New Approaches in Social Research

Carol Grbich



New Approaches in Social Research

New Approaches in Social Research

Carol Grbich



SAGE Publications
London • Thousand Oaks • New Delhi

First published 2004

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored or transmitted in any form, or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency. Inquiries concerning reproduction outside those terms should be sent to the publishers.



SAGE Publications Ltd 6 Bonhill Street London EC2A 4PU

SAGE Publications Inc. 2455 Teller Road Thousand Oaks, California 91320

SAGE Publications India Pvt Ltd B-42, Panchsheel Enclave Post Box 4109 New Delhi 100 017

British Library Cataloguing in Publication data

A catalogue record for this book is available from the British Library

ISBN 0 7619 4931 1 ISBN 0 7619 4932 1 (pbk)

Library of Congress Control Number 2003102341

Contents

PA	RT 1	PHILOSOPHICAL CHANGES	1
1	Mod	ernity to Modernism	3
2	Post	modernity and Postmodernism	17
3	Stru	cturalism and Poststructuralism	32
PA	RT 2	THE IMPACT OF POSTMODERNISM, POSTSTRUCTURALISM, COMPLEXITY AND CHAOS ON SOCIAL AND SCIENTIFIC RESEARCH	49
4	Res	earch Design	51
5	The	Position of the Researcher	67
6	The	Researcher, the Research Participants and the Reader	80
7	Data	Presentation and Re-presentation	94
8	A Po	ostmodern Piece of Research	108
9	Con	tinuums and Continuities	123
Gl	ossar	y	127
Re	eferen	ces	135
Inc	dex		145

PART 1 PHILOSOPHICAL CHANGES

The three chapters within Part 1 aim to trace briefly the advent and application of postmodernism and poststructuralism in a number of fields and to indicate relevant criticisms of these approaches.

Modernity to Modernism

This chapter seeks the historical antecedents of postmodernism by exploring the advent of modernism. In doing so the following questions will be addressed:

- · What is modernism
- How did it emerge?
- · How has reality been constructed under modernism?
- And what impact has this had on research?

Modernism and modernity are interconnected. *Modernity* is the term applied to a period of time, which can be traced from the end of the Middle Ages and is differentiated by particular philosophical underpinnings. *Modernism*, which became dominant during the twentieth century, involves the critical assessment of the limitations of the philosophies of the period of modernity.

WHAT IS MODERNITY?

Modernity was an era where optimism, reason and progress became the dominant discourses (ways of speaking and writing) and the foundations of knowledge were believed to be accessible through processes of reason. Scientific knowledge based in logic was seen as having the capacity to displace ignorance and superstition, and the extension of this form of knowledge to social and natural worlds was perceived as being desirable and achievable. During this time, causality and prediction were elevated to the status of truth, and ideologies based on other approaches were questioned. The 'rational man' was believed to have the capacity to uncover a singular knowable reality – a reality that would not be subject to question and the knowledge of which could liberate the population from its current 'oppressed' state.

THE ADVENT OF MODERNITY

Pre-modernity was characterised by a belief that the meaning of the universe could only be understood through religious revelations provided to a select few by some form of divine intervention. Individuals were perceived as being part of a holistic and harmonious universe and the hierarchical position into which one was born (and which should not be questioned) dictated one's life experience. Tradition, passed down through religious teachings, illuminated moral understandings of right and wrong.

It is generally agreed that modernity emerged during the eighteenth century in Europe – a period termed the Enlightenment, although the use of logical processes of reason to challenge or support established beliefs can be linked to earlier times. For example, Thomas Aquinas used these procedures in the thirteenth century to defend and explain Christianity, and during the four-teenth and fifteenth centuries the Humanists of the Renaissance again used creative logic derived from the Greeks and Romans to critique religious dogmas and the long-held cultural values of the era. During the Enlightenment, the increasing focus on process led eventually to an assumption that knowledge could only be assured when the logical thought processes of reason had been used. Acceptance of this approach allowed its principles to be applied to the study of nature in the broader development of scientific 'truths'.

The main figures of the Enlightenment were a group of philosophers interested in exploring ideas of reason and progress as well as notions of individuality, causality, the laws of nature, power, democracy and the principles governing society. These philosophers included Pierre Bayle, René Descartes, Denis Diderot, David Hume, Immanuel Kant, Michel de Montaigne, Charles-Louis de Secondat Baron de Montesquieu, Blaise Pascal, Jean Jacques Rousseau and François-Marie Arouet de Voltaire. These philosophers were concerned about the power of religion and the church to control interpretations of ideas used to manage the views of the populace, and they believed that reason was the ultimate weapon which could be used to challenge tyrannical practices and to combat superstition. Immanuel Kant reflected popular belief in the power of reason when he stated:'... do not wrest from reason that which makes it the highest good on earth, i.e., the prerogative of being the ultimate touchstone of truth' (Kant, 1788/1949: 305).

'Reason', then, became paramount during this time and many aspects of the world, from art to astronomy and from religion to the human body, became seen as subject to reason. The philosophers anticipated that the nature of the universe could be learned through human senses and the intellect, and that truths gained through processes of reason would become widely disseminated through education. The knowledge thus gained would help the populace counteract the power of state institutions and the repressive ideologies of religion. Truth was seen as having the capacity to equal freedom and the possibility of leading the way to a New World. It is from this ideological position that such statements as 'We hold these truths to be self evident that all men are created equal' (Jefferson, 1776: 1) and 'The essence of truth reveals itself as freedom' (Heidegger, 1943/1998: para 35) emerged.

THE META-NARRATIVES OF MODERNITY

The foundation of knowledge

Like later philosophers of this era, Michel de Montaigne, in his Essays (1575/1993), attacked the very basis of ideas, which had long been accepted, by focusing on the question 'What do I know?' His aim was to point out the danger of accepting ideas that were based in habit rather than on absolute truth sought through processes of reason. René Descartes (1637/1965, 1641/1960) furthered these ideas by seeking absolute certainty in the identification of a solid basis for knowledge. In order that human knowledge be beyond doubt, he believed it must be based on the foundation of universal reason. In identifying this foundation. Descartes set out to find a reality that he personally could depend on – one that he could be absolutely certain would provide a solid base upon which further understandings could safely be built. In this search, he started with self-knowledge and underwent a process by which he attempted to eliminate every opinion or sensation about which he had any doubts. He finally arrived at the position that he considered provided an unshakeable basis for his being: 'I observed that this truth, I think therefore I am (COGITO ERGO SUM), was so certain and of such evidence that no ground of doubt, however extravagant, could be alleged by the sceptics capable of shaking it' (Descartes, 1637/1962: Part 1V).

Here he determined that the lowest common denominator for his being lay in his own capacity for thought and judgement and in processes of pure understanding and rigorous intellectual reasoning through which sensory perceptions of the external world could be checked for their veracity. Other philosophers followed Descartes. David Hume (1758/1975) reinforced Descartes' ideas by suggesting that the only acceptable universal foundation for knowledge was empirical observation and that only through induction (observation of the world 'out there') and deduction (rational thought), could the centralised 'knower' obtain absolute certainty. Immanuel Kant summarised the process of gaining knowledge via the senses and reinforced the belief that logic and reason were the ultimate tools in gaining this: 'All our knowledge begins with the senses, proceeds then to the understanding, and ends with reason. There is nothing higher than reason' (Kant, 1781/1933: 41).

The centred individual

The impact of the statements of these philosophers over a period of 200 years served to shift the previous societal focus from the collective to the individual. The notion of individual freedom was reinforced by Jean Jacques Rousseau in his observation: 'MAN is born free; and everywhere he is in chains. One thinks himself the master of others, and still remains a greater slave than they' (1762: 1). Here, the emphasis was on an earlier natural free state, which has somehow

been misplaced through the advent of the power-laden discourses of others. Kant saw the way out of slavery through an emergent individual – a being capable of independent rational thought, no longer requiring others' interpretations and gaining enlightenment and emancipation through self-knowledge:

'Immaturity is the inability to use one's own understanding without the guidance of another. ... The motto of enlightenment is therefore: Sapere aude! Have courage to use your own understanding. ... For enlightenment of this kind, all that is needed is freedom. And the freedom in question is the most innocuous form of all freedom to make public use of one's reason in all matters' (Kant, 1784: 1).

Thus individualism, order and eventually economic progress became built on the notion of the universal foundation of knowledge – a knowledge which it was the purpose of humanity to gain. The Renaissance ideal of the human capable of choosing his or her own destiny through processes of reason became paramount.

The context facilitating this change in ideas was the major social, economic and political upheavals of the time. The Renaissance had unleashed powerful forces towards liberty and civil rights, which emphasised the power of the individual to act on systems as well as be acted upon by them, while the Reformation had allowed the proliferation of many ideologies. In the French revolution of 1789, the notions of 'liberty, equality and fraternity' were pursued into bloody battles. Later it became obvious that the process of scientific reason might not be the ideal path to true freedom. The dilemma which emerged was that Reason had certainly provided freedom from one type of thinking but it had also provided a channel to a different form of enslavement – the all encompassing power of scientific reason.

Social, economic and political structures and values

Modernity became characterised by particular structures and values. The metanarratives of history were largely unquestioned, they were seen as linear and progressive — a pathway to human freedom which individuals could tread. Change was equated with progress and emancipation was seen as being achievable through change. History further served to consolidate cultural values and national identity, and integration of ideology and cultural identity were enhanced by education, the media and increasing levels of literacy.

ECONOMIC CHANGES

In the move from the pre-modern to the modern era, there was also a major economic shift from feudal agricultural and home-based produce to profit-orientated company-run industries. As production became separated from the domestic sphere, many farm labourers left their towns for city-based industries with increasingly complex technologies, and as cash exchange took over from the bartering of goods, the consumer society and the free market economy

developed and monopoly capitalism emerged. Industry was used to conquer nature, which was seen as a resource which man could control through scientific approaches. The workforce was also seen as controllable in order to enhance profit. Taylorism, with its focus on work routines to improve efficiency, and Fordism, with an emphasis on the assembly line, mass production and deskilling, started to dominate western economies and the ideologies of capitalism flowered and prospered.

POLITICAL CHANGES

As certain nations became rich and powerful, colonialism, imperialism and globalisation emerged. Colonisation involved the imposition of language, religions, political organisations and cultural practices, as well as using colonised populations as cheap labour to enhance profit in capitalist enterprises. Nationalism in the conquering country gained increasing power through new military technologies and the role of the military increased as they protected economic investments both at home and abroad.

Political parties adopted centralised control, represented large interest groups and adopted welfare policies to manage the underclass of unemployed and unemployable people. Moves towards democracy reduced the power both of the monarchy and the church, which soon lost their positions as major forces of social control. Increasing bureaucratisation maintained and controlled the labour force and dominated in both economic and social organisation. Time shifted from an emphasis on seasons and cycles to universal, linear, clock-based time, and space changed in emphasis from defined and local to broader global communities. The extension of time across global spaces led to time-space compression and rapid capital flow influenced global markets, creating chaotic possibilities in the stock markets (Harvey, 1989). Mass consumerist cultures developed and scientific rationality became the dominant discourse. Western culture was highlighted as the ideal, enabling the marginalisation of 'different' cultures, which were seen as 'underdeveloped', 'third world' or 'tribal'. Within western cultures, members of less educated classes were economically and geographically marginalised, and androcentrism - the normalising of humans as predominantly male with females as 'other' - dominated. The classic 'norm' was a white, heterosexual male with legally reinforced rights and privileges, and whose political representation was assured through his right to vote.

SOCIAL CHANGES

The above societal structures were maintained by the centrally positioned and reinforced social and economic unit of the nuclear and extended family, carefully linked to and maintained by the hierarchical institutions of the workplace, the church, the community, the state and the nation. Societal expectations were underpinned by the values of economic production, class division, capitalism and urbanisation, and reinforced by bureaucratic processes and laws. There were clear dichotomies between right and wrong, good and bad, black and white,

civilised (industrially developed, patriarchal, with Christian-style religious groups) and uncivilised (industrially undeveloped, matriarchal, with supernaturally-based religions). The individual was encouraged to view him/herself as a unique but unified entity existing outside nature with a particular gender bias (male/female). Anyone outside the sexual norm of heterosexuality was viewed as deviant by the mainstream and punished appropriately. Exclusion and institutional incarceration controlled other forms of 'deviance', and psychological and pharmaceutical interventions were used for reprocessing, enforcing conformity and exorcising 'supernatural' or other undesirable traits.

Knowledge, truth and reality

With the death of the supernatural, the material world became the major focus. Scientific proof, logical deduction, physical laws and biological processes dominated. The *processes* of broader reason, with their focus on observation and experience, on the particular rather than the general, and on 'facts' rather than principles, were seen as more important than the accumulation of knowledge. Analyses of observable facts through due processes of order and regularity were seen as more important than outcomes. These processes were then applied widely to both scientific and social spheres and the use of determinism, with an emphasis on causality, became widespread.

However, certain truths escaped being subject to the meticulous precision of the processes of scientific rationalism. These were the centralised notions of truth, which held particular powerful discourses together. Religious beliefs are one example of this. These took the form of a firm belief that some higher being such as a 'god', a 'spiritual world' or some grand universal plan, as yet unclarified, existed. Here humanity retained a sense of some greater entity beyond itself, to which respect or acknowledgment was owed. This provided a central arena of 'truth' which believers would not challenge and which then provided a justification for the continuity and further development of the discourse. 'The metaphysics of presence' was one phrase used later to clarify this phenomenon – a belief in the existence of accessible meaning beyond humanity (Derrida, 1976: 73). Despite this, challenges did occur. An early challenge came from Darwin's evolutionary theory (1859), which confronted the theology of the church and beliefs that humans were directly created by god and formed a separate species from animals. Other religious positions then came under scrutiny and, viewed as moralistic and hypercritical, were seen as being maintained for purposes of power and profit.

Knowledge and research

During this era, it became accepted that universal understanding of the world was to be found in objectivity and rationalism based on principles of reductionism and scientism. Knowledge lay in the grand theories and the master narratives of progress gained through scientific measurement, technological

processes and rationalist thought. This knowledge was stored in specialist disciplines with defined boundaries, which were carefully protected and maintained. The central authority of the learned, published author (particularly where scientific research was involved) was paramount. Truth was absolute, depth in value and content was favoured over superficial aspects, and the original and unique aspects of scientific research were favoured over other forms. Realistic descriptions, truthful depiction, studies with clear aims, objectives and properly measured and evaluated outcomes, were preferred. Scientific principles, regularity, order, deductive logic, 'laws' of nature, observation and experience (reason), causality, linearity, logical determinism and analytical approaches based on 'true facts' dominated. Classification, order and hierarchy, prediction and the universality of findings were emphasised. All knowledge was seen as being derived from the experience of reality through the senses and was to be tested only with reference to empirical evidence.

THE RISE OF MODERNISM

Modernism emerged around the turn of the twentieth century. Changes in scientific knowledge started to question the ability of science to provide finite answers and the capacity of scientists to discover 'truth'. Awareness of the worldviews of other cultures was facilitated through faster media communication, books, increasing travel and participation in wars. Changes in the economic system through industrialisation and the introduction of technology, with a consequent perceived dehumanisation of the population, led to Karl Marx's critique of capitalist exploitation, profit and class conflict, being recognised. The outcomes of such economic change became viewed as involving societal fragmentation, disillusion and despair. Recognition that these outcomes were the products of mindsets developed in modernity led artists such as Pablo Picasso and Henri Matisse, and writers and poets such as Franz Kafka and T.S. Elliot, to seek new and more critical ways of representing and viewing this world.

Truth and reality

Considerable criticism emerged during the 1960s and 1970s regarding the ideas of modernity. These criticisms centred on the realisation that although reality might be knowable, it was more complex than had been perceived under modernity. Reality became viewed as being multiply constructed and therefore access required a range of approaches. Truth could also be accessed but its origins might lie in obscure history and/or layered aspects of the present. Getting at the truth could best be represented by the image of an onion - a multi-layered creation where each overlapping layer of skin represented a different facet of truth. This was not to suggest that stripping each layer away

would lead to discovery of the essence of truth, but that the intricate whole required the recognition of the existence of many layers to be meaningful.

The ultimate essence of reality as being external to researchers 'out there' was challenged by Sigmund Freud's exploration (1900/1913) of the unconscious as a source of reality construction. Further changes in philosophical thought suggested that 'reality' was not only constructed from both internal and external sources, but also changed continually, and that what had previously been considered as externally and objectively 'real' was also closely linked to the maintenance of power. Feminists further rejected patriarchal power-laden discourses about reality as being inappropriate for them. There was a move away from realism towards representation. The simplicity of such notions as the integration of the individual, the power of the author, the universality of knowledge and concepts of uniqueness and originality, subsequently came under question.

The power of science: certainty and prediction

Late in the nineteenth century some scientists became aware that the issue of predictability in research was problematic and that this bore some relation to the lack of capacity of the researcher to control changes in areas under research. Henri Poincaré's failure to find order and to prove the stability of the solar system in 1889 challenged dominant notions of linearity and predictability leading him to indicate in 1908 that chance might be a factor to consider (Poincaré, 1889/1993, 1908/1952). Edward Lorenz (1963) took the issue of predictability further by following the impact of fluctuations in initial conditions. An example of this that is often given is long-term weather forecasting. Meteorological laws are available and enable short-term forecasting of reasonable accuracy, but long-term lack of precision occurs as small initial variations in weather patterns in one part of the world may lead to unpredictable storms and cyclones further round the globe. This is referred to as the Butterfly Effect.

Although impressive advances in science and technology had been achieved, some major findings further challenged the bases of previous scientific thought. Albert Einstein's Law of Relativity (1905/1923), which postulated that the laws of nature should appear the same to all freely moving observers and that the speed of light should be the same regardless of movement, was one of these. Acceptance of Einstein's Law meant that absolute rest had to be abandoned (because movement/lack of movement would always be unclear). Universal acceptance of 'time' as measured by clocks and watches also had to disappear in favour of personal time that could be matched only when bodies were at rest relative to each other. Linear time was now seen as discontinuous, overlapping and subject to varying individual perceptions. In addition, Werner Hiesenberg's uncertainty principle in quantum mechanics indicated that small particles did not have a definite position or speed. In fact 'the more precisely their position is determined, the less precisely their momentum is known in

this instant, and vice versa' (Heisenberg, 1927: 197), and further, 'the interaction between observer and object causes uncontrollable and large changes in the system being observed' (Heisenberg, 1949: 3).

From these findings, major implications emerged. First, the path of a particle has no meaning beyond the precision with which it is observed and electrons do not exist in nature unless and until we observe them. Secondly, randomness and unpredictability exist. These findings challenged the assumption that a world, which could be precisely measured and documented, existed independent of humanity that was just waiting for us to gain sufficiently sophisticated tools to discover it. The belief that absolute, knowable truth existed became sidelined and relative, and provisional truths became a more likely outcome.

Knowledge

As confidence in the ability of scientists to explain the universe declined and previously held values collapsed, modernity was questioned. Friedrich Nietzsche provided the basis of an early thread in the critique of modernity when he suggested that the outcome of seeking perfect knowledge would be nihilism. He said: 'Against positivism, which halts at phenomena - "There are only facts" - I would say: No, facts is precisely what there is not, only interpretations. We cannot establish any fact "in itself": perhaps it is folly to want to do such a thing' (Nietzsche, 1888/1982: S.481: 267). So when facts can no longer be seen as absolute 'The only seeing we have is seeing from a perspective; the only knowledge we have is knowledge from a perspective' (Nietzsche, 1887/1967: Essay 3:12). The meta-narratives of progress, the assumption of foundations of knowledge, scientific rationalism, universality, order, reason, objectivity and unity thus came under suspicion. Science and technology were no longer seen as having ultimate power and providing ultimate solutions, nor were the other grand narratives of industrialisation, capitalism, bureaucratisation, economic rationalism, globalisation and urbanisation any longer uncritically accepted.

Architecture

Architecture was one of the earliest disciplines to reflect the influences of modernism, in particular the move away from linearity and consecutive styles. By the end of the nineteenth century new styles were beginning to emerge. Past influences from the Romanesque, Neogothic, Industrial and other traditions could be seen being incorporated in mixed styles and the use of space and form changed dramatically as can be seen in the following three examples. Antonio Gaudi introduced multiple realities by incorporating aspects of nature and surrealism into his buildings. Casa Milá (La Pedrera) in Boulogne, built between 1906 and 1910, is a block of apartments comprising large wave-like, undulating blocks of rough chipped stone, a curved façade of balconies, tidal markings

on the plaster ceilings and starfish ceramics on the footpaths, all emphasising an oceanic theme. On the balconies, ironwork in the form of plants and flowers add another aspect of nature. On the assumption that there are no straight lines in nature, the two interior patios are of different oval and circular shapes, the roof comprises colourful mosaic arches of different sizes and spiral staircases wind between the chimneys (which resemble knights with visors). The pillars that support the building are visible rather than hidden – a characteristic that became popular in postmodern architecture.

Le Corbusier's Villa Savoye (1929–30) near Paris is a house which was constructed as a machine – the living space emphasises a layered dialogue with factory-like functionality and open space. The house is built on stilts, is stark white externally and is sculptural and curved in design. Inside, the colours are soft and the building is open plan with a spiral staircase and ramps joining the floors. The furniture is built-in and there is a roof garden and a ground-floor garage with a turning circle. A further example of modernist architecture can be seen in the New York Guggenheim Museum (1934–37) constructed by Frank Lloyd Wright. Here the traditional square/rectangular-shaped museum building was abandoned in favour of a circular structure where an elevator takes visitors to the roof rotunda from which a continuous curving ramp leads downwards, allowing access into different segregated sections. The building incorporates reflecting geometric design – triangles, ovals, circles and squares.

Art

Edouard Manet was one of the earlier artists to break with tradition in his work Le Dejeuner sur L'Herbe (1863). Reflections of the past draw on earlier compositions such as Giorgione's Concert Champêtre (c. 1508) – a work of uncertain origin which is thought to be either Giorgione's own work or is by Titian or is a collaboration between the two – and an engraving by Marcantonio Raimondi (c. 1516) of a group of river gods which derived from Raphael's The Judgement of Paris, a fresco no longer in existence. The formal composition is challenged by the juxtaposition of two formally-dressed males chatting with a nude female bather and led to considerable controversy. The concern of modernist artists such as Manet and later Picasso was to change the form of art and illuminate the hypocrisy of social norms by the juxtaposition of signifiers (culturally recognised signs) and by introducing innovations such as cubism where multiple perspectives were used.

A further example of this is provided by Picasso's *Les Demoiselles d'Avignon* (1907) a painting of five women prostitutes, four of whom are standing with an arm/arms raised and placed above or behind their heads in classical sculptural poses, naked with white drapery carefully arranged. Two of the women wear dark masks over their faces (suggesting secrecy, magic, slavery, lost identity), while the other two have mask-like faces frozen into traditional poses. The fourth squats naked, legs provocatively open — an invitation to the viewer.

The cubist approach enables the squatting woman to become transparent and to be seen simultaneously from all angles, front, rear and side. The juxtaposition of modest, idealised beauty with the immodest reality of prostitution contrasts different signifiers which link to depictions of women and beauty, and to the use and abuse of women, both past and present.

Societal structures and values

Modernity became seen as elitist, oppressive and colonising, peopled by uncivilised, greedy, hypercritical humans. Civilised people now became those who cared for nature, who were in tune with nature in a mystical, spiritual and egalitarian manner – compared with those individuals and companies whose only interest was to exploit the land for profit, move on and leave it desecrated. An international rather than a national focus started to emerge as people saw themselves as part of a global economy made up of many cultures, aware of the exploitation of 'neighbours' and concerned for the impact of tyrannical regimes on others.

The centralised control of 'normality' in terms of mind, state and body shapes was challenged in favour of extended 'normalities' and multiple possibilities. The advent of feminist challenges led to a critiquing of the social construction of gender and the economically and socially inferior roles of women. Emancipation through exposure to feminist perspectives, together with the opportunity to join the workforce during wartime, in western cultures, led to a continuing increase in numbers of working women (albeit part-time workers) and to a movement away from heavy 'instrumental' nurturing roles to the ideal of marriage as a partnership where housework and childcare were shared by both parents.

The exchange of traditional community values for semi-slavery in industry, alienation and loss of extended social groupings, led to a more critical questioning of these outcomes. The advent of wars, mass destruction and cultural fragmentation were seen as outcomes of modernity. This recognition stressed the responsibilities of individuals and groups and placed an increasing emphasis on democracy. Power shifted away from powerful, authoritative beings towards community consensus.

Individuals

Humans became viewed as subject to nature rather than above it, with the capacity to make their own meaning in the world rather than being there for some 'God'-given purpose. Unified, powerful, centred individuals with an authoritative point of view were rejected in favour of anti-heroes, complex individuals and ambiguous multidimensional narratives from a range of perspectives. Sigmund Freud (1900/1913) separated sexual instinct from reproduction, allowing the recognition of different types of relationship and greater variety among individual sexualities. The disciplines of psychology and psychotherapy further developed the idea that internal or unconscious aspects influenced individual behaviour and constructions of reality. The notion that truth had multiple sources, many of which were not obvious, was enhanced by this recognition.

The roles of the writer and reader

Literature began to mirror the changes in the economy, science, art and architecture by portraying reality as shifting and uncertain rather than set, and by incorporating multiple perspectives from a range of disciplines such as music, philosophy, psychology, sociology and drama as well as including visual possibilities. Discontinuity and experimental styles abounded. Objectivity became less favoured as third-person tales with considerable author power and clearcut positions were encroached on. Writers such as James Joyce introduced radical disruption by changing the relationship between the author and the reader in *Ulysses* (1922) with his subjective stream-of-consciousness technique (self as narrator and self as subject) with self-reflexivity an important part of explanations of reality and with his blurring of the boundaries between prose and poetry. Juxtaposition is also introduced to contrast a day in the life of the working people of Dublin (16 June 1904) by placing this narrative within the framework of an Homeric odyssey.

An emphasis on the mystical and the symbolic started to re-emerge as fantasy and reality were incorporated. Montages of sound, text and music and an emphasis on fragmentary images appeared both in poetry and writing, inviting readers to participate, to contribute from their own experiences and to and take away challenging images for integration with their own life experiences. An early example can be seen in Akira Kurasawa's film Rashomon (1950), which is set in ninth-century Kyoto. Here an incident occurs in a forest which appears to involve the rape of a nobleman's bride and his attempted murder by a vagabond. These incidents are described in four separate flashback stories each one voiced by one of the three participants and the fourth by a woodcutter who was passing by. Each story provides a different perspective, reflecting and refracting the original incident in the construction of unique subjective realities created to protect views of self and others. All stories are quite different and the viewer is left to decide who in fact (if anyone) has approached the truth of what has occurred or if anything of consequence has occurred at all. A multiplicity of perspectives has been utilised here to illuminate the complexity of the varying social constructions of 'truth'.

