disorder: The Facts*. Oxford: Oxford University Press.
- DILLER, L. (1999) *Running on Ritalin*. New York: Bantam Books.
- DURKHEIM, E. (1982) *The Rules of Sociological Method*, trans. W. D. Halls. New York: Free Press. (Orig. pub. 1968.)
- EASTWOOD, H. (2000) 'Complementary Therapies: The Appeal to General Practitioners', *Medical Journal of Australia* 173 (17 July): 95–8.
- FANCHER, R. E. (1996) *The Pioneers of Psychology*, 3rd edn. New York: W. W. Norton.
- FOX-KELLER, E. (1992) 'Nature, Nurture and the Human Genome Project', in D. J. Kevles and L. Hood (eds) *The Code of Codes: Scientific and Social Issues in the Human Genome Project*, pp. 281–95. Cambridge, MA: Harvard University Press.
- GREAVES, D. (1996a) 'Medicine and Mystery', in *Mystery in Western Medicine*, pp. 5–19. Aldershot: Avebury Ashgate Publishing.
- GREAVES, D. (1996b) 'Schizophrenia and Coronary Heart Disease', in *Mystery in Western Medicine*, pp. 65–83. Aldershot: Avebury Ashgate Publishing.
- GRIFFIN, David R. (1988) 'Introduction', in *The Reenchantment of Science, Postmodern Proposals*, pp. 1–46. Albany: State University of New York Press.
- HALBERSTAM, J. and LIVINGSTON, I. (1995) 'Introduction: Posthuman Bodies', in J. Halberstam and I. Livingston (eds) *Posthuman Bodies*, pp. 1–19. Bloomington and Indianapolis: Indiana University Press.
- HELMAN, C. G. (1994) *Culture Health and Illness*. Oxford: Butterworth Heinemann.
- HOLUB, M. (1997) 'This Long Disease', in *Shedding Life: Disease, Politics and Other Human Conditions*, pp. 5–13. Minneapolis: Milkweed Publications.
- HUGHES, Peter (2002) 'Study Links Clots to Fear of Flying', *The Sydney Morning Herald: World* 25 January.
- LEDERBERG, J. (1991) 'Pandemic as a Natural Evolutionary Phenomenon', in A. Mack (ed.) *In Time of Plague: The History and Social Consequences of Lethal Epidemic Disease*. New York: New York University Press.
- LOVE, R. (2001) 'Knowing your Genes: Who Will Have the Last Laugh?', in R. Hindmarsh and G. Lawrence (eds) *Altered Genes 11: The Future*, pp. 112–26. Victoria, Australia: Scribe Publications.

- MCGUIRE, R. (1996) 'About Time: Physics Poses a Serious Problem', *Uniken in Review* September 27: 7.
- MACHADO, N. (1998) *Using the Bodies of the Dead: Legal, Ethical and Organisational Dimensions of Organ Transplantation*. Aldershot: Ashgate Publishing.
- MANSFIELD, N. (2000) *Subjectivity: Theories of the Self from Freud to Haraway*. St Leonards, NSW: Allen and Unwin.
- MERLEAU-PONTY, M. (1968) *The Visible and the Invisible*. Evanston, IL: Northwestern University Press.
- PORTER, R. (1997) *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present*. London: Harper Collins.
- ROBERTSON, M. (1989) 'False Start on Manic Depression', *Nature* 342 (18 November): 222.
- SHELDRAKE, R. (1991) *The Rebirth of Nature*. New York: Bantam Books.
- TALBOT, M. (1996) *The Holographic Universe*. London: Harper Collins.
- YOXEN, E. (1984) 'Constructing Genetic Disease', in T. Duster and K. Garrett (eds) *Cultural Perspectives on Biological knowledge*. Norwood, NJ: Ablex.