Louis Bunuel's 1972 film *Le Charme Discrete de la Bourgeoisie* (The Discrete Charm of the Bourgeoisie) also uses ambiguity and uncertainty, fantasy, reality and truth. This film emphasises the surfaces and layers of social reality. At the most obvious and superficial level a group of six wealthy people interact socially around food, demonstrating appropriate manners, clothing styles, small talk, and so on. At another level, two of the group have a secret, ongoing adulterous

relationship and the three males are involved in cocaine trafficking – an illegal activity which creates poverty and despair for some and wealth for others. Other layers are introduced as fantasy (dreams) and realities become intertwined and eventually inseparable. Representations from various societal discourses (lawmakers, law enforcers, religion, the military, revolutionaries and members of lower social status) confront and challenge the fragile world of these bourgeois people, revealing their positions and the protective mechanisms employed to sustain these. In a connecting and repeated image the six members of the bourgeoisie walk purposefully, in a united manner, along a country road, and this image is juxtaposed with the increasing lack of certainty and success in their attempts to dine together and to maintain the dramatic behavioural production of the style of polite, genteel society.

Juxtaposition of images became the norm in art, literature and film, identifying and exposing areas previously privileged. Chronological development was disrupted, as authors ranged at will among future, past and present. Discipline boundaries were breached as writers moved selectively across previously well-guarded borders. Paradox, ambiguity and uncertainty, with an emphasis on multiple voices providing multiple perspectives but offering no finite resolutions, became common. Complex individuals displaying different aspects of their multiple personae were favoured over simple, two-dimensional characters, yet the underlying wholeness of the human being remained.

CRITIQUES OF MODERNISM

Modernism emerged as a response to developing criticism of, and disillusion with, the power of structures, organisations and values based in rationalism reason and logic. But it can be seen as a stepping stone – a series of substantial and widespread critiques in the development of an awareness, which would eventually provide the foundations of a much larger change. In art, architecture and literature the focus was a rejection of tradition in favour of experimentation, the introduction of new ways of seeing and the development of new forms. Radical novelty was common but the strengths of past structures often meant that change was narrow in focus, easily marginalised, or quickly bounded by labels and boxes. In politics and economics, new structural forms and economic developments were attempted as the old ones came under considerable public scrutiny (for example, the inequality experienced by women and indigenous people). Involvement by governments in the economic or political wars of other countries was also roundly challenged by large sectors of various populations, who were uncomfortable with the old and dissatisfied with the compromise of the new.

Although some innovative directions were opened up by such critiques of the values of the modern era, the long-term outcomes were unsatisfactory, slow in coming or unclear. The emphasis on criticism of the conventions of

16 NEW APPROACHES IN SOCIAL RESEARCH

particular disciplines and the uncertainties produced by the loss of order and of particular definitions of reality led to negativity. In particular, the fragmentation of reality made the development of a coherent worldview from a plethora of fragments, problematic. Beliefs in order, stability and hierarchy had to be suspended, yet with the centring of the self, authority and tradition were often only replaced by other forms of control; decentralised bureaucracies, fluctuations of the economy, and individual responsibility for problems which were structural in origin (for example, poverty induced by the economic practices of advanced capitalism). The individual of this era is characterised by alienation—an internal seeking and a loss of certainty as the coherence and security provided by previous forms of organisation and worldviews became fragmented. Darkness and confusion are evident. The continuum of modernism into the era of postmodernity and postmodernism was about to occur (see next chapter) and this shift was an indication that the limits of modernism had been reached.

Postmodernity and Postmodernism

This chapter examines the meanings of postmodernity and postmodernism and explores the structures of postmodern/postmodernist worlds in an attempt to clarify what counts as knowledge in this era and what impact these changes have had on research.

POSTMODERNITY/POSTMODERN AND POSTMODERNISM/ POSTMODERNIST – WHAT DO THESE INVOLVE?

Postmodernity/postmodern literally means the time following modernity or the modern era, while postmodernism is the identifiable ideological position that developed from modernism, including further development of the ideas, stylistic communications and the perceptions and beliefs, which began to dominate this era. It is not always easy to differentiate clearly modernity from postmodernity and Anthony Giddens (1990) has argued that in fact the terminology is incorrect and we are still within a stage of high modernity (seen as a radical and more universal form of the modern era). In general and for Giddens, the aspects of modernity identified in Chapter 1 (in particular the distancing of time and space, changing social relations, creativity, reflection, chance and risk) are accepted as persisting and as being integral to postmodernity and to postmodernism.

Many of the characteristics and trends of modernism moved forward in a continuum from fringe critique to mainstream and became widely discussed and more readily accepted in the last decades of the twentieth century. Key writers who furthered this process and whose ideas illuminate this text as it progresses, included Roland Barthes, Jean Baudrillard, Jacques Derrida, Gilles Deleuze, Umberto Eco, Felix Guattari, Luce Irigary, Julia Kristeva, Jacques Lacan, Jean François Lyotard and Richard Rorty. As the potential of the shifts in thinking under modernism became evident, the dominant mood changed from one of despair and concern at the loss of the values and beliefs of the modern era to joyful optimism, celebration and a sense of liberation. The postmodern era had arrived.

Can we define *postmodernism*? Because of their confining nature, definitions are contentious. The changing nature of current ideology suggests that

attempts to concretise this philosophical position in advance within the limits of definitional terms is particularly problematic. However, if its transitional and non-finite nature is accepted as an underlying basis and it is recognised that what follows is as important as what exists currently and that this also links to the past, certain aspects can be illuminated:

- The capacity to dialogue with other contextual and temporal influences is usual.
- The search for reality 'out there' is qualified by a recognition that the tools, language and processes of discovery (as well as the interpretations and actions of individual researchers) are socially and culturally constructed and require further examination.
- Not only are research processes seen as being subject to social construction, but other social processes, such as morals and laws, are also constructed discourses which have served to maintain the power bases of particular groups.
- Any borders (disciplinary, research approaches, country and culture) are also constructions that can be crossed, incorporated or reconstructed.

In his essay *What is Postmodernism?* Jean François Lyotard emphasises the dialogue with other influences by suggesting that modern and postmodern are intricately interwoven in an endless spiral of presentation and re-presentation of the 'unpresentable'. Here modern becomes postmodern — a postmodern which then incorporates other aspects of the modern to become another form of postmodern through a continuous cycle of incorporation and reincorporation in the transformative process:

The postmodern would be that which, in the modern, puts forward the unpresentable in presentation itself; that which denies itself the solace of good forms, the consensus of a taste which would make it possible to share collectively the nostalgia for the unattainable; that which searches for new presentations, not in order to enjoy them but in order to impart a stronger sense of the unpresentable. (Lyotard, 1979: 81)

In recognition of the socially constructed nature of the world, disruption, challenge and a multiplicity of forms are essential. Postmodernist forms of display characteristically seek and incorporate irony; playfulness and illusion; pastiche; parody; brilliance; an emphasis on improvisation, satire of others and the self; the use of a variety of visual, textual and other genres, multiple narrators and voices; and fragmented and open and closed forms to break the boundaries of genres and to encourage the audience to see and see through, to participate in events and to interpret experiences gained at (almost) first hand.

In her book *The Law of Love: A Novel* with *Music*, Laura Esquivel (1995) presents an example of multiple forms of representation and attempts boundary crossing in order to challenge the traditional form of the novel and bring the reader close to the text. The story is set in Mexico three centuries hence and centres around an astroanalyst Azucena who uses music to help individuals

identify their past reincarnations of which 14,000 are needed before perfect fusion with one's twin soul can be achieved. Esquivel integrates poetry and music (via a compact disc, which includes Mexican dances and Puccini arias and is to be played at certain points in the text where the characters are also listening to this music). As mental images of past lives emerge, the reader can glimpse these visually through artworks inserted in the text. The light playful tone of the story is juxtaposed with tragic events of death by violence, war, revolution, family breakdown and political intrigue.

THE STRUCTURES OF THE POSTMODERN, POSTMODERNIST WORLD

Politics

In the postmodern world centralisation of power disappears. Decentralisation and micropolitics dominate and interest groups, minority groups and social movements become local and situational. These groups include familial, community, ethnic, commercial, religious and others. The focus on the local and particular may result in political action being very effective in a decentralised system. This form of organisation does not mean that these groups will necessarily always be independent units endlessly jockeying for their place in a global system. Amalgams of smaller groups may emerge and re-emerge in different combinations in order to pursue particular goals more effectively. One example of this is the global action undertaken in 1997 at United Parcel Service, a multinational company involving workers in the UK, the USA, Europe, Canada and South America. Despite distance, cultural and economic differences and diversity in legislation relating to industrial relations, the workers formed an international transport workers' union, and moved together to combat trends by the company to reduce the cost of the workforce by converting positions from full-time to part-time. Widespread strike action was successful in preventing this happening. Across the various countries, pay increases, conversion of existing part-time into full-time jobs and improved union power in the control of wages and conditions were also achieved (Mazur, 2000).

Economics

Globalisation, multinationalism, transnationalism and consumer capitalism with a strong focus on commodity consumption and marketing can be seen taking over. Post-Fordist production values emphasise multiskilling and an endlessly flexible workforce where casual, part-time and work-from-home structures grow. Outsourcing and subcontracting become endemic. Within larger organisations, smaller, specialised teams/groups can be seen taking charge of narrowly focused areas of production. Boutique products - small-scale, unique and with limited markets – have become fashionable. As the service sector increases,

the practical aspects of skills and training become more highly valued than the older style broad general education. The skills now most highly valued include those that facilitate the production and consumption of commodities – managerial, computing and electronic, plus those of skilled service providers.

David Harvey (1989) argues that postmodernism is in fact a cultural construct of globalisation. He suggests that technology has speeded up economic processes, enabling transnationalisation of companies and 'time—space compression'. The removal of the link between cash and the metal gold has facilitated an interconnected global financial system, where major change in one geographic area impacts on all others to a greater or lesser extent. The sense of a lack of boundaries is facilitated by this capacity to switch money at the press of a key stroke from one part of the world economy to another, while global images from 'live' television enforce a sense of 'placelessness' and the absence of time differences.

There is considerable scepticism regarding progress, new technology that provides the 'ultimate' experience or diagnosis, and new economic 'answers' to existing economic problems. Following Lyotard, the economic arrangements of the postmodern era have clearly been influenced by the structures of the modern era. For example, the environmental problems (e.g. space junk, polluted air, soil and water and other environmental hazards) are a legacy of the economic arrangements and political values of modern capitalism and are intrinsically part of postmodernism.

Culture

Cultural pluralism emerges more strongly as the overarching national ethos becomes less important. The dominance of high culture, with its emphasis on depth meaning and value, is disrupted and replaced by popular culture, with an emphasis on superficiality, presentation and re-presentation (image saturation) and hybrid amalgamations (e.g. Luciano Pavarotti and the Spice Girls). Hyperreality and simulacra (copies without originals) abound. For example, the Virgin Mary exists in the form of many simulacra (she may or may not ever have existed in the flesh, however despite this no human form of this person nor drawing nor statue based on the real person is now known to be in existence). Simulacra often become more powerful than the actual living/non-living entities or experiences they represent.

Our lives become dictated by the images and ideals presented through the media. The boundary between image and reality implodes (breaks down) and a world of hyper-reality is created where the distinctions between real and unreal are blurred. Baudrillard suggests that simulations move in a sequence of representations to become simulacra through the following stages:

- They reflect a basic reality.
- They mask and pervert basic reality.

- They mask the absence of a basic reality.
- They bear no relation to any reality whatever: they become their own pure simulacrum. (Adapted from Baudrillard, 1988: 173)

Baudrillard uses the allegory of the Borges parable to clarify this process. Cartographers develop a perfect map, which duplicates every detail of the territory of an empire, but as the empire decays the map becomes frayed and starts to disintegrate. Fragments of the remaining map reflect bits of the former grandeur. These fragments, together with memories, tales and reports, create a reality from which a model of the empire can be constructed. Representation of something real (the connection between the sign and the image) has moved to simulation where there is no absolute reference to reality. The model then becomes more real than the original – its own pure simulacrum (Baudrillard, 1988: 166-84). Baudrillard distinguishes between dissimulation (the masking of reality) and simulation (where there are only self-referential signs). As we move into advanced capitalism Baudrillard is concerned by the loss of the 'real', viewing simulations and simulacra as taking over so that we exist in virtual or hyper-reality where reality is constructed and endlessly copied and recopied and the images of disaster on television become more real than their reality.

Individuals

Previously the individual was socialised into a continuum of groups, starting with the family and reinforced by education and work settings. Here the focus was fitting the individual into the belief systems of existing groups - tangible, identifiable and continuing entities with particular values that could be taught. In the postmodern era, individuals are still seen as social beings constructed by the systems or networks they inhabit, but these comprise many socialising contexts with different meanings and practices and through interaction in these, individuals become situated, symbolic beings. For example, a person becomes situated geographically, culturally, sexually, educationally and with regard to work position as well as in terms of sports and other interests. But in each of these contexts another facet of personality is called on to be creatively constructed in situ and added to as other contexts impinge. The individual has creative reflexive capacities and can control the impact of the ideology of each social context, incorporating aspects that he/she is most comfortable within an ongoing and changing manner.

There is an emphasis on individual growth, on a variety of alternative forms of the traditional nuclear family unit, on arrangements other than marriage and on couples other than the male-female pair. Androgyny and polymorphous sexuality become more widely accepted. The view of self as a social construction evolves from similar views of reality and truth. We construct, deconstruct and decentre ourselves. The self is not a fixed entity, it can change from situation

to situation, moment to moment. Individuals experience and recognise multiple and conflicting identities both in themselves and in others.

The changing signs of time and space facilitate action. A fluid movement among future, past and present, fragments linear time. History and place interweave with other times and other locations and the secure model of a child within a family within a community, gives way to a centred individual with multiple identities and subjectivities and with many social bonds – discursive practices or 'language games'. Some bonds remain relatively intact over time, others join, break and rejoin elsewhere in an endless network of possibilities. Lyotard refers to this as the 'fabric of relations', 'located at "nodal points" of specific communication circuits' or 'one is always located at a post through which various kinds of messages pass' (Lyotard, 1979: 15).

In the postmodern era, the groups one inhabits are seen as more transient in nature with less continuity and a greater emphasis on internal and external transformation and change in values. Fragmentation dominates and group power is lost to changing passions, processes of the law and the political issues of the moment. Fluidity and diversity of discursive forms can only be momentarily captured and any issues are dealt with at the local level.

Architecture

Following the early changes under modernism, Architecture was one of the first disciplines to incorporate postmodern influences. Charles Jencks has described architectural postmodernism as dialoguing on a range of fronts, as being pluralist or double coded, 'one half modern the other as something linked with an attempt to communicate with both a wide public and a dedicated minority, mostly architects' (Jencks, 1993: 32). To Jencks (1980b), buildings comprise signifiers – or signs that can be read. This capacity to emit multiple and contradictory messages is what makes a building postmodern. From the early 1970s some buildings can be seen evoking 'dialogue' with other influences. One example is the AT&T building in New York designed by Philip Johnson (1984). It is a tall narrow skyscraper in the shape of a grandfather clock. This provides a dialogue with past influences from everyday lives, particularly for those who recall this form of clock. The double coding is seen in the interconnection between the decorative shape and the functional steel and glass office block (juxtaposition of contemporary skyscraper, antique clock).

Another example of dialoguing with the past is Frank Gehry's house (1978) at Santa Monica, California, a two-storied house within a house surrounded by a high corrugated metal wall. Dialogue can be seen between the old house, which can be seen through the new house, which wraps around it creating and sharing new spaces. Tension, disruption and the range of materials used provides contrast. Metal, plywood, glass and chain-link fencing, and the apparently ad hoc way in which they have been used, provide an impression of an unfinished dynamic work in progress. The old house maintains the smaller more closed

darker rooms of the past while the newer structure has glass walls and roof, allowing an inside-outside dimension.

Personification through the linking of humans and buildings provides another dimension which can be seen in Charles Jenck's Cape Cod 'face house' where a 'Medusa head' - a human-like head shape with the characteristics of a Medusa - has been placed 'on the head of the building' in order to evoke a more intense dialogue between humans and their places of residence (Jencks, 1980a: 12).

Art and film

The impact and sensory experience of the image on the viewer rather than an emphasis on the artist's meaning or someone else's interpretation provides the postmodern focus in art. Sensation and surface replace depth and interpretation. Participation by the audience becomes paramount. The role of the art reviewer also changes from centred critic dispensing judgements to one who acts as a channel – exposing the energy of the piece through the impact of the work on this particular person.

One form of art that has emerged from this tradition is Bricolage. The bricoleur (the artist/handyman) uses whatever materials are at hand - existing bits and pieces which are then put together to create something new. Examples of this approach include Alexander Calder's Cirque Calder (1927), an 'embellishment' of a toy circus. The animals (elephant and donkey) and clowns have been removed from the original setting and can now be animated by string attachments. Tim Hawkinson's Uberorgan (1998) also emphasises the ad hoc recycling aspect. The installation comprises large polyethylene air ducts linking to 13 large balloons, each with a different musical tone. Red nylon netting around the balloons constructs and reflects a bagpipe shape and switches send air through the structure to provide 'tunes'. A further emphasis on recycling to create new forms can be seen in Tom Fruin's (2002) quilt constructed from the different coloured plastic (drug) baggies left by cocaine addicts on the streets of New York.

Recycling of images can be seen in Andy Warhol's multiple and layered images both of Marilyn Monroe (1962) and of the Mona Lisa (1963) (thirty are better than one). In literature, Kathy Acker's (1986) re-writing of Cervantes' Don Quixote creates a new version of an older tale. In this version the main character is a female who, accompanied by dogs, sets out on an heroic journey to trace American history from inception to annihilation.

In film, a number of other postmodern influences can be seen. The aspect of time is evident in Blade Runner (Scott, 1982) where the Replicants live in an era of compressed time, a life-span of four years. Time is also evident in the incorporation of past influences which can be seen in clothing and the urban landscape. The acute technologisation of this world demonstrates a Foucauldian era of increasing surveillance, particularly through the mechanical

monitoring of pupil response to emotion, which is used to separate Replicants from humans. Hyper-reality and simulacra (the Replicants) abound, with the juxtaposition of humans and Replicants in a situation where Replicants (supposedly emotion free) are seen to be developing more emotional capacity than their human creators.

More recently *Run Lola Run* (Tykwer, 1999) has provided a different focus on time. The same 20-minute sequence of events is re-run three times in real time but with small but significant changes which lead to quite different outcomes in both the immediate and long term. The slight shifts in conditions have links with chaotic possibilities and a flash-forward technique indicates what the outcomes might be several/many years down the track.

Literature

In literature, irony and parody have become popular. Plots and characters are played with and ideas and relationships have been replayed in different situations and different eras. For example, the author John Fowles in The French Lieutenant's Woman (1969) used several postmodern techniques to confront the reader and to satirise the third-person narrative format he is using for this historical novel. During the text he provides the occasional, ironic authorvoiced commentary regarding how he might manipulate his characters, both clarifying and mocking his role as author. In Chapter 13 he incorporates past and present when he steps directly into the text and confronts the reader with regard to his difficulties in deciding on a suitable ending. He then forces reader participation by providing two endings, one happy and one sad for the reader to choose between. In the film adaptation of this book (1981) the past–present juxtaposition is taken further and layered. In the film, the leading characters play dual roles – the romantic pair in the depiction of the book film and a juxtaposed 'real' life unsuccessful relationship (off-screen, but also part of the film). A third layer emerges in their genuinely unattached relationships with each other in real life off-screen (but reported from time to time by other media). Thus the actors are simultaneously involved in three sets of different relationships emerging from different situations and different eras.

A more recent example of social construction, ambiguity and the playful proliferation of meanings can be found in *Mary Swann* by Carol Shields (1990). The text is divided into five sections, four of which reveal the contextual environments and subsequent perspectives of four people whose lives have in some way fleetingly come in contact with the work or person of the main character, Mary Swann, a poet long dead. The four perspectives are juxtaposed then amalgamated when all four meet at a symposium. The character of the invisible Mary Swann is constructed from the four accounts which in turn have been created by secondary sources, fantasy relationships, non-existent biographical material and insight gained in a brief one-hour meeting with one person just prior to Mary's death. Mary's continuing 'existence' becomes constructed by and interwoven with the lives of the four characters impacting significantly on

each. When all four come face to face for the first time, reflection, refraction and distortion construct new possibilities for the lives of all five characters.

The difficulty in working with language which has been overused and which has embedded cultural meanings is demonstrated by Umberto Eco (1984), who indicates the persistence of past influences and how an ironic interpretation can illuminate inherent paradoxes:

I think of the postmodern attitude as that of a man who loves a very cultivated woman and knows he cannot say to her, 'I love you madly', because he knows that she knows (and that she knows that he knows) that these words have already been written by Barbara Cartland. Still, there is a solution. He can say, 'As Barbara Cartland would put it, "I love you madly". At this point, having avoided false innocence, having said clearly that it is no longer possible to speak innocently, he will nevertheless have said what he wanted to say to the woman: that 'he loves her madly', but he loves her in an age of lost innocence. If the woman goes along with this, she will have received a declaration of love all the same. (Eco, 1984: 67-8)

KNOWLEDGE IN A POSTMODERN WORLD

The previous assumptions, developed under modernity, that the universe is ordered and completely knowable by observation (once sufficiently advanced tools have been developed) and that an objective reality exists, have given way to a view that it is chaotic and unknowable. As social constructions and questionable discourses are increasingly seen to dominate knowledge, meanings become recognised as individual creations, which require interpretation and negotiation. According to Richard Rorty (1979), interactive communication becomes the context in which knowledge is clarified. If all we can be sure we know are individual and situational constructions, then absolute knowledge becomes unattainable, and all knowledge becomes relative and subject to negotiation.

What will now count as knowledge? Lyotard (1979) and Madan Sarup (1993) indicate concerns that knowledge may become limited to that which can be digitised and stored in computers. Another concern is that with mass communication surface (superficial) information, such as that which is available by emails and surfing the Internet, will dominate global thinking. Lyotard has indicated that two forms of knowledge will become current: that which an individual needs in order to survive on a daily basis (social, political and cultural knowledge) and the knowledge skills (specific training, decision-making capacity) which are traded in the workforce for cash. The humanist ideal of a broad education and knowledge for its own sake will disappear.

Rejection of grand narratives

In The Postmodern Condition, Lyotard (1979: 37) has indicated that there is now 'Incredulity toward metanarratives' that 'the grand narrative has lost its credibility' regardless of whether these derived from speculative or emancipatory origins. Considerable scepticism should now be observed, particularly towards

the meta-narratives of religion and economic theory, which are seen as ahistorical epistemologies with no capacity to provide privileged discourses or universal explanations. These meta-narratives, says Lyotard, 'have suppressed differences in order to legitimate their own vision of reality' and to maintain established power bases. Ironic deconstruction of these narratives is viewed as one important way of removing their power (1979: 37).

Postmodernism favours 'mini-narratives', which provide explanations for small-scale situations located within particular contexts where no pretensions of abstract theory, universality or generalisability are involved. This position has sent researchers and theorists scurrying for cover and incited concerted attempts for various groups to refashion themselves in order to salvage the previously asserted universal explanatory power of well-loved positions. For example, Linda Nicholson (1990) argues that Feminism is not one large philosophical meta-narrative but instead is made up of a number of social theories and is empirical rather than philosophical and therefore can be seen as a quasimeta-narrative, thus ensuring some future continuity. In the discipline of Sociology, Mike Featherstone (1991) argues for an adapted discipline with a focus on continuing change in the social, artistic, intellectual and symbolic arenas of the world and T.R. Young (1991) posits a combination of postmodern and complex approaches through a focus on the documentation of system complexity based in fractals in the movement towards and away from chaos. The emphasis on the explanatory power of meta-narratives has been downplayed in favour of descriptive documentation of specific processes.

In Law, Margaret Davies (1996) has undertaken a postmodern analysis of positivist law, revealing the powerful relationships among the entities which comprise this system and unravelling the connection between the law, morality and ethics. Davies concludes that if all people did have equal rights under law, there would be no need for a legal system. In achieving such equality this system would no longer be needed and would self-destruct: 'The beginning of law is distinction, differentiation, delimitation, and is thus co-extensive with its own end. The ends of law ... are contained in a finite yet inexplicable and forceful beginning, which is continuously repeated at every stage of legal processes' (Davies, 1996: 153).

Truth and reality

Truth, reason and logic are also seen as being constructed within particular societies and cultures, providing illumination only of meanings within these specific cultural understandings. Realities are multiple. All are subject to endless formation, reformation, construction and reconstruction, including those of the self, family and the groups to which we are aligned. Individual interpretation is paramount, there is no objective reality, and truth and reality lie in the meanings we construe regarding our own subjective perceptions of our life experiences.

If truth can only be temporarily constructed through dialogue negotiated in interaction, then any claims to valid knowledge will also be subject to negotiation with those holding conflicting interpretations. The outcome of this can only be many truths. But are all people's knowledge claims equal? How will dialogue progress? Whose 'truths' will be enacted? Those with greater power will certainly want to insist that their claims to truth have greatest value and in addition can be imposed through legislation, greater media access, or force if necessary. Will all information be available for critique? Or will some still be controlled or distorted by the webs of power?

CERTAINTY

In another challenge, Complex systems and conceptions of Chaos have developed since the 1970s from the mathematical study of dynamic non-linear system behaviour. According to Alvin Toffler (Prigogine with Stengers, 1984: xv-xvi), there are few closed systems in the universe, most are open (exchanging energy and matter with other environments) and in a state of change, which varies from near to far-from equilibrium. In the latter, change involves fluctuations and the more complex the system the greater the fluctuations or potential instability. As instability increases, the system becomes so powerful it shatters the pre-existing organisation (bifurcates), creating change which by chance will either descend into chaos or resolve into a 'dissipative structure' a higher level of structure through self-organisation. Toffler cites the example of heat moving through a liquid, which at a certain point converts into a convection current, reorganising the liquid and the molecules to form themselves into hexagonal cells. In the resolution into dissipative structures an ongoing process of positive feedback occurs. An example of this positive feedback is where one factor of climate change towards warming is thought to lie in the shift of forests into high-latitude grasslands, which reduced the reflectivity of polar regions, thus increasing absorption of sunlight and leading to increased warming (Lashof et al., 1997).

The fluctuations caused by variations in initial conditions and leading to unpredictable behaviour and diverse outcomes were seen as challenging scientific capacity to make predictions of future states in aperiodic systems (where behaviour never repeats itself). Although deterministic laws enable predictions relating to system conditions, considerable precision is required. The outcome of acceptance of the above changes in science was that causality became replaced by probability, certainty by relativity and unity by quantum gaps. In addition, the advent of chaotic and unstable systems has allowed past and future to be viewed as no longer symmetrical (Prigogine, 1997). Ilya Prigogine also established a link between mathematical chaos and complex social systems which he saw as involving many bifurcations involving states of 'being and becoming [which] express two related aspects of reality' (Prigogine, 1997: 310).

RESEARCH

How does research fare under postmodernism? Is it realistic to assume that the research tools of the modern era (in particular reason and logic) are any longer appropriate to use in the search for 'truth' and 'reality' when these are now so much changed? If the assumption that truth is multifaceted, that reality is multiply constructed and that large-scale research which homogenises differences is no longer appropriate are accepted, we fall back on smaller-scale depth research with multiple data sources and individual narratives. These narratives must then be considered as providing only a narrow illumination of the chosen topic — a constructed reflection which is time and context bound, a momentary impression of 'truth', a truth limited by the constructions and interpretations of both researcher and researched, a truth which is fluid in its capacity to shift and change with further time and other contexts.

These implications have considerable impact on scientific research with its dependence on large-scale linear experiments, hypotheses, controlled or carefully manipulated variables and strict statistical procedures. These forms must now be questioned in terms of their appropriateness for use in open systems, replicability, and the generalisability and predictability of their findings. Instead, multiple hypotheses, lack of 'control', multiple system interaction, and the incorporation of descriptive and subjective information must now be considered. The quantitative researcher must become a more participatory being who acknowledges that his/her presence will impact on the setting and that her/his biases, design, selective questions etc., will be part of the construction and interpretation of findings. In qualitative research, emphasis shifts from large- to small-scale ethnography, a refocus on in-depth phenomenological investigation, on small, in-depth grounded theory studies of the Glasserian variety and participatory action research.

In both styles of research, such modern terminology as 'validity' and 'reliability' will give way to indicating how individually constructed views, which are relative to time and context, match or vary from others in the cultural/social group under investigation. No one view or group of views can be privileged over any others. All are 'valid'. Subjectivity becomes paramount, multiple identities are accepted and it is assumed that any individual will comprise multiple subjectivities and that these may shift, form and reform in unpredictable ways. Different contexts with different situations and different people allow different identities to be constructed or foregrounded. The researcher and the researched are no longer identifiably separate; they interweave their constructed meanings in a delicate dance of recognition and interpretation as the same narratives are told and re-told, presented and re-presented for the reader to become involved with.

Reflexivity

Reflexive subjectivity and the politics of position replace objectivity. Selfreflexivity involves a heightened awareness of the self in the process of knowledge creation, a clarification of how one's beliefs have been socially constructed (self-revelation) and how these values are impacting on interaction and data collection in the research setting. Styles of reflexivity relevant to postmodern research in the attempt to transcend differences include:

- Reflexivity as self-critique history, power, culture, class, experience and empathy.
- Reflexivity as process, emphasising diversity, connectedness and intertextuality.
- Subjectivist reflexivity, situated in epistemological positioning. (Adapted from Marcus, 1992: 5)

To these can be added:

• Reflexivity in the response of the researcher to the responses of the public to her/his constructed product.

In his text Interpretive Ethnography, Norman Denzin observes that ethnographic approaches in the twentieth century have passed through five broad historical moments: 'the traditional (1900 to World War 2), modernist (World War 2 to the mid 70's), blurred genres (1970-1986), crisis of representation (1986 to present), and the fifth moment' (90's) (Denzin, 1997: xi). The most reflective, the sixth moment, is seen as 'a period of intense reflection' where 'messy texts' are constructed from personal 'epiphanies' or strongly impacting life events presented in narrative form. These are multivoiced, mapping multiple discourses where 'no given interpretation is privileged' (Denzin, 1997: xvi).

Position of the author

The modernist critique of the centrality of the power of the author has led to a shift from a centred to a decentred position. The centred author of the modern era was viewed as an historical entity producing a 'work' and this view gave way under modernism to recognition that 'texts' are complex constructions. The postmodern emphasis has shifted again towards 'intertextuality' and the interaction of a range of constructed texts.

Various techniques can be observed being utilised in order to facilitate the decentring of the author in the postmodern text. Presenting views through the eyes of others who speak directly to the audience is one way, or the views of others can be incorporated into the views of the author who represents these through his/her own lens. As authority slips away, the dominant third-person voice of the author is replaced by the voices of participants, voices from other texts, or the 'i'/ 'I' voice of the author speaking in her/his own right. The author highlights both his/her biases and the sources of information, which have influenced textual construction by bringing the footnotes and secondary sources up into appropriate places in the body of the text. Any quotes are hyperlinked to the original (which can also be viewed as a hard-copy appendix)

so the reader can view the broader content and the intertextual nature of the document. Deconstruction of previously accepted maxims, overt recycling of ideas and a strong resistance to closure are evident in the decentring process. (Chapters 5 and 6 provide further discussion of the researcher's position.)

Position of the reader

Roland Barthes (1974: 16) indicated that 'rereading ... alone saves the text from repetition'. Each reading allows another interpretation to emerge as the reader interacts with the text, bringing her/his own experiences to bear in the construction of meaning. The reader is encouraged to use the text as one of many sources in the construction of a response or the creation of information. Thus responses will reflect other reading interactions and life experiences. The reader is invited to participate, to interact, to interpret and to respond to the information displayed. The reader responds to this in unpredictable ways, which are part of the ongoing transformation of the text.

Open readings (Eco, 1979) are author-based approaches which utilise semantic techniques to encourage the widest possible reading of the text. Gaps and dislocations, paradox and complexity ensure that the reader's role is an active one. Each reader will take away something different from the text and further interpretations and deconstructions will occur in an ongoing manner. The formal incorporation of readers' comments within new editions of a text can emphasise the interactive construction and ongoing transformation of this text in the generation of new meanings.

Language

The modernist idea that signifiers (signs/words) always point to signifieds (the thing/meaning or aspect of something) and that reality can be found in signifieds gives way in postmodernism to the notion that there are only signifiers which do not represent or necessarily connect to a consistent reality. So although words remain, the things they originally referred to are recognised as fragmented and superficial, and in a state of transformation. The next chapter pursues these issues in more detail.

CRITIQUES OF POSTMODERNISM

Two extremes can be seen. There are those who take an optimistic view of the possibilities and challenges of postmodernism (like this author) and those who take a more pessimistic view of its existence and potential outcomes. The optimists construct and deconstruct realities with enthusiasm, embrace pluralism, leap over boundaries and enjoy playing with parody and irony. The pessimists see nihilism as the most likely future. They experience alienation and extreme scepticism, view the montages of continuing social and cultural construction as

kitsch and see the death of the subject and the lack of any certainty, precluding an optimistic outcome.

In between these two extremes are those who can see new possibilities but have some ongoing concerns, particularly with regard to the rejection of rationality and truth and the relegation of science to a 'social construct' or narrative. Another concern includes the rejection of objectivity. Roy D'Andrade (1995) asserts that objectivity is neither dehumanising nor impossible. He states, 'Science works not because it produces unbiased accounts but because its accounts are objective enough to be proved or disproved no matter what anyone wants to be true' (D'Andrade, 1995: 404).

The 'liquidation of all referentials' (Baudrillard, 1988: 166-84) and decentring raises concerns about the impact of the absence of any meaningful boundaries, morals and codes. Democracy is at risk - the moves away from state intervention could lead to out-of-control capitalism based on the 'free' market. Homogenisation of products, languages and values may well lead to boring conformity and a lack of uniqueness and individuality. Globalisation may be inevitable but what will be the impact on the central characteristics of small cultures? Who benefits most in this situation? Possibly only a few powerful interests. Will free market capitalism control everything? Will democracy become a meaningless term? And will small local groups become inextricably caught up in process - with no real power and no autonomy?

Pauline Rosenau has indicated that postmodernism contains some inherent contradictions such as:

- The rejection of grand narratives and the taking of a position against theorybuilding could in itself be constructed as a theoretical position.
- The rejection of modern criteria for assessing frameworks does not mean that postmodernists can then argue that there are no valid criteria for judging such positions.
- The reaction against reason, logic and rationality has not prevented postmodernists from utilising these tools for their own analysis, particularly in the form of deconstructive techniques.
- A focus on marginal activity is in itself an evaluative trend.
- The focus on intertextuality has not prevented postmodernists treating some texts in isolation.
- The lack of privileging of any statements has not prevented postmodernists from presenting their findings as implicitly better than some others.
- Although the focus is on the problematic nature of truth and the relative nature of language, few postmodernists have relinquished all claims to truth and meaning. (Adapted from Rosenau, 1992: 176-80)

And so the contentious nature of postmodernism continues...

Structuralism and Poststructuralism

This chapter explores what comprises structuralism and the criticisms of this mode of thought which formed the basis for poststructuralism. The two major research aspects of poststructuralism – discourse and deconstruction – are examined in some detail.

STRUCTURALISM

In order to understand poststructuralism, a brief exploration of its origins in structuralism is useful.

General principles

Structuralism became a dominant mode of thought in France in the 1960s. The ideas that can be termed structuralist sought to describe the world in terms of systems of centralised logic and formal structures that could be accessed through processes of scientific reason. Individual objects were viewed as being part of a greater whole. Psychologists concentrated on the structures of the mind and sociologists emphasised the societal institutions which formed the individual. Nothing was seen to be of itself. For example, a particular building was seen less as an individual entity and more as a representative of an architectural style based at a particular point in time in a specific culture and reflecting identifiable values. Similarly, people become seen as objects/products with the self and the unconscious being classified and constructed by their webs of cultural networks, perceptions and values. This allowed people to be seen largely as mechanical organisms produced by systems, and with defined needs, predictable behaviours and actions. Thus the underlying forms, structures and processes of construction and transmission of meaning, rather than the content, became the main focus.

Language, signs and meaning

Under structuralism, language was seen as a key process in the creation and communication of meaning. It was viewed as a self-referential system – all

perceptions and understandings were seen as being framed by words. Meaning lay within the text, a coherent and unified structure derived from pattern and order, and analysis simply involved uncovering these patterns and ascertaining their meaning through the particular order in which they have been constructed.

Much of this view derived from the early twentieth-century work of a Swiss linguist, Ferdinand de Saussure (1857-1913), who, in viewing language as a system of signs and codes, sought out the deep structures, the rules and conventions which enable a language to operate at a particular point in time. He saw individual words as arbitrary signs with meaning only in relation to other signs in the cultural system. Within each rule-based language system (langue) the linguistic sign is the spoken or written word (the signifier) which attributes meaning to objects, concepts and ideas (the signified – the mental picture produced by the signifier) in the construction of reality. For example, the word 'rain' produces a mental image of rain falling. We recognise the meaning of the word rain not from the word in itself but from its difference from other similar sounding words, such as 'ran' and 'lane', which produce different mental pictures. In comprehending meaning we also utilise the difference between rain and similar concepts such as 'hail, 'sleet' and 'snow', as well as opposing concepts such as 'drought'. Meaning is seen as being structured through binary opposites. As de Saussure said: 'in the language itself there are only differences, and no positive terms ... the essential function of a language as an institution is precisely to maintain these series of differences in parallel ... the language itself is a form, not a substance' (1916: 166).

Acceptance of the assumption that through signifiers and signifieds, reality is socially constructed and that any utterance (parole) is meaningful only in relation to other words within the larger cultural system in which all of these have been constructed, became widespread. Binary oppositions were sought to clarify meaning and were seen to provide a localising (within specific cultures) focus and the interrelationships among signs were viewed as crucial in the analysis of language. Some signs were seen as embodying broader cultural meanings and were termed 'myths' - these were viewed as having the capacity to operate as signifiers at a second level of signification or connotation (Barthes, 1957). For example, a Ferrari sports car is a mythic signifier of wealth and a particular lifestyle. De Saussure called the structural analysis of the meanings of signs and codes of textual and material culture in terms of underlying structures, 'semiology' (1907-11, 1983) and Roland Barthes (1964) continued this terminology while Charles Pierce called it 'semiotics' (1894/1998).

Texts

The focus on signs, signifiers, codes (the frameworks in which signs make sense), and order and meaning through repetitions of patterned relationships, enabled texts and cultures to be 'read' using semiotic or other structural forms

of analysis. Here construction of meaning, representation of reality and the privileging of binary opposites are integral. Everything then became 'text', both the author and the reader are also viewed as social constructions, and the ways of presenting 'reality' within 'cultures' was meticulously documented. In literature, reading carries with it certain conventions and expectations – words, style of presentation, type of narrative etc., to which the reader responds in the construction of the story (*parole*). Within structuralism, however, each literary work is further seen as part of the broader institution of literature (*langue*) which is also intricately intertwined in the cultural system.

Structuralist positions

Key figures in various disciplines became very involved in structuralism. In Psychology, Jacques Lacan used the analogy of language and the binary oppositions of the 'subject' and 'other' to examine the development of the structure of the unconscious (Lacan, 1957: 36–7). He suggested that the 'I' was broader than the centred 'ego' of Freud and that the unconscious was fragmented and dispersed. This focus on deep rather than surface structures has similarities with modernity and in particular the works of Freud and Marx, with their de-emphasis on individuals as powerful agents and their focus on unconscious motivation and the power of societal structures in constraining action.

Roland Barthes, who was a literary critic, outlined the process of analysis of 'objects' in terms of a search for their functioning rules: 'The goal of all structuralist activity, whether reflexive or poetic, is to reconstruct an "object" in such a way as to manifest thereby the rules of functioning (the "functions") of this object. ... Structural man [sic] takes the real, decomposes it, then recomposes it' (Barthes, 1972: 214–15).

In the construction of myths, the anthropologist, Claude Lévi-Strauss, personified the elements of the process into two intellectual approaches: the 'bricoleur' (the odd-job man mentioned earlier, who re-uses the bits and pieces at his disposal in devious and creative ways) and the engineer (who can access scientific thought, concepts and theories). But despite the different approaches, both are constrained by the need to order and structure in the creation of knowledge. The scientist 'is no more able than the "bricoleur" to do whatever he wishes when he is presented with a given task. He too has to begin by making a catalogue of a previously determined set consisting of theoretical and practical knowledge, of technical means, which restrict the possible solutions' (Lévi-Strauss, 1962/1966: 19).

Lévi-Strauss used binary oppositions to identify the underlying structures of phenomena and to track their interconnections with other parts of the culture or to compare systems of 'myth' across cultures. For example, he investigated the meanings attached to raw or cooked food across a number of tribal cultural groups. He wrote: 'That which constitutes a society and a culture is a universal code that runs through the culture and the institutional and behavioural

forms of that society. ... This universal cultural system objectively exists, structuring mental processes as well as social' (Lévi-Strauss, 1963: 202-12).

However, this view of the usefulness of some signs in determining universal cultural values would have to be questioned. Returning to the example of the Ferarri sports car, this mythic signifier would have minimal use, meaning and quite different value to the pygmies of the Congo forests in comparison to the value and meaning it might hold for the elite of Milan. This focus on the universality and centrality of structures and signs even across cultures also tended to diminish the role of history in constructing and influencing current values and behaviours.

CRITICISMS OF STRUCTURALISM

In developing arguments regarding the limitations of structuralism, and in a similar process to that between modernity and postmodernity, many authors were actually shifting the field forward and at the same time were providing the foundations of what would later be termed poststructuralism.

Is there meaning beyond the text?

Jacques Derrida challenged the notion from de Saussure that meaning was to be found in the difference between particular words and other concepts in the language system by emphasising both the simultaneous referral and deferral of meaning, and that language and interpretation were crucial in understanding and making sense of human experiences. He supported this view in his statement 'There is nothing outside of the text [there is no outside-text, Il n'y a pas de hors-texte]' (Derrida, 1976: 158). This meant that textual signifiers did not relate to any clear, centred 'reality' or 'signified' outside the text; they simply slid away towards multiple possibilities.

Roland Barthes also asserted that structural analysis could not seek meaning beyond the text itself: "What takes place" in a narrative is from the referential (reality) point of view literally nothing; "what happens" is language alone, the adventure of language, the unceasing celebration of its coming' (Barthes, 1977b: 124). In his essay 'Death of the author', Barthes suggested that the author did not have total control of textual meaning and had no greater insight into the text than the reader. This allowed the notion of free play of meanings to be developed but also emphasised the impossibility of originality under structuralism where the text becomes a product of the system and any possibility of uniqueness is lost:

We know now that a text is not a line of words releasing a single 'theological' meaning (the 'message' of the Author-God) but a multidimensional space in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centres of culture. (Barthes, 1977b: 146)

Jean Baudrillard (1993) also emphasised the death of the possibility of originality in the recycling of images by referring to Andy Warhol's (1962) repeated identical paintings of Marilyn Monroe's face, and Jacques Derrida shared Frederick Nietzche's critique of the level to which 'truth' had descended under structuralism:

What, then, is truth? A mobile army of metaphors, metonyms, and anthropomorphisms – in short, a sum of human relations which have been enhanced, transposed, and embellished poetically and rhetorically, and which after long use seem firm, canonical, and obligatory to a people: truths are illusions about which one has forgotten that this is what they are; metaphors which are worn out and without sensuous power; coins which have lost their pictures and now matter only as metal, no longer as coins. (Neitzche, 1911/1954: 46–7, quoted by Spivak in the preface to Derrida, 1976: xxii)

The problems of binary opposites

Derrida (1976) pointed out that when deconstruction of texts is utilised, binary opposites (each of which always contains traces of the opposing entity) collapse, articulating the difference between space and time and making nonsense of de Saussure's precise systems of meaning (for example, the opposites 'male' and 'female' have both linguistic and biological traces). Luce Irigaray (1985) also strongly critiqued the limited social frames which binary opposites imposed, in particular the binary opposites of penis/vagina. She notes that this privileging of the male organ has led to a phallocentric orientation for all sexuality. Her concern lies with female sexuality and gender, which are seen to have been rendered invisible, except through the male 'gaze' or dissolved into reproductive activities. 'There is only one sex, the masculine, that elaborates itself in and through the production of the 'Other' (lrigaray, 1985: 18). Irigaray suggests that removal of this binary opposition is essential in order to shift female dependence on male versions of their sexuality. The subsequent reduction of the focus on distant male 'vision', substituting instead female 'touch' -'woman takes pleasure more from touching than from looking' (1985: 26) would allow for a physically closer form of sexuality, greater fluidity of language and multiple interpretations.

Signs and signifiers and the problem of desire

Jacques Lacan, like Derrida, emphasised relations between signifiers (rather than signifier and signified like de Sassaure) and further added into the debate the concept of desire through alleging that the sense of self 'I' is constructed through the symbols of language. Without language we cannot perceive the difference between others and ourselves. Thus, language develops around a lack, a separation from the other which creates desire (desire of the Other – the arena which all else relates to or gains relevance from). Lacan sees the unconscious as being structured like a language and made up of signifiers.

Because of this, signifiers have no fixed identity or reference points. They shift and change continuously. Desire becomes insatiable, comprising difference and lack - 'an element necessarily lacking, unsatisfied, impossible, misconstrued'. (Lacan, 1981: 154). The self tries to create meaning in order to make sense of individual being.

Julia Kristeva similarly criticised linguistics as having 'no way of apprehending anything in language which belongs not with the social contract but with play, pleasure or desire' (Kristeva, 1986: 26; see also Kristeva, 1980). The socially framed 'speaking subject' (a person capable of both conscious and unconscious motivation) is involved in the creation of two levels of meaning: semiotic (involving the complexities of internal individual processing) and symbolic (based more in signs). Kristeva suggested another form of analysis, semanalysis (a combination of psychoanalysis and semiology), which utilises signifying processes rather than sign systems to critique meaning in terms of its elements and laws and to allow the impact of the signifying system on the individual to be ascertained in terms of socio-biophysiological constraints. Here she is seeking the movement of unconscious desire into language: 'the language of dreams and the unconscious ... is not identical to la langue studied by linguistics; it is, however, made in this langue. ... At once ultralinguistic and supralinguistic, or translinguistic' (Kristeva, 1989: 272).

The position of the individual

The contentions surrounding 'desire' and the movement beyond the language system can also be seen in the work of the French philosopher Gilles Deleuze and the psychoanalyst Felix Guattari, who also criticised psychoanalysis on the grounds that it had become stuck in a limited Oedipal frame which prevented recognition that individuals are resistant, fragmented, constantly shifting among multiple positions and assemblages and not solely locked into familial and predictable roles.

We cannot say that psychoanalysis is very innovative in this respect: it continues to ask its questions and develop its interpretations from the depths of the Oedipal triangle as its basic perspective, even though today it is acutely aware that this frame of reference is not at all adequate to explain so-called psychotic phenomena. (Deleuze and Guattari, 1977: 14)

In moving towards an active rather than a passive individual, Deleuze and Guattari further criticised psychoanalysis for its view that 'desire' was psychosymbolic and negative - always seeking something that is absent. They reconceived desire as creative, active involvement in the world. The process by which the self is constructed and subjectivity created involves embodiment and resistance (termed nomadology). The resistant and reflective self (termed the body without organs), in taking in the social environment, counteracts the possible domination (territorialisation) of the self by powerful social forces. The self is continually being constructed and deconstructed through further involvement in and the incorporation of aspects of other texts and social contexts (intertextuality), and thus individual styles shift and change.

Territorialisation is seen as an active process involving creatively taking in new ideas (deterritorialisation) to allow new connections to be formed (reterritorialisation) in the production of another form of the body without organs. Building on these ideas, Deleuze and Guattari (1977) critiqued the view posited by Marx that capitalism is a powerfully integrated hierarchical system dependant for its functioning on cohesive and clearly delineated class and familial groupings, by suggesting that this system is actually schizophrenic in operation. In order to maximise profits, the societal structures of the family, church and state have been deterritorialised and reterritorialised into new groupings, for example, families shifted from home-based production to separate roles; men left farms for factories and women stayed to fulfil home-based needs.

To make greater sense of these processes Deleuze and Guattari proposed a new form of analysis, 'Schizoanalysis', which is considerably more flexible in orientation and which includes resistance to and the overthrowing of explanations which purport to be all-encompassing. They also introduced the concept 'rhizomatic' to explain the infinite nature of change:

The rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even nonsign states. ... It is comprised not of units but of dimensions, or rather directions in motion. It has neither beginning nor end, but always a middle (milieu) from which it grows and which it overspills. ... It has multiple entranceways and exits and its own lines of flight. (Deleuze and Guattari, 1987: 21)

This notion of the rhizome, capable of constant adaptation, shifted the field light years away from the previous finite, vertical hierarchies.

The issue of broader cultural concepts

Michel Foucault (1972) introduced a broader political perspective into the study of texts and countered the flexibility of Deleuze and Guattari by re-emphasising the arguments regarding the construction and control of people via signs and symbols. He took a more negative and bounded view of self construction within which he sought to expose the history of claims to truth by indicating that there were identifiable and underlying structures underpinning the human condition which could be observed objectively. He challenged the documentation of events as single, value free, disinterested narratives, emphasising instead the historian's political and cultural interpretations in writing and rewriting for different audiences. He asserted that any event requires multiple narratives in order to approach the many perspectives through which it has been constructed/experienced and that the discourses of power must be traced

back in time and exposed so that future patterns can become clearer. Foucault exposed the manner in which the state had created particular powerful discourses such as 'madness' and 'sexuality' and how through sovereign and disciplinary power and using the metaphor of the arterial system, these ideas had filtered down to the (largely unresisting) population and had become the basis of their understandings and explanations (written and inscribed on their bodies). In this situation, he demonstrated that language would not necessarily be reflecting reality and the location of 'truth' could become very controversial. In tracing the discourses, hidden or buried truths are not sought; the search itself is an active process of detection and creation.

Foucault also emphasised that the death of the author left this position open to other possibilities, such as the emergence of other 'voices'. He utilises Nietzsche's historiographical approach – genealogy – to access knowledge (the hidden voices) which has not been recorded, in order to expose the hidden power plays, the memories and knowledge that have been covered over in the maintenance of powerful interests by dominant institutions. 'Genealogy ... seeks to re-establish the various forms of subjection: not the anticipatory power of meaning, but the hazardous play of dominations' (Foucault, 1984b: 83). 'The search is directed to "that which was already there", the image of a primordial truth fully adequate to its nature, and it necessitates the removal of every mask to ultimately disclose an original identity' (Foucault, 1984a: 78).

Despite these challenges, Foucault still tends to fall back on the underlying structuralist dichotomies 'powerful' and 'powerless' to frame discourses and there is an in-built assumption that the discursive practices associated with particular discourses may become governed by rules. The influences of structuralism have obviously been pervasive.

TRANSITION BETWEEN STRUCTURALISM AND POSTSTRUCTURALISM

Many of the above critics came from the structuralist tradition and have been responsible not only for initiating the move into poststructuralism, but also for the continuity and linking of this newer approach with that of structuralism. As time passed, the overall focus shifted from the structures which generate meaning, to documenting how the generative capacity provided by the framing and content of the texts themselves was displaced by the possibility of an endless deferral of meaning among a range of signifiers.

POSTSTRUCTURALISM

Two arenas of poststructuralism currently dominate the field: Michael Foucault and 'discourse' and Jacques Derrida and 'deconstruction'. Neither Foucault nor Derrida have provided precise instructions as to how the processes of analysing discourse or undertaking deconstruction might be carried out in research, but they have left some strong indications of the general principles and processes that could be followed.

Discourse

The notion of discourse comes primarily from Foucault, who was concerned with the ways in which knowledge had been created and sustained in cultures. In particular, how had it been developed and maintained? In whose best interests? And in creating the discourse, had powerful interests obscured the voices, protests or challenges put up by others with an interest in this piece of knowledge? Discourses are 'practices that systematically form the objects of which they speak. ... Discourses are not about objects; they do not identify objects, they constitute them and in the practice of doing so conceal their own invention' (Foucault, 1972: 49).

Discourses are the spoken or written practices or visual representations which characterise a topic, an era or a cultural practice. They dictate meaning and upon analysis may indicate the individuals or groups whose views have dominated at a particular point in time. Once a discourse has been established, Foucault suggests that it disperses throughout society. He uses the metaphor of the body to represent society in order to show discourses filtering through the arterial and venous systems of the populace and then being fed back in a cyclical process through the capillaries, enabling maintenance and reinforcement. The binary opposites of structuralism, in particular 'good' and 'evil', serve to persuade the population that truth is singular and notions of 'confession' serve as a further micro-form of control and confirm individual alignment alongside the dominant discourses which control and constrain thoughts and actions. Meaning and myth then become the products of power relations.

Power is a key aspect of discourse. In his books on madness, sexuality, prisons and medical clinics, Foucault traces the development and institutionalised control of the population both physically and mentally through technologies of power. The interlinking of sovereign power with dominant modes of disciplinary power is seen as being managed through the 'normalisation' of particular discourses through surveillance and monitoring, and these are enforced by police, warders and the courts. At the micro-level, normalisation can be observed through the image of the Panopticon, a model prison designed by Jeremy Bentham in the nineteenth century, which was never actually built. Foucault used the Panopticon as a metaphor for the articulation of powerful discourses and the technologies of their maintenance in society. The Panopticon is a circular structure with glass windows between each cell and a central watchtower and from each cell to the outside – to let light through. The wardens can observe activity in each cell from the watchtower, but the prisoner cannot distinguish when he is actually being observed. Each cell becomes a

stage and the performance is a public one for those under surveillance. All this anticipated observation is said to produce self-monitoring - the most effective form of discipline maintenance and one for which, once established, minimal observation by 'watchers' is required.

Making sense of this complex process presents difficulties. In The Order of Things (1970), Foucault has suggested that in constructing his discourse on the history of 'truth' he is avoiding the solid foundations of previously accepted discourses by endeavouring to decentre information so that no central argument is constructed or privileged. He expands this in the Archaeology of Knowledge (1972) when he states of the discourse of truth that 'it does not set out to be a recollection of the original or a memory of the truth. On the contrary, its task is to make differences ... it is continually making differentiations, it is a diagnosis' (1972: 205-6).

The process of diagnosis is to get inside the text and to track the historical processes by which it has been constructed and the influences which have constituted its production. 'History is that which transforms documents into monuments. In that area where, in the past, history deciphered the traces left by men, it now deploys a mass of elements that have to be grouped, made relevant, placed in relation to one another to form totalities' (Foucault, 1972: 7). So the process now becomes like an archeological dig, a searching among the traces left, now erased 'like a face drawn in sand at the edge of the sea' (Foucault, 1970: 387), seeing how material remains have become grouped into meaningful entities, comparing them in order to decipher the gaps, and locating the interruptions or discontinuities that may indicate missing pieces, erased voices or obliterated events which may have occurred between 'epistemes' (major systems of knowledge documented over time).

Foucault further indicated that: 'Archaeology tries to define not the thoughts, representations, images, themes, preoccupations that are concealed or revealed in discourses; but those discourses themselves, those discourses as practices obeying certain rules' (1972: 138). In the archeological dig of discourse analysis the artifacts found comprise a set of statements which can transform and change over time with new knowledge, exclusion of challenges, and maintenance of powerful interests. Notions of discontinuity and dispersion underpin this process. Unity is unlikely to be a feature of any discourse so the task of the researcher is to discover the rules which define the discourse, not to interpret it, but to identify the limits to unity and forms of disunity which hold groups of discursive statements in a particular pattern. As with chaos, there will be patterns of order within disorder and disorder within order, and these will flow into one another shifting and changing as a result of chance and forces from within and without.

According to Foucault (1972), the basic element of discourse analysis is the statement. This is more than just a sentence, it must comprise the following aspects: first, some identifiable person who is making the statement; secondly, the statement must be part of an arena where other statements can be found (e.g. a domain such as medicine or politics, which will have had an impact on

delimiting, excluding, appropriating or controlling the discourse); and thirdly, the statement must be meaningfully related (relevant) to the issues around which the discourse has developed.

Discursive regularities (objects forms, concepts, statements and themes relating to a particular issue) are the aspects which constitute a discourse and the conceptual organisation of the discourse is made up of forms of succession (particular arguments), forms of co-existence (relations among all statements – accepted or excluded), and procedures of intervention (the rewriting and ordering of information into systems of ideas, usually by powerful individuals or groups). These aspects occur within a particular historical and social context, which provides meaning.

Discourse analysis is a way of questioning in both social and scientific areas, ways of thinking, writing and speaking about particular topics in order to discover the rules, assumptions, ways of seeing, hidden motivations, conditions for development and change, and how and why these changes occurred or were resisted. In short, how a discourse works (ordering and exclusion) and how it developed (historical formation and powerful groups).

Guidelines for discourse analysis

From this, two areas need to be addressed in undertaking a discourse analysis:

- 1. The outside looking in: historical development and tracking of a discourse over time, identifying the players and the social, economic and political climate which fostered its development. Locating challenges and seeing what happened to these where did they come from? Why? And if they were rejected, how were they dispensed with? And by whom? For what purpose?
- The inside looking out: to identify constituents in terms of statements, themes, arguments, traces of challenges, traces of ideas which changed directions. Seeking disunity and the limits to the discourse, monitoring dispersion and tracking discontinuity.

Deborah Lupton and Simon Chapman (1995) have investigated the discourses on diet, cholesterol control and heart disease in the press and among the lay public. The historical context of the identified discourses was presented in the literature review and the data base was formed by collection of eight months of press clippings in national and regional newspapers. This was followed by 12 semi-structured focus groups, which sought to understand how the general public was making sense of the conflicting information which the press constantly reported. The concept of risk and risky behaviour underpinned the findings and the location of power resided in two competing locations – medicine and individual life experience.

In another study Julie Hepworth (1999) explored medical documentation from the late nineteenth century, in addition to interviews with current health professionals, to expose five discourses in the medicalisation of anorexia nervosa: femininity (women as emotional and deviant psychological, mental and reproductive entities); medical (the search for scientific organic causes); clinical (the prescriptive treatment and the (moral) quality of relationships); discovery (the link between medicine and psychiatry); and hysteria (the link between femininity and the psycho-medical framework through the notion of hysteria). The power of medicine in the maintenance of the enduring discourse of femininity (irrational female behaviour) was exposed.

Deconstruction

One of the major aspects of poststructuralism, the notion of deconstruction of the text through the critique of its structural integrity, was introduced by Jacques Derrida in Of Grammatology (1976). The word 'deconstruction' itself has been subject to different forms of interpretation but the meanings as Derrida understood them are clarified in a 'Letter to a Japanese friend' (1985) where he explains the orientation of this term by utilising several dictionary definitions: 'Deconstruction: action of deconstructing. ... Disarranging the construction of words in a sentence. Of deconstruction, common way of saying construction. ... To disassemble the parts of a whole. ... To deconstruct verse, rendering it, by the suppression of meter, similar to prose' (Derrida, 1985: 1–5).

Thus the deconstruction of text appears to be a positive and a negative process of change although it has been argued by some that it is more a destructive process (Habermas, 1987: 161). However, '[r]ather than destroying, it was also necessary to understand how an "ensemble" was constituted and to reconstruct it to this end' (Derrida, 1985: 1-5). Deconstruction is less a method or stage-by-stage approach and more a natural unravelling which the text invites by presenting this opportunity within its own structure. The word 'deconstruction', like all words, is not a unity in itself but is also subject to deconstruction. Its value is relative to the other words, sentences and concepts, against which it appears in context and to which it is linked.

Most systems constructed during the era of structuralism were seen as centred and self-referential and all meaning emanated and referred back to this centre. According to Derrida 'the center is, paradoxically, within the structure and outside it' (1978b: 279), allowing 'the freeplay of its elements inside the total form' (1978b: 278-9). Derrida talks of the hidden areas inside systems, which can be accessed by various approaches. He uses the analogy of his own veins - their internal action can be viewed by various pieces of medical imaging equipment but if cut they reveal their action outside the body - an action which will display the workings of the circulatory system (the pumping of blood), but can lead to loss of the original form or death (Derrida online: http://www.hydra.umn.edu/derrida/content.html, accessed 20/08/02).

Centred systems are usually created and maintained on the basis of binary oppositions for example 'God' and the 'Devil', 'Good' and 'Evil', etc., where

one reflects a positive value and the other a negative value in society. These central concepts provide meaning and the sense of something meaningful, which exists beyond the system – something indefinable – the 'constant of a presence ... (essence, existence, substance, subject) alatheia transcendentality, consciousness or conscience, God, man, and so forth' (Derrida, 1976: xxi). For Derrida, hierarchical oppositions cannot be absolutes as each contains a trace of the opposite term. Derrida uses the binary opposition of 'presence' and 'absence' to clarify this and what he termed 'logocentrism' – the privileging of speech (presence) over writing (absence of presence).

In Greek, logos means speech and presence connotes the power of the word as the foundation of knowledge (perhaps 'god'-given), existing of itself and linked to reason and truth. The presence of a body and the act of speaking words have been seen as a more transparent (the speaker, the listener and the utterance are all present), and therefore superior, process, closer to producing true meaning and beyond the possible distortion of the process of writing which is supplementary (addition/substitution to speech involving derived and reconstructed representations of the original spoken thoughts). However, to Derrida, these differences are an illusion because presence and absence cannot be separated easily. Presence is only meaningful in the context of the notion of absence and because in each present there is a trace – a sign left by the absent thing. The concept of 'différance' (Derrida, 1972/1982) which has two aspects: difference (to differ, linked to identity) and deference (time and the constant deferral of meaning) served to break down the power of such oppositions. Every sign is a signifier and every signifier is linked to other signifiers in a never-ending process.

The overall purpose of deconstruction is to erase the boundaries of these binary oppositions in order to illuminate the similarities and interdependency between each oppositional pair. This is done by demonstrating that each member of the pair is not a complete opposite, that there are elements of one within the other (e.g. male and female), to show the dependency of the positive member of the pair on the negative member and to demonstrate how the marginalisation of the negative member has in fact centred it. This exposure of societal values causes rigid boundaries to blur and collapse and the oppositions to become meaningless.

Thus both deconstruction (boundary removal) and construction – putting into free play the relationships among signs and allowing new possibilities of meaning to emerge – have occurred. Rather than developing new binary oppositions, conclusions become infinite with the constant referral/deferral of multiple interpretations of meaning. Sometimes a 'hinge' (*la brisure* – an internal device such as double meaning, trace, statement) can break open the text and put *différance* into play (Derrida, 1976: 65). Many meanings thread together to make up the discourses within any one text. With deconstruction, one thread leads to another and to another and slowly the text unravels. Roland Barthes has said that '[i]n the multiplicity of writing, everything is to be *disentangled*,

nothing deciphered; the structure can then be followed ("run" like the thread of a stocking)' (Barthes, 1977b: 147).

Each sign carries traces of references to many other signs in an interconnected network of possibilities. Language and meaning depend on 'différance' (from other signs) and deferral of meanings. Interpretations are thus intertextual, differing among the author, the text and the viewer, as well as constantly shifting and subject to revision. The viewer is empowered and both viewer and creator are part of the 'jubilant multiplicity of self-references' (Derrida, 1984: 174). Closure or finite meanings are impossible. Fragmentation and pluralism dominate.

Deconstruction: indications of process

Derrida is quite clear that there is danger in formalising a method of deconstruction:

I would say that deconstruction loses nothing from admitting that it is impossible; ... For a deconstructive operation possibility would rather be a danger, the danger of becoming an available set of rule-governed procedures, methods, accessible practices. Deconstruction is inventive or it is nothing at all; it does not settle for methodological procedures, it opens up a passageway, it marches ahead and marks a trail; its writing is not only performative, it produces rules - other conventions. ... Its process involves an affirmation, this latter being linked to the coming [venir] in event, advent, invention. (Derrida, 1992: 312-13)

Although the disentangling or unravelling process appears fairly simple as a visual construct, when faced with a complex text the actual process of locating a key thread could be fairly daunting. Rosenau (1992) has collated a number of principles from various sources and these have been expanded in an attempt to indicate some suggestions for guiding the procedure. First, take the position of accepting nothing and rejecting nothing in a critical and sceptical reading, the overall outcome of which should be the production of an understanding of the text's structure, its content and its omissions.

In the seeking of threads to rupture the text:

- allow the arguments of the text to challenge each other;
- identify any contradictions and inconsistencies (ideas, metaphors, etc.);
- locate any generalisations and use these to undermine any principles used;
- place argument against argument;
- seek out and disentangle the complexities of all dichotomies, binary oppositions and hierarchies:
- try reading against the grain of the document to discover alternative readings;
- seek out links with other texts.

Secondly, examine the margins and identify marginalised voices and concealed information. Thirdly, in writing up:

- write so as to allow as many interpretations as feasible;
- avoid making any absolute statements;
- stay close to the language of the text;
- cultivate ambiguity and ambivalence;
- remember that this is a transitional not a finite text that you are creating it should resist closure. (Adapted from Rosenau, 1992: 120–1)

Researchers who have attempted deconstruction have employed various approaches, such as placing texts against each other in order to trouble them, interrupting texts in an attempt to prevent them closing and avoiding other interpretations, and by creating another structure to allow a freer play of language.

David Boje (2000) has attempted the first of these. In dual vertical columns he placed an article from *Popular Mechanics* against researcher-collated reports of community action and celebration. This juxtaposition allows the violence of urban culture to be magnified and the joyousness of community life to be put into hard relief against the aggression of police, dislodging threads for unravelling. An example of the second approach has involved placing several different sets of data in three columns (Karen Fox, 1996) to situate the juxtaposition of voices, including that of the author, providing the reader with a complexity of interacting threads to pursue. Both these examples have been discussed further in Chapter 7.

Alan Aycock (1993) has attempted a new structure to facilitate a preliminary deconstruction of the term 'play' with particular reference to the Fort-da game described by Freud and as played by his young grandson. This game involved throwing a wooden spool attached to a piece of string and retrieving it to the accompaniment of 'ooo' and 'ah' sounds. Derrida (1987: 257–409) had previously used this game as a trope (metaphor) for Freud's writings – how he sends away and retrieves his arguments. He also uses it as a trope for love, love letters, work, and a commentary on the ideas of other philosophers. Aycock applies Derrida's approach to the notion of 'Fort-da' to five different forms of chess which he has observed: casual play, tournament play, correspondence play, computer play, and skittles, in all cases focusing on data gathered relating to play talk, structures of play and player self-awareness. This process appears to weaken the centrality of 'play', identifies the traces of absence and picks up on difference and deferral of meaning.

POSTSTRUCTURALISM: BASIC CONCEPTS

Let us sum up some of the ideas of poststructuralism in terms of various concepts:

Language There is an acceptance that our major mode of communication is through language but there is a rejection of the existence of deep structure or form and a recognition that the meanings signified by signs are conventions. It is no longer accepted that the language system is stable and closed with signs

that have clear meanings. Instead, signifiers dance in an endless play of meaning with no relation to any integrated centre. There is no one all-encompassing explanatory concept such as 'god' or 'science' which can explain the genesis and operation of the universe. Further, there is recognition that existing discourses structure and limit the way we think, read and write, that the language we use and the discourses and tropes (metaphors) within which we think prevent us from seeing the genesis and development of ideas as the powerladen discourses that they really are. A process of naturalisation has taken place, which has smoothed over the discourses making them appear to be transparent and 'truthful'. However, the privileging of certain discourses and texts will have left sufficient traces for a process of unravelling and exposure to take place and to allow formerly hidden aspects to emerge.

Truth There is considerable scepticism about this concept. Knowledge is viewed as unreliable if it comes solely from language. History, and the discourses they have been a part of, influence meaning. There is no absolute truth beyond or beneath the text. Reality is fragmented and diverse, and analysis has tended to highlight texts, language, history and contextualised cultural practices.

Meaning is fluid, it is focused either within the text or between and among texts. All that we can know is textual and related to discourses. There is constant referral of meaning, the signifier/signified breaks down and everything becomes a signifier with never ending possibilities. This allows many readings of the text to occur, thus emphasising that the original writing may change meanings over readers, time and culture.

CRITICISMS OF POSTSTRUCTURALISM

Poststructuralism has been criticised regarding the complexities that it provides. In particular in terms of its tendency towards nihilism – the deconstruction of the deconstruction of the deconstructed text can lead very quickly to meaninglessness. The emphasis on uninterpretability through the constant deferral of meaning also presents difficulties in terms of evaluation and policy decisions.

The decentring of the author doesn't take into account the fact that the author still composes the structure of the text, has selected the 'voices' and manipulated the direction of interpretation. Although deconstruction should clarify this, it is a lengthy and painstaking process.

Is there so much difference between deconstruction and good critique? (Donoghue, 1989: 37)

Is deconstruction any more than an older authorial desire to appropriate a text (however momentarily)?

How will the contradictions between culture and science be explained without recourse to the language claims of structuralism?

PART 2 THE IMPACT OF POSTMODERNISM, POSTSTRUCTURALISM, COMPLEXITY AND CHAOS ON SOCIAL AND SCIENTIFIC RESEARCH

Part 2 aims to take the aspects of postmodernism and poststructuralism which have been outlined more generally in Part 1 together with theories of complexity and chaos in order to see how these are impacting on research.

Research Design

This chapter will demonstrate a number of trends which have been identified across several disciplines and research approaches and will centre debate around the following questions:

- How are research designs changing to address the postmodern/ poststructural aspects identified in Part 1 as well as the ideas from complex and chaotic systems?
- What impact have these changes had on design?
- What strategies are evident to capture the new multifaceted 'truths'?
- · What trends are emerging?

In general, the impact of postmodern/poststructural thought on research needs to be contextualised in terms of the institutional and structural changes which are also affecting the research climate. At the local level, the cutbacks in research monies from government and other institutional sources, have driven researchers and research institutions to seek funding from a variety of sources, many linked with national and international corporations and particular interest groups (whose understanding and knowledge of the ideas underpinning postmodern/ poststructural/complex/chaotic research is limited). The focus of research in this climate has shifted from long-term experimental/observational approaches generated by personal interest, from which new ideas and new paradigms have emerged in the past, to short-term targeted applied research, which attempts to solve the specific concerns of the funding institution. In this situation, those with funding monies are in a position to control the research agenda both in terms of content and research approaches. This is one negative outcome of a focus on external funding agents, another lies in the lack of continuity created as researchers jump from one project arena to another in the race to secure adequate financial support to maintain expected research profiles.

Within this climate, and taking a positive slant, globalisation has led to a greater awareness of what researchers in other parts of the world are doing, and this, together with an emphasis on transdisciplinary, multidisciplinary and multi-perspective approaches, has shifted the emphasis away from the individual

researcher to diverse research teams which cross discipline boundaries as well as state and national divides. Computer technology has impacted on the speed of communication, facilitating team management, and the development of new programs has enabled the storage, modelling and transmission of complex data sets across vast geographical spaces.

So, how has postmodern thought impacted on research designs and the ways that research is approached? It is becoming clear that the principles of postmodern research are sliding quietly but determinedly into the mainstream, challenging, subverting and becoming part of accepted practice. In many qualitative and some quantitative projects objectivity, certainty, legitimation and predictability are not sought. In place of these, doubt, chaotic possibilities, complex, interconnected systems, multiple selves and multiple critiques of findings in the transformative process, replace linearity, rationalism, closure and simple hierarchies. A more holistic approach is evident. The meta-narratives, which have driven intellectual thought in the past, are severely questioned and largely discarded in favour of smaller local explanations. Through poststructuralism, the power of language and the knowledge—power nexus enshrined in discourse is unravelled, the authoritative researcher's voice is decentred and a focus on previously less audible voices is encouraged.

The notions of complexity and chaos, which have challenged traditional positivist thought and the modernist position that nature can be predicted and controlled, have emerged strongly and are currently being used to underpin both scientific and social research.

COMPLEX AND CHAOTIC SYSTEMS

The principles of complex and chaotic systems and non-linear science have become widespread in scientific research, mathematics, information technology, biology, physics, engineering and in social and behavioural research, including decision-making, organisational management, economics, psychology, family therapy and defence. In summary, complex systems are seen as dynamic and non-linear - many possess the capacity to adapt, modify and selforganise (complex adaptive systems) through agents (units/elements). They are seen as open, interconnected and unpredictable, with elements of order and disorder. Change occurs through continuous feedback loops which are either positive (increasing the effect) or negative (minimising the effect) (Mandel, 1995). Where the interaction of agents (and systems) affect each other in an ongoing manner through feedback loops creating new patterns, this process is termed emergence. Systems which are in a state far from equilibrium (or inherently unstable) have the capacity, when disrupted, or when they reach a particular threshold, to shift from 'being to becoming' (Prigogine, 1997: 310) through a process of bifurcation (branching) and to develop into more complex, holistic, interconnected systems through feedback loops which can lead to a greater state of equilibrium, or after more than four bifurcations (4.6) through period doubling (a simple periodic system has two basins of attraction which double and double again under pressure in an order-disorder continuum) will descend into chaos (Feigenbaum, 1978).

Complex Adaptive Systems, which have achieved a close-to-equilibrium state through processes of self-organisation, contain strange attractors (collections of changing trajectories usually of fractal structure occurring in basins of attraction (Tsonis, 1992)), which are areas of stability and order on the fringes of disorder at which change can occur. So if a stream of water patterns meet a rock, activity focuses on going around or over the rock, thus changing the flow of energy from a strange attractor state into different patterns and creating a chain reaction further down the system. Here the initiator of change, around which these new patterns develop, may be a protuberance in the river or a man-made dam or a set of rapids, any of which can impact on flow patterns. Further bifurcations may occur and the system dynamics change again and again, possibly moving towards chaotic patterns or towards greater stability in an ongoing and unpredictable process.

For systems in a state of transition, be they social structures, people or biological and psychological entities, the 'edge of chaos' (Langton, 1986) of fractals – the boundary between order and chaos – is seen as the domain where balance is poised (in a far-from-equilibrium state) and where optimum adaptation (self-organisation) or greater instability can result. When system instability happens, various trajectories come together and the system branches, moving towards new self-organised forms, some of which are more stable than others. In social sciences these forms are motivated by choices which can lead via negative or positive feedback loops to destruction (too many choices) or to more complex organisation involving non-linear transformations between dynamic states in the processes of self and system change.

In more stable complex systems, entrainment – the impact of stable patterns on other systems - may occur (Gleick, 1987). An example of this is when a group of women live together their menstrual cycles, though initially at different times of the month, will tend to move closer towards similar time patterns. Another related concept derived from fractal mathematics is self-similarity, where repetition of form (close but never exact) can be viewed at different levels of magnification or different perspectives of a system/group.

GENERAL IMPLICATIONS FOR RESEARCH

A broad-based approach is essential but can system designs of sufficient magnitude be designed to capture large changes within dynamic systems and between evolving systems? Longitudinal research will certainly be needed and a variety of approaches will be required over time and space to map, reflect and refract the fuzzy complexity of changing systems and capture feedback loops

and bifurcations in the order-disorder continuum. Experimental research will no longer stand alone, it will become one of a myriad of options (narratives), insufficient of itself to encompass trends. Reductionist analysis and the building of theoretical, organisational and behavioural models will become limited activities in terms of transitions, impermanence and the lack of finite closure. Variable and group control, predictability and replicability are not feasible, regardless of system size, as change is endemic. The researcher is limited to defining patterns, forms, self-organisation and adaptive qualities of complex systems, to tracking the contexts and influences on choices, their history and their possible outcomes over time. There are no assumptions that because agents, molecules or individuals have experienced the same set of circumstances their outcomes will be similar. For example, although under system stress some people who have experienced violent parenting may sometimes replicate this form of parenting themselves (although the variety, type and extent of this will vary), others will not. Choices and interventions will create other bifurcations.

In addition to the implications above for complex/chaotic systems, postmodern/poststructural influences would reinforce or add:

- emphasis on the constructed and transitional nature of reality;
- dialogue with the past in the identification of historically powerful discourses;
- deconstruction of all 'texts' to identify the complexity of 'reality' and language
 through the challenges of disruption, scepticism, playfulness, irony, juxtaposition, fragmentation, parody and satire, as well as the use of multiple forms of
 re-presentation;
- decentring of the author in favour of the reader;
- recognition and display of multiple selves and multiple narratives;
- consideration of research on the margins and the provision of spaces for previously silent/silenced voices to be heard;
- understanding that any frames, models or theoretical explanations will be specific to a particular time and a local context and also transitional in nature.

CHAOS AND COMPLEXITY IN RESEARCH: EXAMPLES FROM VARIOUS DISCIPLINES

The following are several more detailed examples from a range of disciplines to clarify how complexity and chaos are currently being used in scientific and social research.

Family therapy

This area has undergone a paradigm shift in the movement away from linear, hierarchical approaches to viewing the family as a multi-layered, open-ended organic system with sets of subsystems such as parents, siblings and extended

family whose complex interactions form boundaries that shift and change. The interaction among systems can be demonstrated when one member is disabled, becomes ill or addicted to damaging behaviours and the total family system adapts towards stability or instability as each part of the system affects another part. As in chaotic/complex systems, families which start out in the same/ similar situations may end up quite differently and there is no guarantee that children brought up in a like manner will necessarily resemble each other in outcomes. Equally, adults with values and lifestyles in common will often have come from a wide variety of socialising situations and experiences.

Koopmans (1996) uses the chaotic principles of feedback, random fluctuation, stability, bifurcation and disequilibrium to account for the diversity seen in structural family change. He suggests that small changes in interactive modes between people may produce large outcomes with major impacts. Far-fromequilibrium systems tend towards change but do not necessarily destabilise. They may bifurcate, return to a steady state or maintain disequilibrium (Prigogine and Stengers, 1984) for short or long periods.

Strange attractors from chaos theory have also been used in family therapy as the points where bifurcations can occur, thus creating transformations in the readings of long-held narratives (Baetz, et al., 1996; Sluzki, 1998). Modes of behaviour which have become stuck, reinforced by negative feedback in order to maintain a situation of violence/co-dependency, can be changed through the creation of positive feedback loops and further interventions can maintain adaptation and change.

Business management

In business management the use of complexity theory has led models away from individual, authoritarian rule-based approaches to a focus on less managed and more productive workforces where interrelationships and teams are emphasised, where complex autonomous individuals are not forced into a mould, and where the adaptive organisation is pushed forward by the energy and enthusiastic initiatives which emerge in patches from the bottom levels up and from different parts of the organisation.

Roger Lewin and Birute Regine (1999) have amalgamated their backgrounds in psychology and biology to explore the creation of work culture and the links between innovation and productivity. They emphasise care-full rather than careless relationships which nurture both the soul of the individual and the soul of the organisation. They suggest that when people are engaged in the workforce they add value. Emphasis solely on fiscal efficiency alienates workers and dehumanises organisations. The soul of an organisation is constructed out of the values, abilities and shared purpose of the group and is developed by trust rather than distrust, by belief rather than scepticism and by positive feedback loops.

In this field, fractal geometry has also been used to develop models to clarify the interaction between market organisation and human behaviour in the

management of financial risk (Sorkin and Bayer, 2001). The market is viewed as a complex adaptive system within a total environment. It incorporates new information, enabling decisions which in turn create further information and decisions, thus promoting self-organisation through feedback loops. The market reacts to a number of system influences, in particular the decision-making behaviour of market participants who, through trading practices, can enhance or deflate it. This model of interaction can track bifurcations and indicate when moves towards chaos may be occurring by using the value of Feigenbaum's constant (4.669).

Conservation management

This is another area where the complexity of interacting systems impacting on political decision-making can be seen. Mark (2001) documented the 13-year controversy in New Zealand around the raising of the levels of Lakes Manapouri and Te Anau in Fiordland National Park for the purposes of hydroelectric development. Competing narratives were presented by Comalco, the multinational company seeking to profit from the development, and the Guardians (previously conservation campaign leaders who were given the role of advising the government on lake management), who were very anxious to preserve the fragile environment of the lakes and through ecological and geomorphological reports indicated how raising the lakes would impact on the vulnerable, mostly forested lake shores. Following the long dance of negotiation, a compromise was agreed upon, which more or less suited all parties: both protection and ecotourism were to be managed by government legislation and the Guardians, while the water resource would be used for the production of some hydro-electricity (thus profiting the multinational company) but without undue flooding of the environment.

Environmental informatics

Information technology has been applied to environmental issues to link scientific research to environmental planning and management in order to expose and understand environmental complexity. Green and Klomp (1998) integrate information from a variety of sources regarding such interconnecting systems as: the influence of aspects of the solar system on life on earth; geological and evolutionary knowledge and processes; detailed information about the many species and their habits; the shifts in populations when parts of the environment change and the impact of this on larger environments such as forests; non-linear outcomes of competition among networks of species in unstable environments where seasonal feedback loop delay can lead to chaotic dynamics; and the disruption of the environment by human habitation and behaviour. These complex influences have led to a focus on computation and modelling in order to store, match and map all this information. The authors point to the decision on whether or not to log a rainforest as requiring information

on size, age, spatial aspects, species and the risk factors of any small or large changes, and they demonstrate that all of this can be explored through simulation tools which integrate and overlap information to provide a range of possible models of future landscapes under different scenarios.

Oceanography

Ted Frison (2000) has challenged the traditional notion that water levels at coastal and estuary tide stations comprise independent linear components despite the fact that non-linear equations have been used to describe their dynamics. Analysis of water-level data from five tide stations, including associated harmonic models, residuals and simulation with additive noise, provided support for recent research which indicated that water levels comprise interconnected aspects whose results can better be explained when they are treated as low dimensional chaotic systems.

Criminology

Chaotic principles have been used to create an understanding of individual offenders (Walters, 1999). A typical case study of a young male with five arrests (drug possession, breaking and entering, and robbery) was used. This particular person's behaviour is seen as a result of interacting reciprocal influences involving peer pressure, self-choice and pattern development. Walters suggests that in fostering change, the offender and intervening agents should avoid the use of blocking labels such as 'drug dealer', 'robber', etc. Change in behavioural patterns (at some unpredictable future time) is viewed as coming from individual realisation of the limits of the activities (insufficient wealth gained, too much time in prison) rather than from external rehabilitative-type counselling. Small changes are anticipated to result in substantial changes later and the offender's capacity for more socially acceptable behaviour and self-organisation should increase as he acknowledges the limits of his current lifestyle.

Further research in this area, emphasising a complex systems approach (Young, 1994), has viewed the chaotic dynamic as connecting the criminal individual to societal systems. Individual deviancy then becomes difficult to pursue as a causal factor and attempts to rehabilitate the 'lost' individual as a single entity, separate from cultural and class connections, is viewed as a waste of time. The strange attractors of crime are then seen as a construct of the social, political and economic environment. Feedback loops, which trigger or constrain criminal activity for certain individuals are seen as worth exploring, in particular the positive feedback loops that enhance inequality. Also worth pursuing are the changing boundaries between those who do and those who do not commit crime, the unpredictable outcomes of rehabilitation, patterns and bifurcations, and the activities which promote change. According to Young, crime can be re-interpreted as an important non-linear feedback loop where wealth is redistributed beyond the marketplace and resources are transferred,

stimulating certain sectors of the economy (consumers, insurance companies, police workers, the legal service, etc.).

Medicine

Postmodern ideas and complexity have been used to explore the action and interaction between the Human Immunodeficiency Virus (HIV) and the Human Papilloma Virus (HPV) which causes cervical cancer in women – the second virus appears to be very commonly associated with the first (Clarke and Chetty, 2002). The unpredictable movement of viruses as they integrate, co-opt and transform through positive feedback loops can best be understood in a complex non-linear frame.

CHAOS, COMPLEXITY AND POSTMODERNISM

What is the connection between chaotic and complex systems, which are based largely in mathematics and physics, and postmodernism/poststructuralism, which lean heavily on philosophical theory? It can be argued that the principles and models of chaotic and complex systems, scientifically applied, parallel aspects of the philosophies that make up postmodern/poststructural thought. Direct connections can be seen between the focus in complex systems on dynamic holistic entities, with their underpinning of neural networks, and postmodern individuals situated at the intersections of various nodes. Neural networks, with nodes can also be linked to language and the ideas of poststructuralism (Cilliers, 1998) where words at a particular node have limited meaning but in a holistic nodal arrangement can evoke larger meanings. This links to Derrida's (1976) notion that meaning is only found in the traces between signs and that use of language in particular contexts modifies meaning and impacts on other signs in a situation where meaning is constantly being deferred.

Multiple methods are seen as essential, and universal laws and meta-narratives have been rejected both by complexity and postmodernism respectively. The researcher is decentred in postmodernism in order to allow this person to re-present information and enable access for the reader, while in complex systems non-finite framing or modelling enable analysis. The transitional, dynamic nature of both is emphasised with links not only to other systems but also to other texts and the past through Derrida's (1976) traces of meaning perceived as often absent but embedded in history. Change and transformation and the creative states of being and becoming are characteristic of both, and différance (awareness at the edge of consciousness) and entrainment (movement towards similar states) have some links regarding the effect of one set of signifiers upon meaning.

DESIGN ISSUES

So what impact have these changes had on the interpretation of design aspects?

Validity

This has shifted from a focus on accuracy of measurement of the defined area (quantitative) or a demonstration of the attainment of the truth of the matter (qualitative) and now lies in a move away from defined criteria with no pretence of outcomes of prediction or generalisability. Richardson (1994b: 522) suggests that 'the central image is the crystal, which combines symmetry and substance with an infinite variety of shapes, substances, transformation, multidimensionalities, and angles of approach', and which reflects and refracts understandings in the creation of more complex understandings. From complexity, we could add that demonstration of complex system interaction and documentation of changes over time are also aspects of demonstrating a close grappling with the question.

Patti Lather (1993) has indicated that any attempt to define postmodern validity is problematic and must be viewed as a link back to the power structures which attempt to control and frame research within particular objective parameters. In the interest of disrupting and challenging such a discourse, she creates a 'nomadic and dispersed validity' of four framings in order to incite discourse and to work 'against the inscription of another "regime of truth"' (Lather, 1993: 677). These frames are:

- Validity as simulacra/ironic validity (simulacra a copy that becomes more real than the original which no longer exists; ironic - multiple presentations including the reflective voice of the author refusing finality and closure).
- 2. Lyotardian parology/neo-pragmatic validity (with an emphasis on difference and contradiction, heterogeneity and language games, multiplicity, interruptions and multiple interpretations).
- 3. Derridean rigour/rhizomatic validity (featuring play and subversion from within, arbitrary development in unpredictable and unrepeatable directions undermining established discourses, the decentred author, textual, methodological and social relations strategies that disrupt and create new possibilities).
- Voluptuous validity/situated validity (with a focus on male-female othering, marginal voices, and open texts and spaces). (Adapted from Lather, 1993: 677 - 83)

Objectivity and subjectivity

In the past, those advocating linear scientific methods have argued that the pretested tools (based in mathematics and physics) and the training of the researcher enabled a distant (objective) position to be taken which should result in minimal impact on the design and results of the research. In complex adaptive systems and postmodern research, such claims are rejected outright. With the interconnection between subject and object, agent and agent, objective reality (snapshot approaches of discrete objects of study) disappears and intersubjectivity (shared consciousness/agreement/disagreement) emerges.

Intersubjectivity leads to an examination of language as one of the main forms of communication with others and as a constraining aspect in social construction. The simple and easily identified 'subject' of modernity – the one- or two-dimensional people, be they researchers or participants, with identifiable attributes, integrated within a stable context, following a defined and predictable life-path – is replaced by a decentred, layered, unstable, fluid, fragmented, schizophrenic individual made up of many selves. Fuzzy objects with dynamic and overlapping boundaries, loosely interconnected and with emergent patterns exhibiting stability and instability dominate.

In postmodern research, subjectivity replaces objectivity, which is seen as a political tool deriving from previously powerful institutional control of the ways of seeing and interpreting reality. But it has been argued (Crowley, 1999) that incorporation rather than replacement occurs and the subjectivity/objectivity divide dissolves, allowing the two aspects to become integrated in the construction, presentation and interpretation of the social space location and the cultural historical contexts of others and ourselves.

Reflexivity

The researcher cannot be separated from his/her background, life experiences and memories, which inevitably filter impressions of the actions and behaviour of others. It is important to recognise that the self is not a clean slate waiting to be written on. Through feedback loops and emergent patterns we interact, react, incorporate and shift in a never-ending process. Tracking all these changes precisely would be a mammoth project in itself but identifying major bifurcations and their outcomes is not difficult, and in the inter-subjective process is essential.

This critical awareness of self and the impact of one's own intellectual baggage and life experiences on the research process has been taken a step further by Raymond Lee (2002), who argues that self-reflexivity approaches its zenith in lucid dreaming. The modern self is the one which has been socialised and normalised in the 'real' world, while in the dream world, destabilisation of this reality occurs. Reinvention and adaptation of self in this uncertain and changing world are essential, enabling the emergence and acceptance of multiple selves and fractal identities. This has intimations of Derrida's 'différance' and reflective meaning at the edge of consciousness. Documentation of dreams (where these can be recalled) would seem to be particularly useful in autoethnographic work (researching the self).

The key here is not to see oneself as a static, centred object, but as interlinked with others and undergoing processes of change. There are several selves in this process – the central, historically-constructed self, the self that is currently undergoing change (bifurcating, doubling) and another self, the reflexive observer of this process. The strong focus on self-disclosure in this form of research has been criticised by Clive Seale (1999), who has suggested that the

exposure of bias and multiple selves through the confessional stories of the researcher may simply serve as a distraction from poor research. This comment, although legitimate in terms of one reader's response, has echoes of the 'expert' researcher standing in judgement on the universal 'quality' of research - a meaningless concept in this context and derived from modern hegemonic discourse.

Sampling

As parameters vary and dimensions of a given population change, it is somewhat pointless to emphasise homogeneity, particularly when there is recognition that this is artificial, that variables cannot be controlled precisely, that individuals are changing entities and that a quick snapshot bounded by time and context is all that can be achieved. Maximum variation/heterogeneous sampling will certainly allow for the combination of elements from a variety of sources and facilitate mixing them into a collage/pastiche in order to contrast various views/experiences. However, more appropriately, complex/chaotic systems will need initial articulation, as will their interactions with other systems. Then a situational sampling approach, the focus of which is to give insight into system operation from a number of vantage points, should occur tailored to issues of equal representation of all aspects.

Analysis Analysis of each data set will produce unique results. Should a study be replicated over time (although there is little advantage to this except to document change), any differences in results will be explained through the principles of chaos, bifurcations and the impact of feedback loops and emergent patterns, or it will be assumed that the researcher is viewing/sampling from a different part of the fractal basin. Meta-narratives or grand theory as an overall explanatory tool become less useful, as linearity and prediction disappear, as boundaries shift, and as feedback loops make causality impossible. Local explanations linked to chaos and complexity become more useful. According to Zygmunt Bauman (1993), it is important to avoid the modern search for universals and absolutes.

Ethics A detailed discussion of ethics can be found in Chapter 7.

FOUR RESEARCH DESIGNS

In order to clarify how these design principles and ideas are being interpreted within current research designs, I propose to take four pieces of research: the first utilising a chaotic systems approach; the second attempting a complex systems approach; the third undertaking a predominantly poststructuralist approach; and the final one attempting a more general postmodern approach.

Chaotic systems approach

In 1992, three researchers (Colin Thompson, Benjamin Thompson and Bruce Hocking) utilised the mathematical techniques of deterministic chaos to analyse three years of the health and safety data of Telecom Australia – the major provider of phone communication at the time. Their purpose was to detect causal factors in accidents and to assess the management of health and safety in this organisation. At the time of research Telecom Australia employed 87,000 staff and over the three years of the study 30,000 employee-related accident cases were reported and recorded by age, sex, work activity, hours on shift, date, time, severity, type and cost.

The researchers subjected this data to two techniques:

- The Takens embedding technique where sets of monthly accident figures were placed against one another to provide a one-dimensional return map which is a strong indicator of a chaotic strange attractor. In this case, further embedding up to two and three dimensions occurred.
- 2. Phase-plane analysis, based on a two-dimensional state space, was applied to the Telecom Australia data with regard to two variables the number of accidents and the cost or severity of accidents in a particular month.

Results from both approaches indicated that the Telecom Australia accident data exhibited similarity between males and females and fell 'on a low dimensional strange attractor with fractal dimension between two and three' (Thompson et al., 1992: 111), and that during one year a definite transition from order to chaos could be documented. Overall, some underlying deterministic dynamical descriptions of accidents was possible. It was concluded that, regarding accident prevention, only a small number of variables might be relevant (and that these didn't include age, sex and time of day, accident type and work activity), and that regarding business management, the accident data had shifted from stable equilibrium to a chaotic state but was tending to shift back towards stability. Thompson et al., argued that costs of accidents in a chaotic state could be lower than in an unstable equilibrium state which is less resilient and less capable of adapting.

A COMPLEX SYSTEMS APPROACH IN SOCIAL SCIENCE

Malcolm Williams (2001) applied notions of social complexity to the methodological issues of homelessness research and discussed their implications for policy. In past studies, definitions of homelessness were viewed as being politically motivated and linked to resources or to the dominant orientations of specific disciplines. Williams focused on single-case analysis and took three case studies to demonstrate complexity and the emergent nature of the phenomenon:

- Bethan, a-20-year-old female, staying for the last two weeks in a night shelter for young people. After witnessing physical abuse of her mother by her stepfather, she ran away from home at the age of 14. Since leaving care at 16 she has been drifting and has recently slept rough for three months.
- Jimmy is 63, an ex-merchant seaman with a history of alcoholism, unemployment and sleeping rough, developed from an inability to adapt to life outside the navy. He has lived in a Salvation Army hostel for 12 years.
- Mark and Ruth, both aged 21, live in assisted housing with a six-month tenancy. Ruth is pregnant. Both left home at the age of 16, and have spent some time in care.

These vignettes are used to demonstrate the complexity and emergent aspects of individual circumstances in the attempt to develop a definition of homelessness. In addition, Williams demonstrated that the use of predictor variables has limited utility. For example, the study from which the above three cases was drawn used the variable 'time spent in an institution' and found that 62 per cent of 'homeless' had spent time in a diverse number and styles of institutions at different times and stages of their lives, but 38 per cent had not, and that predictions formed from links between antecedents and outcomes were extremely limited. Probabilities can be suggested from a range of scenarios but the complexity of initial circumstances and subsequent events make predications and definitions difficult. Outcomes feed into other actions, interventions and choices available in the environment, and interact with nested properties of the individuals, producing emergent patterns.

Williams suggests that 'homelessness' is a heterogeneous set of phenomena, strongly linked to other diverse processes, and that the key to understanding lies in an acceptance of complex and self-organising systems in terms of the variety of antecedents from which individuals congregate to make up a location of homeless people. He suggests that life-history approaches married with cluster analysis, model-building and qualitative comparative analysis (Fielding and Lee, 1998) can help to capture the diversity that is evident.

Postmodern/poststructural

The interconnection between postmodernism and poststructuralism can be seen in the following two examples which combine both orientations while occasionally leaning more towards one than the other.

POSTSTRUCTURAL EMPHASIS

Within the focus of poststructuralism, Sohail Inayatulla (1998) has introduced the technique of causal layered analysis, as part of the agenda of problematising units of analysis to 'open up the present and past and to create alternative futures' (1998: 815). This approach seeks the complex layers of the system which provide the various perspectives framing the construction of an issue or event. The focus is deconstruction, the tracing of historical discourses and the reordering of knowledge. The first level sought is the *litany* – the public discourse often created and maintained by the politics of the day or the media. The second layer is concerned with *social causes* – the technical and academic discourses derived from social, economic, historical and cultural factors. The third level contains the deeper discourses which maintain structural *worldviews* linked to the underlying inequalities in society – religious, cultural, historical – from which alternative discourses can be derived. The fourth and final level contains *metaphor and myth*, the unconscious, often visual dimensions of emotive and intuitive thought.

As examples of how this would work in research, Inayatulla presents several case studies focusing on analysis of particular questions or workshops: a UNESCO workshop; a workshop for senior university management; and a seminar on advocacy for people with disabilities. Taking the last example in more detail, at the litary level, and regarding the debate around housing people with disabilities in institutions, the public debate focused on institutions as settings of neglect and abuse with 'feel good' media highlighting government actions to improve this 'problem'. At the level of social causes, the focus on individual patients rather than structural imbalances of power within the institutions was noted. At the worldview level, the 'othering' of people with disability because of their difference from 'normal' people was an issue and at the myth and metaphor level, fear of difference was seen in terms of inclusion/ exclusion of these people in society. Alternative future scenarios centred on societal change, removal of difference through genetic technology, and continued ghettoisation resulting from the media-led campaigns (Inayatulla, 1998: 821-4). This approach allows for the development of alternative action plans based on a deeper recognition of the dominant discourses in a particular field.

POSTMODERN APPROACH

Within the qualitative tradition, the auto-ethnographic orientation has gained considerable support. Auto-ethnography usually involves personal narratives of the author's life experiences within a particular cultural setting. Carolyn Ellis has been instrumental in trialling different approaches to designing research based on postmodern principles. The personal and emotive story of her relationship with her husband Gene (Ellis, 1995b) demonstrates her interest in tracing the impact of change on herself from a situation of being part of a couple very much in love to becoming a caretaker for a husband dying from emphysema. The documentation of this process led her to accumulate considerable data, including fieldnotes of the relationship and illness processes from eight months prior to the death and two years after, interviews with family and friends, medical case notes, personal diaries and travel logs. Carolyn was the object, subject and researcher, and also wrote the final version in the first person as she attempted to move from realist ethnography to literary narrative in her

search for the right 'voice' to clarify both her personal experiences and understandings, and the sociological significance of these events. (The process is documented in more detail in Tierney and Lincoln, 1997: 127-31). Ellis focused on emotions and feelings (narrative truth rather than historical facts), moving from past to future, incorporating alternative versions and her own multiple voices in an open text which emphasises ambivalence and contradiction as outcomes.

The following excerpt indicates the complexity of emotions in caring of this nature:

She's in the lobby of the theater with her partner, who is critically ill with emphysema. He has refused to let her retrieve his battery-powered wheelchair from the car, though he is having trouble breathing and his oxygen canister, which he needs to walk, is low on oxygen. On the way out of the theater, he carries the oxygen tank on his shoulder and insists that she carry his cane, which opens up into a chair. Enter the scene briefly as she - struggling for some measure of independence from the weight of her caretaking role as well as distance from the oddity of how they appear to others - walks away from her partner momentarily to greet some friends she sees across the lobby.

Their conversation is interrupted by a loud voice yelling, 'Help!' Embarrassed and angry, she rushes to him. 'The chair. I need the chair,' he gasps, pointing to the cane. She unfolds it and he sits down quickly in the middle of the lobby. She narrows her shoulders and looks to the floor, trying to make herself invisible to the people staring at her.

Between gasps, he says in a loud voice filled with hatred, 'You castrating bitch.' With that, she storms out of the theater, not waiting to see if he is okay. At that moment, she hates him. (Ellis, 1995b: 121-2; see also Ellis, 1997)

IMPLICATIONS

The loosening of boundaries has produced an amalgamation of influences among chaos, complexity, postmodernism and poststructuralism, with the terminology often being utilised interchangeably. Tom Jagtenberg and David McKie (1997: 33) have shown that chaos has been an 'emblem' of postmodernism and that this overlapping can be used to effect, in the enhancement of research. They see that interdisciplinary links between social science and science are now appropriate, particularly in ecological and environmental research where they position the environment as the fourth dimension of social space (after race, class and gender).

The overall implications for research lie in:

- intertextuality (impact of the text on others in terms of the appearance of particular signs and the linking of ideas from one text to another);
- inter-system linkage, change, chaos, bifurcations, transition from being to becoming, feedback loops, fractals, and Pickover's biomorphs (mathematical creatures resembling microscopic organisms which exist on complex planes (Dewdney, 1989) dominate;

66 NEW APPROACHES IN SOCIAL RESEARCH

- multiple selves and voices;
- local and complex referentiality;
- declining meta-narratives;
- links between mathematical chaos theory and deconstruction (Hayles, 1990).

The Position of the Researcher

The shift to postmodern approaches has resulted in changes to the position of the researcher. This chapter will address the following questions and will further develop related design issues introduced in the previous chapter, including:

- How are researchers managing the movement from a previously centred position, with the 'gaze' of authority and power, to positions where they are decentred?
- What are researchers doing about the social, psychological and biological discourses they identify as being inscribed upon the body, particularly those of knowledge, power and the social self?
- How are the problems that have been identified regarding objectivity and the increasing emphasis on subjectivity and reflexivity being interpreted?
- How are multiple subjectivities being addressed?

THE DEATH OF THE AUTHOR

With the advent of postmodern approaches, the powerful centred author of earlier times vanishes. According to Roland Bathes (1977a), who has written at length on this topic, the author removes her/himself from centre stage in order to make way for the reader. Barthes sees the author as a 'mediator' or 'relator' (1977a: 142) of narratives – 'it is the language which speaks, not the author' (1977a: 143). The distancing of the author completely transforms the text which is 'henceforth made and read in such a way that at all levels the author is absent' (1977a: 145). The act of writing is seen as the destruction of voice. 'Writing is that neutral, composite, oblique space where our subject slips away, the negative where all identity is lost' (1977a: 142). The origin of the voice disappears and the author becomes less substantial, shadowy and distant, and the text becomes 'a multidimensional space, in which a variety of writings, none of them original, blend and clash' (1977a: 146). The writer's only power lies in the capacity to mix writings. These views are emphasised by Umberto Eco

when he stated: 'The author should die once he has finished writing. So as not to trouble the path of the text' (Eco, 1984: 7).

The author is now seen as writing from a shifting network of places, and the various texts (interviews, observations, researcher diary, surveys and controlled experiments) that he/she has access to as data link to these places. The researcher can be viewed either as a juggler (Singer, 1993) playing with many balls - theories, contexts, concepts, events and signs which are drawn together as one temporary entity in an attempt to illuminate various aspects of a research question – or as an interpreter (Roseneau, 1992: 31) who presents the options and is involved in the debate regarding these. According to Roseneau (1992: 30-4), the author's position varies from a requirement for total erasure, to a recognition that this person facilitates the development of an open text which minimises overfocus on one interpretation in favour of encouraging multiple interpretations. Entry of the author into the text as an equal player or as the central focus (Ronai, 1992; Ellis, 1995a) in the interactive process is another more recent development. In scientific writings, which utilise chaotic and complex underpinnings, the authorial voice is largely maintained but uncertainty and possibility replace certainty, predictability and finite conclusions.

With the focus on the active decentring of the authorial voice in order to allow the voices of the researched to emerge more loudly and to be viewed more substantially, both the gathering of data and what comprises data have changed. Within local situations, the display of voices of many participants, rather than a few key and carefully selected high-ranking or eloquent individuals, is required to demonstrate complexity. In addition, the tracing and querying of all dominant discourses and the emphasis on fluidity and change, not only within local contexts but also within the larger global contexts which are impacting on the local, potentially present a minefield for the researcher to navigate. However, the decentring of the author does allow all participants, including the author, to become actors in their own right (Polkinghorne, 1997). The author becomes the eye of the text – the facilitator of the display of voices, including her/his own, and the illuminator of the text through reflexive/reflective/refractive critique.

The subject

As mentioned in the previous chapter, the researcher has shifted some distance from the position of neutral observer, unbiased by previous connections and perceptions. The current position of the researcher is hard to classify into a discrete box. Like the unravelling of the jumper through the pulling of a loose thread, the decentring of the author flows naturally, impacting on notions of the subject and subjectivity, reflectivity, reflexivity, essence, knowledge inscriptions and presence. Traditionally, the position of the researcher as subject is a powerful one, where the constructed image of this person is maintained by discourses of status and knowledge, which legitimate claims to and ownership of

new knowledge comprising 'truths' gained through access to unmediated knowledge of the world. This knowable, unified entity (divided between conscious and unconscious), with a capacity for predictable and logical thought, varies considerably from the postmodern researcher who can be located spatially, culturally and within the research process in similar or different places from the participants. The constructed nature of this person is recognised: 'A gendered, historical self is brought to this process. This self, as a set of shifting identities, has its own history with the situated practices that define and shape the consumption of cultural goods and commodities' (Denzin, 2002: 29).

The multiple nature of the postmodern subject and an emphasis on fragmentary and fluid constructions based in language and discourse allows for increased knowledge and awareness of the self, as well as of the selves of those under research. The self is the transitional compilation of an individual's internal and external conversations both past and present, of this person's desires, fantasies, wishes, interactions, and social and cultural values and understandings acquired and continually being adapted and adjusted in a range of contexts.

According to Lyotard (1979), language and language games also construct the positioning of the subject but resistance is possible:

'A self does not amount to much, but no self is an island; each exists in a fabric of relations that is now more complex and mobile than ever before. Young or old, man or woman, rich or poor, a person is always located at 'nodal points' of specific communication circuits, however tiny these may be. Or better: one is always located at a post through which various kinds of messages pass. No one, not even the least privileged among us, is ever entirely powerless over the messages that traverse and position him at the post of sender, addressee, or referent. (Lyotard, 1979: 15)

Thus although the subject is influenced by global economics, local politics, social structures, language, and culture, he/she is a unique and changing collection of cultural, educational and personal influences, an 'habitus' (Bourdieu, 1984) and a 'work in progress' (Kristeva, 1974: 142), capable of action and reaction, choices and bifurcations. Individuality lies in the unique patterns of association of the selves which emerge in response to the multiple contexts in which we find ourselves and to which we respond with a mixture of cognitive, social, emotive and other feeling responses. This does not negate that one of these selves is a dominant and overarching self whose persona is maintained and recognised for its continuity across a range of contexts, even though it may demonstrate minor variations (displaying more formal and respectful social modes of behaviour in one context than in another).

In research, the inside of the subject researcher and subject participant is sought – the fleeting feelings and views, the passions, the angers, the internal messiness rather than tidy external descriptions. Researcher control and manipulation of the presentation and views expressed by the subject are minimised as authors step back into greater obscurity or foreground themselves in critical reflexive processes.

Subjectivity

The view of self and others can often be clarified by looking in more depth at the 'nodal points' at which they are located. One nodal point is that of the gendered body where the body and psyche are seen as interacting and impacting upon each other. One's position at a particular nodal point may be the outcome of powerful discourses. The positioning of gender, it is argued by feminists, has a strong impact on subjectivity and identity. Luce Irigaray has critiqued this orientation, seeing it as linked to the ideas of Freud and Lacan where women have been located, through male parameters, as inferior gendered bodies because of their lack of a phallus (a symbol of power) and relegated to an inferior status becoming the 'other' in a patriarchal system. Thus gender, subjectivity, identity and patriarchy interact to create the order of society - with powerful male bodies as agents of exchange (Irigaray, 1985) and weaker female bodies commodified for production and exchange within the pallocentric order of desire. Irigaray argues for autonomy and independence from these views, relocating women as independent beings with different and powerfully sexualised bodies in their own right.

At another 'nodal point' subjectivity can be viewed as the lived body which constructs meaning through social interaction, values and understandings in an ongoing reciprocal process of emotion, communication and response. Cultural symbols and time influence this body subjectivity. In this vein, subjectivity has also been seen as body labour. Body and world interact through labour; the body is impacted on by labour inscribing the body (muscles, pain, injuries) while the body contributes to the making of the made world through labour (Scarry, 1985) and to culture through body decoration (tattoos, make-up, jewellery, clothes, dieting, surgery, etc.).

In addition to multiple nodal points, the author has multiple entry and exit points into the text through changing personas which are flexible, resistant, ambiguous, ambivalent and reflexive. Intricately interwoven with body experience, selfhood is seen as a constructed category made up of open-ended desire for personal gain and social relationships. Lyotard (1988) increasingly separates time from space, allowing people to move more freely through these in the process of 'becoming' (1988: 31–6). Boundaries disappear and the subject no longer has a fixed space, allowing feelings and imagination to edge aside reason. New space—time modes also allow different methods of communication among absent bodies (via computers and other links).

Which of the multiple subjectivities available to the author will be inhabited? Teacher? Academic Researcher? Theorist of a particular discipline? Political, social or economic activist? Linda Singer (1993) suggests other identities, referring to the author as a Scherherazade (who told stories in order to stay alive), 'seducing with her stories, the dance of the seven veils and seven theories, a perpetual play of simulations' (1993: 26). The use of narrative has become widespread in many disciplines and in planning (Boje, 1998) where

the performance context of the storyteller can be seen situated in the wider historical, social and economic climate affecting the organisation. The emphasis on the multiple stories of vendors, clients and workers at all levels of the organisation moves away from the CEO as spokesperson, to expose the complex interactions of individuals within the environment.

Singer also introduces the image of the bandita, 'playing with the remains of dead men, ruthlessly pillaging, taking what is needed' (1993: 23) for recycling into new forms. Another image of the postmodern researcher is provided through Deleuze and Guattari's (1987) rhizomatic subjectivity with schizophrenic overtones - a complex bricolage, a mixture of changing patterns; fragmented, flexible and unconfined. The breakdown between self and other, and the crossing of boundaries among person, nature and machines, has led to the creation of the metaphor of the cyborg (Haraway, 1991). The cyborg is 'a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction' (Haraway, 1991: 149).

The blurred boundaries created by the integration of bodies with machine parts has been well developed in terms of surgically replaced body parts and the changing of bodyshapes through cosmetic and sexual reassignment surgery. Changed appearances of a more superficial nature can be seen in tattoos and permanent make-up drawn on the body. Haraway, however, was urging women to problematise the boundaries between body and machine and move to the forefront of interaction with computers and other technologies in order to prevent these arenas from becoming male-only domains. Posthuman bodies move even further away from this focus; they are bodies of the future, boundaryless hybridities, they erase boundaries and 'emerge at nodes where ... bodies of discourse, and discourses of bodies intersect to foreclose any easy distinction between actor and stage, between sender/receiver' (Halberstam and Livingstone, 1995: 2).

Reflexivity

Reflexivity can be simply defined as viewing the self and the processes of data collection and interpretation in a critical and detached manner 'through internal dialogue and constant (and intensive) scrutiny of "what I know" and "how I know it" (Hertz, 1997: viii) in the development of knowledge claims. In the notion of positional reflexivity the researcher further examines 'place, biography, self and other to understand how they shape the analytic exercise' (Macbeth, 2001: 35). Here the focus is the researcher her/himself and is premised on the assumption that reflection on the self (looking and re-looking) is essential in the understanding of the self and identifying the discourses which have impacted on the lenses through which the researcher views the worlds and participants under study. This self-referential interrogatory process is both inwardly and outwardly reflected/refracted to the reader and is a critical part of individual transformation and change.

This self-conscious conversation can be recorded in a number of ways, most usually via diary record, and the process is often revealed more publicly in articles (Krieger, 1985; Ellis et al., 1997). Ellis, Kiesinger and Tillman-Healy document, review and critique their thoughts and feelings as researcher and researched throughout the interviewing processes. They interweave these thoughts with interview data and documentation written by each of the three people after a dinner together. This not only clarifies the previously hidden world of the researcher's mind in the reflexive process, but also reveals to the reader much more starkly the inside views of the issues and contexts of bulimia as experienced by two sufferers. The contrasts provided within the spaces between Carolyn (as the non-bulimic researcher) and Christine and Lisa (as the bulimic researchers/interviewees) provide considerable insight. Carolyn Ellis points out the interesting dilemmas and risks of exposure of this process, in particular how status, issues of hierarchy, relationships outside the study and the need to protect self-image as a senior academic may well lead to such a researcher releasing only carefully constructed information regarding the reflexive process.

Intricately interwoven with positional reflexivity is textual reflexivity, 'where the researcher examines then disrupt[s] the very exercise of textual representation' (Macbeth, 2001: 1) and where the emphasis is on displaying reflexivity with regard to the production of the text. Here, the text takes account of and includes the processes of its own production, and queries, critiques and comments upon this process. Patti Lather and Chris Smithies (1995) attempt this process in the production of their 'Kmart' book, which was developed from their research on experiences of women living with HIV/AIDS. They use the metaphor of Angels (ambiguous creatures, calm, cool, yet troubling tricksters) to stimulate reflection and multiple readings by the two targeted audiences; the women themselves and a wider public audience (creating inside-looking-out and outside-looking-in aspects). A form of 'hyptertextual pastiche that is a warping of comfort texts aimed at opening up possibilities for displaying complexities' (Lather, 1996: 542-3) is used. The text is horizontally split on the page, allowing the interaction between two narratives to reflect issues back to the readers. The upper text portrays voices from the conversations among the female participants while the lower text displays researcher-voiced commentaries of the research process drawn from journal notes together with a discussion about the construction of this narrative. Short chapters or inter-texts ('Angel' messengers or 'breathers' (Lather and Smithies, 1995: xix)) provide reflective commentary on the issues raised by the women interviewed in terms of the history of Angels and sociological and feminist commentaries related to AIDS. Any footnotes and further information, such as statistics, research findings, useful resources etc., are placed in sidebars - boxes alongside the other two texts. According to Lather and Smithies, the text has been structured in this manner to provide 'layers of various kinds of information, shifts of register, turns of different faces toward the reader, in order to provide a glimpse of the vast and intricate network of the complexities of cultural information about AIDS in which we are all caught' (1995: xviii), and in this process 'the text turns back on itself, putting the authority of its own affirmations in doubt, an undercutting that causes a doubling of meanings that adds to a sense of multivalence and fluidities' (Lather, 1996: 543).

Objectivity

The removal of the subject as a simple, intact, confinable entity also removes the subject-object dichotomy and the notion of objectivity. There is acceptance that our own knowledge bases are limited and focused by education, culture and life experiences, and that these can only be expanded and added to by continual interaction with a variety of written texts and a complexity of interactive styles with others in many contexts. So given the multiple positioning of both the researcher and the participant in the process of becoming, what can be hoped for from a research encounter? Questions that would arise would be quite distant from a previous emphasis on deriving 'truthful' descriptions of 'reality' and would need to query the discourses that the researcher and participants were drawing upon. The focus would then become: how are accounts being constructed in context? And which multiple nodes currently inhabited are impacting on the interaction? In short, objectivity becomes submerged into positional and textual reflexivity.

Inscriptions of knowledge on the body

The focus here is on the body as a surface, a body without organs (Deleuze and Guattari, 1987) which can be territorialised, reterritorialised (allowing new connections to be formed), written on both by external factors (the powerful discourses of society) and internal factors (what the mind produces in response to, or as resistance to, these discourses), or deterritorialised (through taking in new ideas). The constant deferral of meaning and the powerful discourses of culture and desire (Deleuze and Guattari, 1977; Lacan, 1981) means that the body presents a contested site with many discourses dancing anything from slow collaboration to a violent struggle in the processes of transformation and becoming.

In research, the 'gaze' of the most powerful discourse has for some time been located in scientific approaches, with their focus on linearity, prediction and measurement with some spatial allowance for individual and group opinions, feelings and experiences, although the latter have largely been viewed as a supplement to the dominant position. Under postmodernism, an emphasis on the margins, in order to destabilise these discourses, and an acceptance of chaos, complexity and the uniqueness of data avoids the seeking of new knowledge. Knowledge is seen only as a product of the discourses that constructed it and therefore a product suitable for historical deconstruction. This view, together with the postmodern focus on multiple interpretations, emotional subjectivity, ambiguity and creative display, provides a critical framework for distancing the

researcher from a desire to claim the originality of his/her knowledge. But what happens to prior knowledge gleaned and internalised at various nodal points or firmly inscribed on the body? How are these to be dealt with? Are they to be kept at arm's length and treated like cultural or discipline-framed discourses, to be deconstructed, displaced and questioned for their power? Or, more likely, are they to be accepted, exposed and displayed (so the reader can judge their implicit power on the final text) and put aside in order to allow the voices of the participants to have space? Later this knowledge may well be selectively drawn from as part of a larger debate where the researcher displays several possible explanations while indicating or arguing for her/his preference.

EXAMPLES OF CHANGING RESEARCHER POSITION

How are the above aspects of researcher positioning being interpreted in reality? What roles are author/researchers taking in relation to decentring their positions? How are they managing their subjectivity, prior knowledge and the insertion of the self into the text? Several author positions are outlined below.

Author as self-reflective manipulator

Ruth Behar's (1993) life of Esperanza – a Mexican woman of 60 years – is also a critical self-reflective tale of the researcher, who attempted to impose, categorise and interpret this life of a woman from another culture to fit into the researcher's ways of seeing (or at least the academic ways of the American anthropological culture) and to provide information which she had been trained to believe was desirable in a 'proper' life story. In this process the researcher became at least as exposed as the participant, particularly when the generally accepted notion that the participant is the expert was fiercely believed by the participant. Esperanza avoided divulging information about her intimate emotions and sexual relations, and instead saw her story in terms of the aspects of her life that she felt were worth talking about: 'physical suffering, martyrdom, rage, salvation' (Behar, 1993: 273). Behar concludes: 'It has long seemed to me that most life histories stop short of their goal of decentering Western notions of whose life deserves a place in the world of (our) letters. We ask for revelations of others but reveal little or nothing of ourselves' (1993: 273). Behar's 'biography in the shadow' of the biography of Esperanza critically assesses the outcomes of her research in terms of translating one Mexican woman's life story for consumption 'over the border' so that Behar can attain the prize of tenure in a university setting in the translation of herself from Cuban researcher to successful American academic.

Author as behind-the-scene facilitator of others' voices

Within the oral history tradition there are examples of this approach from earlier times. For example, Robert Bogdan's (1974) story of the full life biography of

Jane Fry, a trans-sexual, involved the edited display of much of 100 hours of interviewing over a three-month period. Jane's letters, photos and diaries are also included as supporting documentation. Seven chapters comprise a display in the words of Jane alone. The final (and brief) chapter is the voice of the author, describing the process of data collection and submitting an interpretation of the life described for the reader to consider. Here, although Bogdan features Jane's voice for seven-eighths of the book, he still maintains the right to a traditional author-voiced academic interpretation, without reflecting on the colonising aspect of this.

A later example comes from Susan Krieger (1983), who hid her voice completely in order to display more accurately the interacting voices of her 78 participants. Krieger (1985) has clarified the difficulty she had in separating herself out and dealing with estrangement from the live-in community of lesbian academics of which she had been a member prior to becoming a researcher of this community. The strength of the voices and interrelationships within the community, together with a research focus on privacy, complicated the necessary separating out of Krieger from her data, and it was not until several years after data collection that she was able to write anything from the study.

Krieger underwent a 'process of re-engagement' which involved step-bystep self-reflexivity of her involvement with the community - her entry, personal and sexual involvement, key events, emotional responses and leaving this group. She documented her relationships with each interviewee pre-interview; critically assessed her response to each interviewee, documenting any prejudices, discomfort, emotional reactions, pressures to take the view of the interviewee, any sense of threat and confusion about her own identity and sexual attraction; and with regard to analysis of data, the temptation to interpret according to a matching of the views of others with her own views and needs particularly the need to be confirmed as a community member. Krieger concluded: 'The great danger of doing injustice to the reality of the "other" does not come about through use of the self, but through lack of use of a full enough sense of self which, concomitantly, produces a stifled, artificial, limited and unreal knowledge of others' (1985: 320).

This detailed display of process gives considerable insight into the reflexive interpreative processes undertaken by one author in the move to decentring the self.

Author as diarist: transparency of views

Peter McLaren (1997) used the term 'Flâneur', to describe the reflexive postmodern researcher who moves via city spaces across the interwoven connections between modernity and postmodernity. This term is derived from Charles Baudelaire, who described the Flâneur as a solitary but passionate spectator of crowds, 'gifted with an active imagination, ceaselessly journeying across the great human desert' (1863/1964), the ultimate observer of life. McLaren

uses the notion of the ethnographic *Flâneur* to reflect on his own dual positions of university academic and ethnographer of popular culture. In the former he sees himself as an insider but operating outside the accepted traditions, within blurred strategies of representation and shifting late-capitalist discourses yet trapped within past traditions. He seeks to 'problematize the reflective gaze of the ethnographer' (McLaren, 1997: 144) through the inhabiting of many spaces. He displays extensive diary records of his desires and emotions, and provides a Marxist-based political commentary as he moves through the urban spaces of Los Angeles, Berlin, Paris and South America, developing the role of the researcher *Flâneur* as political praxis. In this process, he places the problem of speaking for others against the equal problem that many of these other people cannot speak for themselves (because of political tyranny, lack of the language of the dominant culture). He concludes: 'We begin speaking for ourselves – only by becoming other. It is in recognising ourselves in the suffering of others that we become ourselves' (1997: 174).

Author as diarist in researching the self: transparency of process

Carol Ronai's study (1992) of erotic dancers allows her to observe others and also to observe herself in the role of erotic dancer in a strip bar. Her dual role as researcher/dancer allows her to move with ease between the two roles and to layer her observations with a critical analysis of her experiences. Her playful article (1998) further documents the process of gaining access to the striptease dancers she wanted to interview for her study. The substance of the article comes from her fieldnotes interspersed with the image of the mystic writing pad, a metaphor for consciousness, which enables her to pick up the traces of impressions left by society upon herself and others. The account of her multiple impressions of one particular person, 'Kitty', is put into play using juxtaposition:

Kitty is tall, intimidating, built like a fuckin' Valkyrie warrior maiden, ready to swoop down from Valhalla and kick ass.

Kitty is a blatant figure of false consciousness, buying into her own oppression and objectification by reproducing the very images that oppress her. Kitty is clueless.

Kitty is a hard-core feminist who fully embraces her power as a woman. By taking control of her body and her life, she uses the very means by which most women are typically oppressed to undermine patriarchy and get her plumbing fixed. (Ronai, 1998: 408–9)

Observations of Kitty are interspersed with metaphorical analogies and author-voiced self-reflective comments as she draws and displays her impressions of their encounters while reflecting back to earlier encounters of her own experiences of erotic dancing, sketching and being a researcher, and these impressions are used to decentre the author's voice. The selves of the researcher – trickster, court jester, reflexive observer, writer and dancer – are troubled and the author

moves from one to another as she puts these selves into play, intertwining traces ambiguously against one another in order to bring out the play of differences and the endless deferral of meaning. Ronai concludes that like children drawing on the mystic writing pad, deconstructed researchers are 'transformed into tricksters who dandle about questioning, playing, toying with any formulation of reality that stands as the paramount reality. ... The trickster/researcher must "tease out" the ambiguity of existing structures by putting them into play' (1998: 419) in order to dismantle identity and allow other images to emerge.

Author becoming a participant in the group under study

Karen Brown's (1991) study of Mama Lola, a vodou priestess in Brooklyn, was carried out over a dozen years and after three years in the field Brown decided to undergo a process of initiation into vodou practice. 'If I persisted in studying vodou objectively, the heart of the system, its ability to heal, would remain closed to me' (Brown, 1991: 10). Yet it is also clear that this move was not made solely on the basis of researcher desire to access otherwise unobtainable data, but was also part of a natural process of acceptance and reciprocal obligation within the community – obligations which could not just be taken on for the duration of the study. In ethnographic terms, this project started out as a classical ethnography, but as the researcher 'went native' and became part of the group under study, it shifted to an insider view which had to include observations of the self as community member and the self as researcher in this setting. Brown started to write herself into the story of Mama Lola so that in the final book she appears in two voices, one a fairly accessible academic voice and the other a more personal reflective voice.

Author becoming the phenomenon under study

As the best-known but least critically assessed individual, the self provides rich territory for research. Art Bochner and Carolyn Ellis (1992) provide revealing accounts of their experiences of the processes, feelings and emotions and ambiguities each experience in the discovery of a pregnancy of the couple and the decision to terminate this. The aim of this dual-voiced dramatic production is to provide reflections on their own streams of consciousness and to explore the link between 'emotional, cognitive and physical experiences' (1992: 5) in an attempt to understand internal subjectivity through response and resistance to external social discourses. The text displays extremely personal and revealing emotional responses of both the male and female partners, entering territory which many researcher academics would fear to tread, preferring to remain silent regarding their participation in matters formerly regarded as private. Ellis argues (1997) that this approach does not have to be confined to middle-class articulate academic researchers; interviewees at all levels, with some researcher facilitation, can use it.

Carolyn Ellis (1995a) has also explored her self in the process of meeting and breakfasting with an old friend and colleague who is dying of AIDs. She uses a short-story format with commentary to gain distance and to see and interpret her interactions. The dialogue of the interaction is interspersed with a reflexive critique of the language and behaviour she has exhibited in order to display the conflict between thought and action. Although her outward performance is empathetic, and her language politely neutral, inwardly she is screaming, facing emotional chaos, which impacts in the form of physical symptoms of panic and upset stomach as can be seen below.

Peter: 'I guess it could be worse. I had a friend who just went blind.'

What does he mean worse? How much worse can it be? He'll probably go blind too.

He's dying. ...

Carolyn: 'He had AIDS?' I ask, saying the word AIDS quietly.

Peter: 'What?'

'The guy who went blind?'

'Yes, he had AIDS'. Peter replies in a normal tome.

The feeling of passing out wont let go of me. I'm nauseated. As my bowels react to the stress, gas pains warn me I need to go to a bathroom. Sweating, I clutch my cup of tea with both hands to steady myself. Its an effort to talk and hard to breathe.

(adapted from 1995a: 76)

Ellis explains this response in terms of the memories this meeting forced her to revisit of the time when her own husband was also dying and the confrontation with one's own mortality that encounters with others facing death inevitably provoke.

Author as hypothetical interviewer/interviewee

With regard to the arena of environment and planning, Dixon and Jones (1998) present a conversation over lunch, a dialogue between a hypothetical spatial analyst in the discipline of geography and a poststructuralist, in order to draw out the differences in epistemology, ontology, research questions and methods between the two perspectives. The whole is presented as a dinner menu under the title of 'My dinner with Derrida *or* spatial analysis and poststructuralism do lunch'. Here the voices of the authors are muted and disguised through hypothetical identities and re-presented under the rubric of a French luncheon menu with headings such as Entrée, Plat Principal, Desert and Digestif.

HOW HAVE THESE CHANGES IMPACTED ON RESEARCHERS?

The shift to other positions is a useful way of changing the previous authority of the researcher's voice but is often a very time-consuming and emotionally complex process involving years of writing and rewriting in order to gain distance from or to get closer to the data. Susan Krieger, Karen Brown and Ruth Behar all spent up to 12 years collecting and writing their data, and Carolyn

Ellis took nine years to come to terms with a lost relationship and to find the right voice to do justice to her feelings (Ellis, 1997). Ellis wrote that the story of her relationship with her husband, who had died of emphysema (Ellis, 1995b), was interspersed with the horror of her brother being killed in a plane crash at around the same time. This double tragedy led her to a need 'to understand and cope with the intense emotion I felt about the sudden loss of my brother and the excruciating pain I experienced as Gene deteriorated. I wanted to tell my stories to others because it would be therapeutic for me and evocative for them' (Ellis, 1997: 126). She found it necessary to keep notes of the process of writing, as did Krieger, in order to re-address the voices of participants and find a comfortable way of communicating.

Considerable emotion is poured into these texts and this becomes very obvious when performance is involved. Ellis and Bochner's performance of their abortion dialogue at a conference was difficult to do and emotionally charged for the pair. However, they saw it as a way to open doors to others to tell and retell similar stories and to make space to legitimise this form of communication, which is a natural way of sharing feelings from the heart.

The Researcher, the Research Participants and the Reader

With the decentring of the subject and the acceptance that both researcher and participants are multiply positioned and changing, and with knowledge, expertise and power located in fragmented bodies, how is participant information being treated? What does this mean when very personal information is shared? And what role does the reader have in all of this?

THE RESEARCHER AND THE RESEARCHED

In the move away from verification and cross-checking of participants' statements towards a reflective understanding of how social contexts (relationships, various personal pressures and views, politics, feelings, etc.) frame the construction of particular texts, are the voices of participants emerging more clearly? It would appear that 'research participants' fall into two broad groups: those with whom the researcher interacts in the gaining of knowledge regarding a particular research area, and the researcher him/herself who is integral to the research process in the construction of text.

Frames and framing

The researcher and the researched approach the research encounter with considerable intellectual baggage or frames (Goffman, 1974; MacLaren and Reid, 1994). These frames are 'the principles of organisation which govern social events and the actor's subjective involvement in them' (Goffman, 1974: 10). As we approach particular situations we use meta-textual frames (Bateson, 1973) – broad framing devices – to create meaning and to make sense of events. These frames arise from a variety of sources: some from gender and cultural socialisation derived from earlier social encounters with family and society, while others are gained through such life experiences as education, language games (culture– or discipline–based), public discourses, religious beliefs, previous research and the occupancy of other positions. The very act of choosing a

research question and selecting participants, documents or events, places a frame around these and lifts them out. This separation may disturb, distort or decontextualise the area of focus and this needs careful management and awareness.

It has been suggested (MacLaren and Reid, 1994) that there are four major framing approaches which researchers need to address. The first is extra textual – the imposition of our accumulated knowledge bases about the world, gained through education and the media. Intra textual refers to the internal framing devices such as variables of age, sex, ethnicity, which impact on our view of the world at a particular point in time. Inter textual is our preferred theoretical and ideological frames (developed from life experience or education into particular disciplines), which we use to interpret situations. Finally, circum textual is our interpretation of contexts in terms of time, space and location. This process of frame identification enables the researcher to decentre the self more effectively and also to use this awareness of framing arenas to clarify the influences affecting meanings volunteered by participants. When researcher and researched meet, portions of their layered frames overlap and where this overlap occurs, data is created. From this it becomes evident that the frames of both the researcher and the researched need to be exposed.

In order to make sense of meaning within postmodern orientations, all these frames need to be understood. But how far will the researcher need to go in deconstructing the discourses which constitute the responses of participants in the interview interaction? And how far will they go in exposing their own views of the discourses which have made up their multiple personae? How will the researcher and the researched be embodied in the final text? One- or twodimensional identification is insufficient – the discourses of race, sex, class and gender are no longer simple categories which can be imposed and have universal meaning. These are contested categories which have meaning only in context, where they are regarded as fluid, changing, complex, resisted, or even meaningless. How are participants using such categories? Are they being used as masks (Kwa, 1999) to block the 'gaze' of the observer, behind which existence and action can continue but in a disguised manner, or are these categories masks imposed by others for particular ends? Or, are they useful signposts in an ancient map, which may lead to selves partially demolished but still sufficiently intact for identification to be made.

The influence of the categories of race, gender and class has proved pervasive. Michele Fine and Lois Weis (1996) indicated their problems in attempting to write the stories of 150 economically challenged men and women of white, Asian, Latino and African-American extraction in a changing and negative political climate. Fine and Weis have opened up a conversation regarding the methodological and ethical dilemmas of an emphasis on author decentring and the move away from stratified categories such as race and gender. In order to manage these issues, the authors 'script a story in which they float a semifictional portrait of each community, layered over with an analytic matrix of differences "within", utilising 'coherence and difference' (1996: 253). In this manner they are able to demonstrate that the category of race is both unstable and complex but enduring. But problematising it as a construction does not get away from the fact that it is embedded in the fabric of society with considerable and ongoing consequences for the lived realities of some people.

Decentring self to highlight participants

These authors also present two other thorny questions. First, what happens if researchers choose not to report certain aspects of their findings? And what does this mean if suppression of some voices are involved? What responsibilities does the author have in this situation to ensure that an accurate reflection of the issues has been provided? Secondly, what impact do researchers of different race, colour and socio-economic level have on a setting? How do these differences impact on the data received and on the interpretation of this data? Clearly, each researcher will interpret issues somewhat differently and some will go to great lengths to problematise the previously powerful researcher–researched relations through the detailed display of their own frames and the tracing back of the discourses from which these have been constituted and they will treat the responses of participants in the same way. Others will take a lighter approach and interweave the voices of participants and selves in an ambiguous dance in order to indicate and trouble relevant frames and to expose the contexts in which interactions have taken place. While still others will focus more on the display of participants' voices or the voices of the self with minimal explanation, simply presenting these for the reader to respond to whichever way he/she will.

How does the researcher actually move to a decentred position? It needs to be recognised that this person still has a vested interest in the research, varying from curiosity to personal passion to monetary commitment, and is the one who has created the research focus, selected the participants and listened with interest to their views which will be presented in as intact a form as the structure of presentation will allow, but necessarily truncated and emphasised by the chosen form of display. As research participants, we are so used to the power and authority of the researcher that even the hint of an authorial voice or a highlighted area in question design creates a powerful focus in interaction. Is the exposure and recognition of frames sufficient to counter this influence? What stands for 'truth' and 'knowledge' when 'methods' have disappeared? Will we just be left with ways of approaching phenomena which provide more questions than solutions because 'post-modern social science presumes methods that multiply paradox, inventing ever more elaborate repertoires of questions, each of which encourages an infinity of answers' (Rosenau, 1992: 117)?

It has been suggested that bringing different lenses to bear on a situation (Peshkin, 2001) is one way of stepping back and developing multiple perspectives in the attempt to unravel complexity, Alan Peshkin's alternative and overlapping lenses include:

- Patterns (noting regular recurring events, responses or ways of being that construct the setting and peoples' lives).
- Time (being aware of how this frames organisational or individual activity? How is it being interpreted? Tracing history and historical documents and discourses over time. Using a longitudinal design to trace change).
- Emic (respecting and displaying others' views, avoiding imposition of one's own values and interpretations on the data).
- Positionality (identifying but putting aside views related to one's own age, sex, race, discipline, life experience, etc. in order to get close to the lives of others who should not be classified by such obscuring and limiting categories).
- Ideology (being sceptical about discipline and other ideologies which obscure vision, particularly theories, paradigms, methods, Othering, emancipation).
- Themes (taking personal favourites (injustice, power, transition, etc.) and being aware that imposition of these may blind us to other possibilities).
- *Metaphors* (understanding that these enable other comparative perceptions but may direct vision and attention in particular ways, preventing other ways of seeing).
- Irony (using opposing contradictions and juxtaposition to clarify complexity, comparing intentions with reality).
- Silence (developing an awareness of absence of people, emotions, omissions on the margins, conflict and other excluded aspects). (Adapted from Peshkin, 2001: 241 - 7

Narrative voices

The use of narratives – large displays of story material gleaned from others or from the self – has been one approach that has been used to bring the voices of researcher and researched closer to the reader. This form has not been without its critics. The use of personal narrative in particular has received criticism. Some have viewed this approach as simply providing a therapeutic outlet for the narrator, a 'blind alley' of self-indulgence (Atkinson and Silverman, 1997).

Art Bochner (2001a, 2001b) has responded to this criticism by asserting that narrative inquiry is a legitimate part of the move to diverse and multiple forms of qualitative display, 'it is an articulation of the significance and meaning of one's experiences' (2001a: 153), a move which is undoubtedly threatening to more traditional social scientists whose power of analysis and control of interpretation has been an important part of their research. Bochner insists that a collection of narratives provides access to the truth of people's lives and that it is up to us (as researchers) to view and listen to these rather than to decontextualise and segment them into factors and variables in order to make bits of them a suitable response to some predefined question or to fit some theoretical frame. He focuses on the move from fact to meaning, from single to multiple representations and to stories that are local, including those of the self, where critical reflection has the greatest potential. Narrative breaches the boundaries of disciplines moving across literature, anthropology, sociology and history.

Containing it with strict guidelines and marginalising it by terming it 'alternative' fails to recognise that it is a legitimate and integral part of postmodern research.

Bochner asserts that the research we undertake on relationships is inextricably linked to issues of meaning we may well be trying to work through in our own lives, thus creating a link between the therapeutic and scholarly aspects of research. He also argues that relationships between the researcher and the researched have taken a whole continuum of possibilities from the past distant observer to one who sees research as inextricably connected to relationships formed in the research encounter, and that only through the development of these can we bridge the gaps to the lives of others while providing insight and reflected light upon aspects of our own lives. The therapeutic narrative not only helps the writer come to terms with loss, but reaches out to the involved, reflective reader to share and make meaning of his/her own life experiences, thus potentially doubling the therapeutic outcome. Where such experiences have not been shared, these narratives serve to provide insight, empathy and a greater understanding of the lives of others.

The contextualising and theorising of long narratives by researchers may well serve to highlight and to provide particular interpretations, but these may also obscure the original message embedded in a narrative. Some authors (Fine and Weis, 1996) embrace the interpretative/theorising stance where they see it as problematising a strong existing position, but one criticism which can be levelled at this position is that in replacing the long-held views of white, male academics with those of Jewish, feminist academics, they may well be simply replacing one form of domination with another. Multiple voices of multiple selves speaking from different positions are seen as one way through this problem. This, then, presents the question of how the readership will interpret this and which of the selves will be listened to? Will policy-makers, for example, pick out the voices which suit their purposes and ignore others providing less palatable information.

Let's look in more detail at some research examples to see how researchers are approaching issues of decentring, participation, voice and the reader.

THE DECENTRED AUTHOR (SEPARATE RESEARCHER VOICE)

An extensive narrative display was used by Helen Woodruffe-Burton (1998) in her study of compensatory consumption behaviour. She presents a case study of one of her participants, Emily, who she sees as a postmodern consumer (one for whom consumption is an ongoing part of self-production). But there are, in reality, two stories here: Emily's narrative and the researcher's story as she attempts a postmodern approach and resists the formats of traditional marketing literature in order to justify paradigmatic pluralism. The 'I' of the researcher's voice can be seen in the introductory and methods sections where the researcher states her concerns and biases: 'I seek a way of doing research which is emancipatory in nature' (1998: 6). 'I want to try to put across Emily's story without too much imposition of my own interpretation' (1998: 7). The

'I' persists through the formal literature review which is interspersed with self-critique: 'It has frequently been my wont ... to read lengthy interview transcripts and to seize upon the little gems, the little nuggets of recorded information which can be neatly labelled, pigeonholed and categorised as falling into this or that type of behaviour' (1998: 7).

Emily's extensive participant-voiced story contains some brief contextualised information from the author:

Researcher: 'Financial stress is frequently a trigger for compensatory consumption in

Emily's life.'

Emily: 'A few weeks ago, I don't remember what triggered it but I assume it must

> either have been a huge bill of some sort. ... I don't want to cook, I want to go out to dinner instead, we usually go to a popular restaurant, which is never a good idea when you are in a bad mood to go out with a three year old to dinner but this is quite standard at home, is that financial bad

news then going out to dinner'. (1998: 10)

The researcher does not impose her own interpretation on this story, merely suggesting how it might be interpreted, but the detail in which the story is presented allows the reader the option of a wide variety of interpretations. The greater the richness of detail which is displayed, the less likelihood that a simple interpretation by the author will be accepted by a reader.

Susan Bost (2001) also takes on a playful and ambivalent dialoguing position in her own voice, moving between academic and hip hop knowledge. She uses 'hip hop' to 'describe the culture associated with contemporary African American female urban youth identity, including rap music, fashion, break dancing, graffiti art, and signifying' (Bost, 2001: Note 3). Poetic display of hip hop is interspersed with researcher commentary and perceptions of the body by women of colour, in order to explore sensuality, sexuality, abuse, exploitation and differences from the white culture. Feminist orientations are used to produce an open-ended text.

INTERWOVEN VOICES (RESEARCHER AND PARTICIPANTS)

Six poetic transcriptions taken from interviews are used to display the voice of Dona Juana, an elderly female professor at the University of Puerto Rico (Glesne, 1997). The first poem starts:

That rare feeling I am a flying bird moving fast seeing quickly looking with the eyes of God from the tops of trees (1997: 202)

The 'I' of the researcher contextualising, adding further information and critically reflecting on the process of writing this way, follows each poem. Glesne points to the difficulty of whose voice finally dominates the poem – the words and phrases chosen by the researcher may well reflect not only her own political agendas but also aspects of the rewriting of the self gained through intersubjectivity with the participant. The difference between this and Woodruffe-Burton's presentation lies in Glesne's conclusion that a third voice has emerged through poetic transcription – a combination of both researcher and researched. 'Using Dona Juana's words, I compose the pieces that tell a story, make a point or evoke a feeling told, heard, and felt by either Dona Juana and myself. Poetic transcription disintegrates any notion of separation of observer and observed' (Glesne, 1997: 211). One drawback of this tight mode of conjoint voice is that it allows the reader less latitude of interpretation.

THE AUTHOR AS SUBJECT/FOCUS OF THE RESEARCH

The personal voice of the narrator/author allows the exposure of multiple selves and the linkage of different experiences of a person's life. Art Bochner (2001b) explores the theme of isolation, and resistance to change, in both work and familial contexts when he discusses the death of his father while he was away at a conference. The 'I', 'eye' of the researcher/self-observer dominates as the story shifts among various selves: adult son, child and academic as the narrative outlines his reception of the news, his flight back home, a digression into the impersonality of academic life, flashbacks to childhood interactions with a violent father, academic discussions using literature to shed light on difficult-to-handle, emotive events, a eulogy (which he wrote and delivered for his father), and an attempt to reconstruct, to understand his father's life and to come to terms with the past. 'My father's death disrupted my sense of continuity. Looking back, I saw that one-day I had not returned home; instead I just kept running and didn't stop until I was too far away to see the past behind me. Now the past was in front of me again' (Bochner, 1997: 425). Here, storytelling is seen as therapeutic in the reconstruction of meaning and in putting the person's life back on track. The notion of 'epiphany', a sudden event, a turning point from which several aspects of life now need to be reframed in order to provide closure or continuity, dominate this text. The author demonstrates the process of coming to terms with the personal familial aspects prompted by his father's death and indicates that this disruption has unsettled his work life which now also needs reframing, in particular past losses and terminations in other contexts. This epiphany clarified the split between the academic self and the personal self and indicated how the 'objective' academic orientation closes out the personal, creating alienation.

Another example of an author writing of her own experiences is provided by Laurel Richardson (1998), who carries further the links between past and present indicating how these shape the future. In an article which avoids traditional forms of literature review and interpretative theoretical discussions, Richardson cuts straight to the action, mixing fact, fiction, autobiography and co-authorship through the metaphor of the writing map on which she locates

herself. Richardson comments that writing about spatial and temporal locations has helped her to relocate her physical, emotional and psychological selves. She explores her emotional responses to two life-changing situations: the first a car accident in which she was badly wounded, resulting in her losing an opportunity for tenure and promotion at her university. Here, Richardson's partner creates fictional dialogue between herself and two hospital-visiting colleagues which better expresses her emotional feelings around this event. This use of fictional dialogue is justified on the basis that 'Dialogue is not just putting words in imaginary people's mouths. Dialogue is the audible breathing of a person's soul' (Richardson, 1998: 48), and from Picasso 'We all know that art is not truth. Art is a lie that makes us realise truth. The artist must know of the manner to convince others of the truthfulness of his [sic] lies' (Picasso, 1965: 25).

The story then jumps 16 years to an autobiographical account of her involvement in a poststructuralist feminist group and how this prompted a move into experimental writing, bringing her again into confrontation with the established practices of the university culture and culminating with her leaving the sociology department and moving to cultural studies. According to Richardson, the combination of fact, fiction and feeling over spatial and temporal locations helped her both therapeutically and in the relocation of self, and from this reader's perspective appears not only as a more intense reflection of experience but also provides a better communication tool with which to reach out to the audience.

Timothy McGettigan (1997) displays the complexity of the ethnographic role and the change in perspective as the researcher shifts position with regard to the phenomenon under investigation. During his trip on the Green Tortoise adventure travel tour, he had initially taken the position of fairly distant observer in the classical ethnographic tradition, which had allowed him to view the mode of operation and the behaviour of other passengers and to make sense of their antics from this position. On the fourth day, an incident between a rather inebriated male and female passenger occurred in which both ended up in a river and McGettigan went into the river to help the female passenger. The venting of his fury towards the male passenger involved and the loss of his spectacles in the river, served not only to shift McGettigan's vision but also provided him with an epiphany - a moment of truth which jolted him from distant observer to highly involved participant with considerable emotional involvement – as well as providing a metaphor with which to frame the narrative. This shift in awareness enabled him to reflect critically on the distance between the interpretations gained from his current and earlier position. The dialogue, which is set up with the reader, then allows much greater transparency in the creation and viewing of reality from both researcher's and readers' perspectives.

McGettigan stays with a more traditional article format of third-person literature review, sliding into the 'I' of the author as he approaches the actual journey. In the narrative story, an extensive third-person narrative, is presented

initially reflecting the more distant earlier stance of the researcher but this changes in focus to the 'I' of the author as he becomes involved in the incident and subsequently in the tour. Staying in the first person, he concludes with a reflexive critique of his performance. Following the incident, changes noted were 'an increased level of interference in the concerns of others that at times approached the level of surrogate parenthood. ... However rather than contaminating the social environment on the Tortoise ... my morally involved participation ... enabled me to experience the site more realistically' (1997: 374), enabling him to challenge the power of knowledge through a redefinition of reality.

ETHICAL ISSUES

Where do the traditional ethical standards so dear to Ethics Committees stand in postmodern research? The issues of concern to most committees (apart from protecting their institutions from litigation, which often appears to be the dominant motivation) lie in concerns of researcher accountability and issues of privacy. In general, it is anticipated that participants should have full knowledge regarding the research purposes, that any possible physical or psychological harm they may experience should be removed altogether or severely minimised, that participants have the right to leave the study at any stage without prompting adverse effects such as loss of treatment or benefits, and that anonymity and confidentiality of participants should be maintained at all costs with all data being de-identified and stored safely for an appropriate length of time.

In contrast and implicit in Lyotard's report (1979) is that ethics, including universal and moral rules, is yet another grand narrative about which we should be deeply sceptical. Later works by Lyotard (1988a, 1988b; Lyotard and Thébaud, 1985) focus on the little games (petit récits) or small discourses in which we are involved and which are not in themselves rule free – their focus being less in terms of universal laws and more in terms of an emphasis on behaviour which is beneficial to other players in the game community. We are all game players involved in a multitude of games, and without involvement in these games we would cease to exist, these local engagements are all there are. Sensitivity and care for others in the game is part of expected and accepted behaviour.

Postmodern authors see it as their responsibility, rather than to acquiesce to so-called universal laws of ethics, to seek out such discourses and constructions as have dominated particular fields and to explore their inside worlds, exposing the complexity, fragmentation and seething mass of contradictions, resistance and diversity which exists in most settings. The role is an active one and is bound up in the processes of collection and deconstruction of information as well as exposure of the self while incorporating a strong sense of responsibility to others, particularly those bound up in the games of the research

process. In addition, there is an acceptance that anything produced must be openly transparent and available for further deconstruction, particularly regarding discourses identified, the discipline orientation or the political slant of the researcher. Stephen White (1991) has emphasised the notion of responsibility for otherness, through recognition of differences, and has pointed to the spaces between self and others as providing an ethical basis for action. Frederich Nietzche's notion of the eternal return - the idea that life's paths and experiences repeat themselves returning time and time again in the same sequence (1882/1974: 341) in the self-creation of self – also emphasises the uniqueness of each individual in the process of becoming and how celebration of the differences between people may provide an important ethical focus. This is in contrast to Richard Rorty's view (1989) that in acting on our own view of what is morally acceptable we should seek to persuade others to accept our views, a position which could lead very quickly back to powerful people developing universal laws for the betterment of humankind and away from a celebration of difference and otherness. This dilemma is particularly evident in public health (Roberts and Reich, 2002) where the desire to persuade others to follow 'healthy' lifestyles for the greater good of the economy comes into some conflict with the emphasis on 'individual discretion, risk taking, chronic uncertainty and never placated qualms' (Bauman, 1993: 203), which reflects the notion from Kant of individual responsibility deriving from the assumption that each being has a moral capacity within themselves for critical self-reflection and that in checking against one's conscience and the relevant gaming community, the appropriate moral choices will be made.

This emphasis on moral responsibility within research contexts requires personal engagement at a much greater level. Such responsibility involves 'being for the Other before one can be with the Other' (Bauman, 1993: 13) and '[a] wakening to being for the Other is the awakening of the self, which is the birth of the self. There is no other awakening, no other way of finding out myself as the unique I, the one and only I, the I different from all others, the irreplaceable I, not a specimen of a category' (1993: 76-7). In research, this might involve expanding one's close social groups to include participants who otherwise would not be more than passing acquaintances or relative strangers, or emphasising a strong professional commitment to participants. An emphasis on shared concerns, common global problems, inequalities and social justice help here. Alternative data collection modes and an emphasis on long-term accountability would also enhance this.

Postmodern ethics thus appear to comprise 'morality without ethical code' (Bauman, 1993: 31) and 'individuals thrown back on their own subjectivity as the only ultimate ethical authority' (Bauman, 1992: 203). Although universal laws are rejected, individual principles remain but these are not to be followed blindly. Such moral principles fall into what Jacques Derrida terms 'quasi transcendental' (Cilliers, 1998) positions at the border of space which serve to challenge the existence or non-existence of universal ethics in the deconstructive

process (Gasché, 1986: 317). They are guidelines, which need to be questioned and examined in the light of each piece of research for their legitimacy and applicability. The focus is thus on researchers to maintain appropriate behaviour according to the dictates of their own conscience. Implicit in this is the assumption that participants will be well informed regarding their rights and will be able to recognise and cope with any exploitation in the research context.

The move to individually responsible research and respect for others should not be too difficult if we agree with Mikhail Bakhtin (1990), who has suggested that the other already inhabits the self as one of the many voices absorbed during identity formation as an interactive member of different social groups. This provides our basic humanity – our empathy and understanding of others. In undertaking responsible postmodern ethical behaviour, researchers should consider: attempting to gain as much intersubjective agreement as possible; re-presenting multiple narratives as 'truthfully' as possible or clarifying whose view (researcher or researched) is dominating and which discourses have impacted; as well as respecting and maintaining the dignity of others. Kristi Yuthas and Jesse Dillard (1999) have suggested the following in the operationalisation of a postmodern ethical approach to enable the development of empathy and solidarity of management with stakeholders in the construction of information systems, and these principles can be adapted for use in other research studies:

- In the identification of stakeholders *all* those who are impacted upon should be included and their input respected rather than inviting key people for their status and power in the organisation.
- Good relations with and within the stakeholder group should be fostered, all
 people's input respected and power given to them. The power involved in
 deliberately silencing difficult issues or maintaining a lack of familiarity with
 others should be avoided.
- The active exposure of past discourses and the recognition of how these have been constructed and maintained, can help force issues of accountability.

Inclusion of stakeholders at all levels and the fostering of the whole team as a social group should lead to moral reflexivity, and greater equality and awareness of the needs of others in enabling a potentially emancipatory environment. Here consensus rather than winners and losers is the most likely outcome.

Ethics in data collection

In seeking an understanding of a particular domain, it would be useful to identify the diversity of the micro-cultural frames of which it is comprised. These frames may have historical links. The values of individuals interacting within the broader culture in the fluid and changing construction of meaning also needs clarification. Traditional practices of interviewing, observation and document-gathering persist, but the relationships among researcher and researched should become more equal and more respectful of others' views. The boundaries between researcher and participant blur. Many voices rather than just a few are sought and will be displayed without over interpretation.

The work of Craig Thompson and Maura Troester (2002) indicates that gaining this level of information in larger research projects is time consuming. Their project exploring consumer value systems took four years. They talked informally with natural health practitioners, participated in several natural health seminars and adult education courses, and were involved in several natural health practices. They read books and magazines and listened to radio programmes on natural health and visited websites in order to understand the language of the micro cultures. A variety of natural health consumers (32) were interviewed to provide further information. Movement among these texts was developed and challenged in an iterative process and the indications were that four main cultural values were involved: harmonious balance (purification), flexibility (pragmatic moderation), making connections (transforming insights) and mindfulness (choice, risk awareness). They concluded that postmodern consumer culture is complex, highly adaptable and changing, with intersections of ordered intra-cultural diversity between micro-cultural and microsocial aspects of society. By theorising values as narrative structures, cultural content could be viewed and a better understanding of the links between meaning and consumer values gained.

The creation of greater equality in interaction and feedback among researchers, designers and users of technology has the capacity to create an ongoing productive dialogue which not only blurs the boundaries between researcher and researched but crosses the divide between researching in a bounded context and ongoing usage of the technology (Salvo, 2001).

From ethics to action

It has been suggested that in mapping the territory of the research area to give insight, then in listening to the stories of others, it is no longer possible to take the data and run or to assume that publication of one's findings may be the key to change for people experiencing inequality or other problems.

Rick Voithofer, Alan Foley and Steven Ross (2002) have constructed an ideal example of how postmodern research approaches could be applied to the field of information technology and, incidentally, indicate how ethical orientations are woven into design. The purpose of the research was to explore how technology shapes pedagogy and curriculum within the following scenario: Information Technology is to be integrated into the social science curriculum in a school which has a large African population and Somalian students with second-language English. The research question within an ecological orientation (which has a focus on impacts and interrelationships between components

of the problem) would take into account: interrelationships among teachers, students, the classroom, school and community cultures, other curriculum and multiple ways of knowing in order to investigate how particular technologies or delivery media frame what is teachable and unteachable. The focus then becomes construction of knowledge, and student identity and exclusion through particular representations, rather than the more traditional orientations of learning efficiency outcomes through technology use.

Three sub-questions then arise: What are the ideological positions of the researchers? What are the social dynamics and learning goals of the existing learning environment? And how can an integrated design incorporating multiple ways of knowing be created?

Gender differences would not be assumed but any differences found among students would be used to begin to explore learning experiences from the perspective of cultural identity. The researcher would utilise many lenses in seeking how knowledge is created and would participate in the environment in order to collect a range of interview, observational and textual data (for discourse and narrative analysis) from a number of classroom topics. Generalisable conclusions would tend to be avoided but a number of indicators and suggestions could be developed to enhance curriculum design through multiple ways of learning. The study might conclude that a social science curriculum that both incorporates and challenges these students' views – in terms of their technological, historical and social constructs – would facilitate their learning.

'Postmodern frameworks [should be used] to recognize the complex social, cultural, and political dynamics that have implications for the negotiations of race, class, gender, and ethnicity within diverse learning environments and that are set in motion when learning with technologies and media' (Voithofer et al., 2002: 14). In an ideal world and maintaining ethical orientations, these researchers would move into collaborative curriculum development with staff and students, would help address the complexity of issues uncovered and would facilitate joint monitoring of outcomes at all levels in a continuing and adaptive manner.

THE POSITION OF THE READER

The death of the author has occurred in order to allow for the rebirth of the reader as the final authority. The discipline of semiotics has indicated that various techniques are available in the form of open texts, which encourage the reader to take a position of power in interpreting and assessing research. The text is created by the author for the reader. The author is 'simply that someone who holds together in a single field all the traces by which a written text is constituted' (Barthes, 1977a: 148). During textual construction a dual dialogue is created between the author and the reader, and the text and all other previously

finished texts. But on completion, the dialogue is between the text and the reader only (Eco, 1984: 47). No text is an unique or original entity,

a text is made of multiple writings, drawn from many cultures and entering into mutual relations of dialogue, parody, contestation, but there is one place where this multiplicity is focused and that place is the reader, not as was hitherto said, the author. The reader is the space on which all the quotations that make up a writing are inscribed without any of them being lost; a text's unity lies not in its origin but in its destination. (Barthes, 1977a: 148)

This text is a carefully crafted object with a particular reader in mind. Is this reader one to be satisfied with didactic 'factual' reality? Or one to be challenged and intellectually transformed? Or one to be taken on a journey of discovery? According to Denzin (1997: 188), and applying to readers his categories for performance texts, there are four types of audience to which such texts might be displayed: professional (scholars); participatory (co-performers/critics); lay (fellow performers); aesthetic (those who come along to view the performance for enjoyment or enlightenment). The aesthetic viewer or reader may simply browse nomadically, patterning the surface of the text and occasionally dipping deeper as particular aspects catch the eye. The altered constructions, both emotional and intellectual aspects, which the reader will create in dialogue with the text, will depend on his/her pre-existing biases, beliefs and life experiences and why he/she is reading (for deep engagement with the text to enhance knowledge or to provide a critical review or to identify by superficial skimming whether the text contains anything of particular interest). Contextual factors may also impact (quiet or noisy environment and whether the mind of the reader is alert or half asleep). The interactions of historical, social and cultural positioning of both the reader and the text will intersect in the development of an outcome.

The author's skill in structuring the text with regard to reader involvement will be the topic of the next chapter.

Data Presentation and Re-presentation

'Every story tells a story that has already been told' (Eco, 1984: 20). In crafting the text, the postmodern writer is cognisant of this, and of the ever-changing perspective of what constitutes 'truth' and the problem of the lack of a universal reality. But what does it look like when undecideability, uncertainty, chaos, ambiguity and juxtaposition heavily influence the social construction of a transitory reality?

It is not the role of the author to interpret data collected for the reader, only to expose how the text has been constructed, to identify discourses and discursive practices, to point to links to other stories and to indicate what masks the author has assumed and why. In order facilitate the reader's access to this text, there are a range of strategies that the author can bring to its construction. This chapter aims to display examples of innovative and creative textual forms that have taken advantage of the many opportunities offered, including juxtaposition, layering, pastiche, vignette, literary and dramatic approaches. Creative visual forms such as photography, paintings, videos and computer imaging are still in the early stages of use, as are aural forms such as music and other sounds.

OPEN VERSUS CLOSED TEXTS

Umberto Eco (1979) has provided indications of the diversity available in the structuring of open texts in order to allow many interpretations, ranging from the active performance of a text which has been structured to allow performers autonomy in the way they enact the performance, to the passive reading of a written text where reader interpretation is encouraged. In music, the structures which have encouraged performers to be actively involved include: choice of starting point, choice of sequencing of different segments, and flexibility in interpreting the length and grouping of notes, and these options can be transferred to the readers of other texts. A further option includes taking part in the ongoing development of a text, through the varied interpretations that will inevitably occur as viewers/readers/performers bring their differing frames to a reading/performance. This makes all such texts 'works in progress'.

There are various ways of capturing readers' attention and bringing them into an active and emotionally empathetic dialogue with the text, and to a greater or lesser extent with the writer/people who wrote the text. One technique can be seen in the edited text Composing Ethnography (Ellis and Bochner, 1996). The introduction takes you into the house of the editors and enables you to eavesdrop on a conversation which appears partly posed but sufficiently real enough to allow you to feel like a fly on the wall observing in another's domain. The ending of the book picks up on this invitation to come closer through a letter written by one of the editors which invites the reader to provide a response to the editors from both intellectual and emotional positions regarding the book in a continuing dialogue. This approach avoids the usual finality of book endings and enables the option of continuing transformation, particularly when reader comments are displayed in reprints or new editions. Dialogue has also been used to address the reader and incorporate him/her in a discussion about new themes in art history and writing (Phelan and Rogoff, 2001).

Let us examine some of the current ways of encouraging the reader to interact with the text - to come as close as possible to the emotions experienced by authors and participants in order that the dialogue between reader and text is unmediated by further author interpretation.

OPEN TEXTS: OPTIONS

Performance texts: public performances

The performance of data has been seen in an earlier example of Carolyn Ellis and Art Bochner (1992) performing their personal stories of pregnancy and termination. The display of fieldwork research can also be seen in a dialogical performance by Michal McCall and Howard Becker (1990), derived from their study of the social organisation of professional theatre in the USA. This text was performed at a conference. The piece is delivered as a prologue and is a discussion of the process of developing and delivering performance science. The interweaving of the researcher's voice with the voice of the theatre historian, interspersed with findings from the research, serves to blur the boundaries between writer, performer, data and audience. The direct addressing of the audience and inclusion of them (if only by talking directly to them rather than by encouraging an active response) has a more immediate effect than a continuing third-person account.

Performance science has its critics, particularly those who bemoan the blurring and loss of discipline boundaries and the lack of interpretative theoretical perspectives and rigorous analysis (Hilbert, 1990). Conquergood (1985: 1–13) has pointed to four potential moral pitfalls in the creation of performance texts: the custodian's rip-off, the enthusiast's infatuation, the curator's exhibitionism, and the sceptic's cop-out. The major concern here is that the information

gained often comes from those of a different class/culture from that of the researcher, and in turning narratives gained in the research context into performances there is a tendency to trivialise, simplify or to ignore the depth and contexts of cultural differences.

Ethno drama

Confrontational theatre performances have been used for some time to bring about emotional catharsis in the audience. A catharsis has been defined as 'a staged (semiotically presented) revelation that intentionally confronts the emotional construction of self for audience members and actors and may ... present a prerequisite of epiphany' (Mienczakowski, et al., 1996: 443). Mienczakowski, Smith and Sinclair have used this technique in the health area to challenge audiences with regard to displaying the emotions and powerlessness experienced by people with traumatic brain injury. Other studies have addressed the experiences of those undergoing detoxification (Mienczakowski, 1996) or schizophrenic illness (Mienczakowski, 1992). Information is usually gained from interviews and observation and 'vraisemblance' (of or from truths, Mienczakowski, 1996: 258). The actors may well have experienced the condition they are acting out or they may not. The audiences to whom these performances are directed are health practitioners, students, carers and the interested public where the focus is community education.

One example of an ethno drama which highlighted the experiences of people undergoing detoxification (Mienczakowski and Morgan, 1993) opens with a scene derived from an informant's description of herself at a night beach party. A teenage girl stands alone drinking Bourbon. An adjacent slide show echoes her drinking posture, showing images of this girl and other women drinking alone and in a range of drinking contexts. The girl then dances alone to music and is approached by an intoxicated male who offers her a bottle and tries to have forced intercourse with her. His advanced drunken state and her vomiting prevent this occurring.

A similar form of ethno drama in 'show, don't tell' mode is a one-act play developed by Darryl Pifer (1999) to illustrate the racial antagonism which he heard about incidentally while he was researching the case studies of two 'problem' white youths. The incidents in this small rural town (96 per cent white Anglo-American) involved the burning of a cross on the front lawn of a black student, taunting and violence. Information regarding these racial incidents was gained from newspaper reports and discussions with the two youths and a staff member who had been present at the time. Scenes in the play display student interaction, parent–student interaction, staffroom conversations and community gossip, all interspersed with brief comments from the 'theorist' author who situates the scenes in the wider social context.

Other ethno dramatic options involve a blurring of the boundaries between actor and audience. A 'mystory' performance by Sanmiguel (2000) encourages audience participation by giving them a text to respond to prior to the performance and by giving them lines to perform during the performance.

The use of this form of theatre to produce a cathartic form of therapy can be very powerful for the actors and there may be those in the audience who have also experienced similar situations, or who unwittingly have enhanced the powerlessness of those who are the focus of the play, or for whom the performance is a revelation. For these people, an 'epiphany' – often a turning point following 'a problematic experience that illuminate(s) personal character' (Denzin, 1989: 141) - may occur. Counsellors are available at each performance for those who may become distressed or for those who may need further information. Forum discussions after the performance allow the articulation of responses as well as facilitating audience-actor interaction, and these forums are recorded and added to the data base of the project. It is suggested that the emancipatory nature of ethno drama needs to fold back further on itself in order to deconstruct the structures and discourses that have created misinformation and non-empathetic attitudes (Mienczakowski et al., 1996).

Simple layering

Simple layering involves the use of more than one layer. Barbara Jago (1996) presents an initial layer of a story of her father, gleaned through the postcards he sent his daughter from all parts of the world, but these, plus the family photos which inhabit her apartment, are a fantasy. Beneath this layer is another, a story of a father who left home when Barbara was eight years old and hasn't been heard of since. A third layer, the 'real' story of his disappearance, is pursued. Vignettes from the author's remaining family are sought, displayed and further layered with intellectual discussion in a 'writing story' which encompasses the process of transforming experiences into narrative form. The whole presents a narrative therapeutic process by which the author reveals and comes to terms with the absent father-daughter relationship, recognising how this has impacted on her subsequent relationships with other men.

Twelve years of sitting in the back row of the audience listening to the changes in experimental presentations at cultural studies meetings is interwoven in a double-voiced account with moving to the front (podium) of one meeting, and the fears and problems experienced in constructing and publically presenting her own piece of layered autoethnography (Oleson, 2001). In another example, Akindes (2001) utilises conversations and memories of family life to layer her experience of a trip which she took with her father at the age of four to a town in Hawaii to attend a funeral. The current visit to this

same town is to observe the last 'bon dance', which is a Buddhist ceremony held to honour the dead who are thought to return home between July and August each year. The conjunction of these two events, religious and familial, allowed interplay within a text in which the two events were layered, evoking memories and developing understandings of the relationship with her father. The rhizomatic metaphor of lava flows on the island is used to link the temporal memories, allowing release and reflecting on the layers of identity. Journal notes, videotapes and interviews provided the data for the layer of the current visit and loose subjective, reflexive brush strokes illuminate the past and 'allow the heart of the matter to emerge' as fragments of memory arise and are seen with an adult eye (Akindes, 2001: 23).

Complex layering

In order to look reflexively at the emotional dimensions and consequences between body and self over time and to link personal emotions with societal reactions and structural limitations, Andrew Sparkes (1996) uses a number of layers to expose the fragility of the body-self in contemporary society. Again, the notion of epiphany provides the opportunity to take stock – to look backwards and forwards across time and space in order to understand the impact of repeated injury and the embodiment of pain in the process of creating new body narratives.

The focus is the reflexive relationships between his body and himself in a situation where his body has been changed through injury, leading to disruption of self-image and changes in self-perception. The structure involves a discussion of other literature and the method of self-narrative, in the third person, before moving to the first person to reflect on how a repeat onset of pain takes him back in time to the pain and fear of the first onset. This reflection is interrupted by medical voiced reports of CT and MRI scans, which are followed by the display of a telephone conversation between himself and his brother who is an osteopath. A general discussion in the first person precedes a reality incident as Andrew rejoins a gym in order to strengthen his back. A diary record of a week of pain is then disclosed, followed by a flashback to childhood before a more detailed concluding exploration of the meaning of the gendered body in the culture of the United Kingdom. Within first-person reflection, Andrew moves between the past and the present, tracking influences and fears, actions and reactions. Multiple and diverse layers of emotive disclosure, fragmentation and disruption are deliberately used to engage the reader.

A multivocal layered account of child sex abuse (Fox, 1996) is used to present three perspectives on this form of abuse. The voices of the abuser, one of his victims and the researcher (who has also experienced such abuse as a child) are juxtaposed in three columns on the page (see structure below) in order to contrast responses, and reactions to responses, of the three:

Ben - Sex Offender

I love her vou know. You see We really had a good relation ship. She loves me, she told me that.

Karen - Researcher

I want to believe Ben. I guess I've always hoped that I meant something to my abuser; that he really did love me; that he really did feel I was special.

Sherry - Victim

I never felt romantic love for him. That area disgusts me. (Fox, 1996: 339)

This is a powerful and confronting approach, which is explored further through feminist and Foucauldian notions of the location of power in this type of situation.

Spaces and gaps

To date, this can be seen more readily in literature and film which clarify how spaces and gaps can be used in data display. Raymond Carver's short stories of snapshots of several days in the lives of ordinary people in Los Angeles (film version, Short Cuts (1993) by Robert Altman) presents interspersed segments of each story, leaving the viewer the opportunity to fill in the gaps any way he/she wishes – by using fantasy, suspected reality based on their own life experiences, or shrewd judgement of the characters presented.

Umberto Eco (1979) has also presented a heavily gapped short story in seven very truncated chapters varying from between two and 20 lines of text. The story is about a married couple in a rather tempestuous relationship. After a particularly violent quarrel (Chapter 2) they make up and Chapter 3 is left blank for the reader to visualise this process. In Chapter 4 each receives a separate invitation to a masked ball in which it is written that there will be an opportunity to see their partner in a good mood at this event, so each pretends to the other that he/she will not attend the ball while secretly making preparations to do just that and in the disguise each has been warned the other will take. They meet and retire to a private room to dine. On removing the other's mask it is found that neither the husband nor the wife of the earlier chapters is present. At this point the story stops, leaving the reader to try to sort out what has happened, while being assured that the original married couple lived much more happily than could have been predicted by the earlier chapters.

Metaphor

Metaphor involves a comparison or analogy between two things or aspects where one is referred to as if it was the other thing (e.g. 'life is a journey', 'you are my sun'). Jacques Derrida has suggested that in making such analogies other meanings can arise as 'metaphor is never innocent. It orients research and fixes results' (Derrida, 1978a: 17). Metaphors are a form of *trope* (an approach which shifts understanding from literal to figurative – to the domain where words or phrases have other than literal meanings). Tropes also include; irony (where the intended meaning is quite different from the one expressed), metonymy (where the name of an attribute is substituted for the thing meant (e.g. crown for authority), and synecdoche (where a more comprehensive term is used in place of a less comprehensive one and vice versa (e.g. 'nose to the grindstone' where the assumption is that there is a body attached to the nose).

In postmodern displays, metaphors are often used to create another level of imagery in order to reflect and refract the data presented, or to provide another dimension or lens or frame within which the reader can toy with the images presented. 'Lava flow' is used as a metaphor for time (Akindes, 2001), the 'mystic writing pad' becomes the analogy for the impressions of life events on the body (Ronai, 1998), the 'journey' is the autobiographical process (Jago, 1996), and skirting (going around) the 'pleated text' – the mixed experimental and traditional academic papers form the pleats – the 'folds' of which can be turned back to reveal the writing contexts (Richardson, 1997).

Parody and irony

Parody involves an imitation or mimicking of the works/ideas of another in order to show them in a particular light, usually for purposes of irony or ridicule. If irony is the focus, double coding or juxtaposition is often used in such a way as to convey a meaning opposite to that to which the words actually refer. In this manner, highlighting and ridiculing can occur at the same time, clarifying both the limits and the longevity of particular discourses (Hucheon, 1989: 98). Umberto Eco (1993) provides an example of this in a short manuscript (supposedly left in a prison cell by a prisoner who provides echoes of the personas both Vadimar Nabokov and Eco himself). The manuscript is entitled 'Granita' and parodies Nabokov's 'Lolita', but instead of a prepubescent female who is experiencing the passion of a middle-aged male, Granita is an octogenarian grandmother lusted after by an adolescent male. This intertextual juxtaposition provides the basis of the parody and is emphasised by the ironic language used by Umberto. Umberto as he describes his passion for older women: 'I loved, dear Reader, dear friend! And with the folly of my eager years, I loved those whom you would call, in your sluggish thoughtlessness, "old women." From the deepest labyrinth of my beardless being, I desired those creatures already marked by stern implacable age, bent by the fatal rhythm of their eighty years, horribly undermined by the shadow of senescence' (1993: 8). The playful juxtaposition of the two texts also serves to clarify what has been privileged (youth) and marginalised (females who are older) in western society.

Pastiche

The emphasis here is either on imitation of the style or content of existing texts, or on the combining of different styles, often including the presentation of a mixture of fragments as a collage. David Adams (2000) utilises imitative pastiche to present a short story on the death of Tarzan. The style and context (forest) are similar to the original stories but the figure is not that of a fit, young male swinging from tree to tree, but that of a geriatric and possibly delusional old man rolling happily among the autumn leaves as he approaches death.

The collaging of fragments from other sources has echoes of the bricoleur and Ronald Wendt (1998) provides a complex presentation, which includes pastiche, paradox, reflexivity and interruption as one way of approaching paradoxical situations in participative organisations. While focusing on issues of empowerment, he inserts fragments of Zen stories which trouble and illuminate organisational double binds. The voice of the author unites the fragments and further provides both critical and radical postmodern insights on each tale. The article is structured to provide a case study/narrative tale of each of eight microparadoxes: top down, women as managers, middle management, teamwork, bottom up, success-failure, never-ending quest for perfection, and doing more with less. Each narrative is placed against a Zen tale and is followed by both a critical (affirmative) and radical (sceptical) postmodern reflection from the author. The whole seeks to bring out counter-intuitive lessons which can be found within the narrative tales of powerlessness. The reader is encouraged to juxtapose further the stories and parables provided, in order to gain different insights.

Frederic Jameson has been very critical of pastiche, viewing its emphasis on fragmentation as reducing past cultures to simulations, clichés and nostalgic images through 'the wearing of a linguistic mask, speech in a dead language' (Jameson, 1991: 17). He sees postmodernism as the new 'cultural logic of capitalism', a global capitalism comprising fragmented images.

HYPERTEXT PASTICHE

Shelley Jackson's Patchwork Girl (1995) is a hypertext novel in compact disc form. Based on Mary Shelly's book Frankenstein, the monster created by Shelley is an intertextual body, a collaged female of 175 years, stitched together by words and stories which keep threatening to come apart. But the strength lies in the scar issue and the stories therein which make these strong. The focus of this process novel is reproduction, sexuality, female identity and difference. In structure, the novel comprises 323 screens which are joined by 462 links there is no particular start or finish but many flashbacks. The links from the stitched body parts go to a graveyard (also cradle), a journal (from the 'mother' Mary Shelley), a quilt (other parodies, stories of patchwork girls), a monster's story, broken accents (author reflections on the process of creating this text) and resources, and each of these lead further along multiple paths to locate the

stories of the dead women from whose body parts the monster is constructed. As she travels through America, the monster mingles with other women, reflecting and refracting inwardly and outwardly as she connects in a visual and metaphorical relationship with all women.

Juxtaposition of models

On a broader research scale, Radnofsky (1996) constructs graphic models to reflect the differing perspectives in a school reform project where decentralisation of power from government to the local school council had occurred. From observations, documentation and interviews, four models were developed, reflecting the perspectives of legislators (organisational structure, money and power), teachers (teacher—student relations), theoreticians (teaching models from the literature), and the researcher (interacting aspects of school, family and society). The juxtaposition of these graphic representations of the multiple expectations and foci, which were present for each of the groups, are placed against outcomes to illuminate the failure of legislators to meet teaching and learning needs and to incorporate families in the shifts of power.

David Boje (2000) uses two vertical parallel columns to act as 'tympanum'. This idea comes from Derrida (1972/1982) and is taken from the structure of the ear where the hammer-bone beats the tympanum (which both receives sound and protects the inner ear) 'obliquely' in order to strike the ear with new ideas, to encourage it to unblock and make it receptive to other ways of interpreting. Here the striking occurs through the use of juxtaposition as a deconstructive technique. On the left-hand side is displayed an article from *Popular Mechanics* (1997) by Samuel Katz called 'Felon busters: when the cops are outgunned, LAPD SWAT breaks up the party'. This article and photos are interspersed with Boje's analytical comments while in the right-hand column are the author's storied observation-based fieldnotes and photos taken at Nickerson Gardens between 1990 and 1999. The two texts provide different perspectives on Nickerson Gardens – one illuminates a strong, cohesive community while the other portrays it as a nest of criminal activity. The reader is instructed to move between the two texts, to wave the cursor and to 'read the columns in any way they wish'.

Boje states that the purpose of this juxtaposition is to 'highlight the thin margin between photo-images and stories of *Popular Mechanics* mechanistic and Hobbesian account of urban combat technology, and *Nickerson Garden's Resident Management Corporation (NGRMC)* mothers' organic and non-violent storytelling' (Boje, 2000: 1). Both are seen as linked 'spectacles' with echoes of Appollian and Dionysian festivities. Strategies of urban combat technology and urban housing, and the festive aspects of community living and resident empowerment, are placed side by side. Through processes of minor 'detournement' – image (photo) juxtaposition – and deceptive 'detournement' (Debord and Wolman, 1956) the *Popular Mechanics* story acts as a focus for the development of new meaning, which is derived from its new context along side the festive reportage of community events.

Short stories

The postmodern short story is characterised by its focus on utilising open textual characteristics to engage the reader; its lack of finite endings or definitive meaning; its focus on representation, the local, disconnected, superficial, complex, dysfunctional, fragmented, marginalised and everyday; a lack of defined characters or decisive plot or linear time sequences; a focus on dialogue and the decentred but personal and emotional voice of the writer; and the possibility that meaning may emerge via an epiphany for the reader who has considerable opportunity for interpretation.

FICTION

Steven Banks (2000) has created what he terms a 'weak form of fiction' or 'accidental fiction', a fictional story loosely based on the annual summer holiday letters which are sent to a variety of family members. Banks constructs and displays five of these letters, written over a period of six years, in order that the reading experience might both clarify for the reader the structure of this particular genre as well as evoke the emotional responses of empathy and sympathy usually produced by the reception of such letters. The central character and 'writer' of these letters is Ginny Balfour, the wife of Ted and mother of children, whose yearly life experiences, as seen through her eyes, reflect those of many other such families, who also document similar reports. To the author, Ginny 'speaks to me of an interpersonal drama that instantiates in specifically intimate and public expression the pathos, courage, disillusionment, conceits, optimism, and faith that is, the quotidian struggles - of a particular life' (Banks, 2000: 392). In his collections of such letters Banks has identified six types of content: 'good' news; positive familial achievements; exciting personal experiences; time passing; social relationships; and mundane news. In combination all these serve to highlight family integrity and moral character. These are letters written for a purpose – they gloss over sad events, direct reader interpretation and maintain fictional joyfulness.

AUTHOR'S STORY

The construction and presentation of short stories has been a powerful tool in the exploration of the author's emotional responses in individual interaction (Ellis, 1995a). Short stories have also been used more generally in fieldwork projects. The actual process of the conversion of fieldnotes into short story form has been captured by Deborah Ceglowski (1997). The fieldnotes of a visit to a Head Start programme are presented first but these were unsatisfactory to the author, as they didn't share what she had experienced, cognitively, emotionally and physically. So she started to utilise a short story format as well to bring to the reader in a more immediate fashion what she had been experiencing. These stories move from the focused 'eye' of the author to the broader stage of the storyteller, allowing the 'I' of the author to phase in and out of focus yet allow her to express her emotions succinctly while enabling others to come into clearer focus. These stories provide the reader with closer access to all players. Ceglowski sees the local and situational nature of these ad hoc stories linking with the variety and

complexity of policy interpretation and development. The final presentation is 'mixed genre', combining short stories with connecting text. This mix allows the contextualisation of data both culturally and politically.

Laurel Richardson has coined the phrase 'the pleated text' to explore her constructions of and struggles within academic institutions (Richardson, 1997). She unfolds traditional and experimental papers within writing stories that tease out the contexts in which these papers were constructed. These pleats serve to trouble the boundaries between autobiography and other forms of writing. Richardson's story shows the plight of an academic with radical ideas (at least in terms of the department in which she is located) who is devalued because she is seen as different. It also illuminates the strength of discipline boundaries and the politics of creative and novel ways of presentation. These influences are pervasive and destructive and result in a lot of wasted emotional energy, leading (in this case) to a move to another location. Richardson has indicated that narratives of the self as other should be coherent and interesting to readers rather than strictly factual (1997: 521).

A THRICE-TOLD TALE

Margery Wolf (1992) has taken a set of data collected 30 years previously and replayed it in three different forms in order to bring to bear notions of critical reflexivity and to decentre the power of the writer/researcher. The data centres on an incident in a Taiwanese village where a women appears to be visited either by madness or is being used as a conduit for spiritual voices (a position of considerably higher status than the former) and the villagers are engaged in trying to ascertain which situation is occurring. One form of re-presentation is taken from Wolfe's own research journals, a fictional/confessional tale which allows the reader into the world of the anthropologist - a world of heat and dust, precise observations minutely recorded but interspersed with frustration, ambiguity, contradictions of interpretation, and a critique of the power of the researcher in a situation where events are distanced from both writer and reader through the barriers of language and culture. Another tale comes from the fieldnotes of the Chinese research assistant which are juxtaposed with Wolfe's story and provide different cultural insights, while the third tale is in the form of a published journal article derived from the event and presented with content and in language suitable for readers of anthropology.

Poetry

The poetic text sits in a changing network of texts, interrelating and blurring traditional boundaries and allowing multiple selves and voices to emerge. The construction of poetic forms from the interviews of participants has been used for some time (Richardson, 1994a; Glesne, 1997). Corrine Glesne (1997) clarifies the process that she undertook in moving from interview text to poetic form. For Glesne, the words or phrases did not have to be in chronological order in the interview, but they needed to represent the rhythm of the participant's speech and be true to the main sense of the communication. Glesne read all

the interview material which had been gathered under a particular theme (taken from a series of interviews with one person), seeking the essence of what had been said. This is similar to the approach taken by Laurel Richardson (1992), who in a project on unmarried mothers transcribed 36 hours of an interview with 'Louisa May' turning it into a three-page poem 'using only her words, her tone and her diction but relying on poetic devices such as repetition, off rhyme, meter, and pauses to convert her narrative' (Richardson, 1992: 126). For Richardson, this process allowed the decentring of self, 'In writing the Other, we can (re)write the Self' (1992: 136).

THE NARRATIVE POEM

(Katz, 1991)

A COMPUTER FILE NAMED ALISON

The narrative poem usually takes poetic form (not necessarily rhyming) and has the elements of a short story, with location, characters, and a situation around which the poem moves. It can start at any point and move in a number of directions. Such a poem is sometimes fictional, sometimes based in actual events, sometimes based in the writer's life history and sometimes is a chronicle of past events. As in the extract example below, metaphor has been used to provide a particular perspective on the writer's wife's life – as a computer file:

```
\For My Wife\
I dated a file named Alison, created
worlds in her name; but needed more space,
new memories to save, new files to live. (After all, although the universe expands
at astronomic rates, it's slowing down,
and there is only so much space inside machines.)
```

Deborah Austin (1996) has used a poetic form to conglomerate the voices and views of the researcher and the researched as they meld into one. Spoken dialogue, author's thoughts, memories and judgements are incorporated in her narrative poem 'Poetry helped me to express the tension, lyricism and circularity of our interaction' (Austin, 1996: 207). She presents a kaleidoscope of a friendship between herself, an African-American, and an African woman friend from Zaïre (Annie) in order to capture language and linguistic rhythm and to bring the reader in close to this relationship. Here the dominant voice is that of the researcher and we see Annie through her reportage. The structure of presentation also gives insight into the rhythm of the interaction:

Africans are the same wherever we are, she says to me matter-of-factly I look at her and smile And ask like a good researcher should how so? I can't explain, she says with that voice that sounds like the rush of many rivers (Austin, 1996: 207-8)

Vignettes

One aspect of the vignette is that it is like a photo with blurred boundaries or a description that shades off at the edges. In data presentation, vignettes are usually small, illustrative stories involving observation of activity and behaviour, which illuminate or trouble some important aspect of the area of investigation.

Susan Bell and Roberta Apfel (1995) use three vignettes to explore women's experience of DES-related cancer. Diethylstilbestrol was a drug given in the midtwentieth century to women to prevent miscarriage, which predisposed their female children to cervical cancer. The first vignette is a summarised transcript of a conference presentation, given by a feminist health activist at a workshop, which taught women vaginal self-examination as part of an empowerment process in reclaiming this area from medicine. The second vignette is also a summary of a presentation by an oncologist who is displaying a DES-infected vagina to colleagues using medical terminology. The third vignette is the voice of a woman – in poetic form derived from an interview transcript - who has experienced DES-related cancer over a long period and is sharing her private thoughts and experiences and clarifying the impact of this cancer on her sexual relationships. These vignettes trouble gender, sexuality and powerlesness by refocusing on self-help and the reshaping of womanhood in a situation where the usual ways of female selfidentification have been challenged (through inability to bear children or maintain lovers because of problems related to reconstructed vaginas).

Photoethnography

This technique of display allows the reader visual access to research data and can be created by either researcher or researched. In marketing and some ethnographic research, cameras have been given to groups of people who are encouraged to photograph aspects of their lives. Results indicate that this approach may be more informative than focus groups. Hedy Bach (1998) has used visual approaches to complement data gathered regarding the creation and interpretation of schoolgirl culture in Canada. Four girls were given disposable cameras and encouraged to document their lives inside and outside their classrooms. Each produced 80–120 photos and these, together with interview transcripts, were used to produce visual narratives.

Dona Schwartz (1989) used a photo-interview approach, displaying photos taken in a community prior to interviewing to prompt the memories of townspeople and to encourage them to read through these to earlier times in order to document changes which had occurred. The ethnographic analysis of photos as the sole source of data (in situations where there is no other information available (anonymous photograph albums, Walker and Moulton, 1989)) or the discovery of 800 photos in the basement of an institution for people with mental illness that was being demolished (Dowdall and Golden, 1989) are other approaches.

Autobiology

Autobiology takes inspiration from biology and has as its focus of concern on the location of bodies within various powerful discourses, which serve to separate the body from the self. The voice of the self is hard to find, separated by powerful socialising experiences in home, school and work. In performance autobiology, and in trying to identify the self, memory and life events are put aside in favour of an awareness of being in the present space at the present moment and responding and adapting to situations in an unpredictable emergent process.

David Payne (1996) presents an autobiological account of his paid working experiences under the already overpopulated discourses of Love, Knowledge and Authority, exploring how these 'were constructed for me, through me and by me' (1996: 50), by intertwining his factory, graduate and postgraduate work experiences with a reflective theoretical discussion. Payne emphasises the difficulties of finding his voice, particularly regarding events which have occurred many years before and where the most accessible voices have been authored by societal structures and social discourses. Payne makes the link between the body and ideas he had as a young student doing factory work during the summer break and himself as a university professor in a factory-like organisation which focuses on productivity and outcomes, and wonders if it really is possible to review and reclaim the voice of the self via theoretical perspectives. These are, after all, just another set of discourses ...

POSTMODERN PHRASEOLOGY - A LIGHTHEARTED GLANCE

Stephen Katz has provided an amusing view of the over complex language which can easily be developed as part of being acceptably postmodern. He provides a couple of examples, first taking the statement:

'We should listen to the views of people outside of Western society in order to learn about the cultural biases that affect us.'

He suggests that in postmodern-speak this could become:

'We should listen to the intertextual, multivocalities of postcolonial others outside of Western culture in order to learn about the phallogocentric biases that mediate our identities.'

In another example, 'Contemporary buildings are alienating' could be elevated to the indescribably complex and totally confusing:

'Pre/post/spacialities of counter-architectural hyper-contemporaneity (re)commits us to an ambivalent recurrentiality of antisociality/seductivity, one enunciated in a de/gendered-Baudrillardian discourse of granulated subjectivity.' (Katz, 2002)

A Postmodern Piece of Research

So how might these ideas be utilised? This chapter seeks to put together many of the ideas discussed and referred to in this book so far by taking an existing data base – collected in a traditional qualitative manner. This data base has been shifted forward to explore the possibilities of how it could be re-attempted within a postmodern orientation.

The study was one of my own (Grbich, 1987a, 1987b, 1990, 1994, 1995, 1997), involving the collection of a large data base of longitudinal information and covering a period from 1984 to 1990. The focus was 25 fathers in intact heterosexual family units who had become long-term primary caregivers to their pre-school-age children while their wives/partners earned the main family income. The study was designed predominantly as a face-to-face interview study with some observational sessions. The males were interviewed (with associated observation) at regular intervals over a period of five years. Their parents were also interviewed once to clarify perceptions of their sons' early childhood socialisation influences as well as their views of this style of parenting. The wives/partners of the home fathers were interviewed twice (early and late in the data collection period). In addition, formal observational sessions were recorded at a 'fathers' playgroup set up by some of these men which a number of them attended on a regular/irregular basis.

The purpose of the research was to seek longitudinal data relating to three major question areas:

- How had the choice to take on the home role been made? What were the contexts and situations which had enabled the decision to parent in this manner?
 And what happened as these shifted and changed over the years?
- How were these men interpreting and enacting the home role (both home duties and childcare tasks)?
- How were other people responding to them? Did this change over the five years? And if responses were negative, how was this managed?

An area which became of considerable interest to the researcher and which was also monitored informally as well as formally over the years was: what was happening to the female partners in this situation? How were they interpreting home and work roles and how did this change? And what happened to relationships in this situation? If we were to stay with the intention of the original project, how would design, data collection and data management and display change under a postmodern interpretation?

THE SELF

First, an initial critical reflexive process of who the researcher is, via the identification and exposure of his/her historical social construction, cultural location and views, is essential. Who is the researcher? What are his/her nodal locations (such categories as sex, race, age, class - being mindful of the fluidity of these labels culture, profession, stage of life, political affiliations, theoretical preferences, interconnections with others, life experiences, etc. may be of some use here, or may be meaningless and confining) and how is the impact of these on the research topic to be managed. In addition, the overt and more hidden assumptions which pattern the researcher's undertaking need exposure. What does the researcher think he/she will find in the setting to be researched? What gut feelings or professional opinions does he/she already have in place? What impact has the discipline/readings undertaken to date had on the views of the researcher? This critical reflexive process will need to be revisited at all stages of the project. For example, in the interview situation, what impact are the above factors having on the interaction between researcher and researched? And at the preliminary analysis stage, at collation and management of data and at writing and presentation of information received, the researcher will have to be critically alert.

LANGUAGE

Another early step in a postmodern orientation would be to clarify the terminology used and to be aware of the fluidity and constant deferral of meaning. One option would be simply to base a study on deconstructing the discourses identified in the above cited aims of the previous study. If the study is to be taken into the field, then rather than imposing views and attitudes gained from the literature, the researcher should pull back and allow the researched to explore the experience of being a father at home. But what does 'father' and 'at home' actually mean in these contexts? A deconstruction of the term 'father' in western culture is probably a necessity as this is the key term in the study, and certainly the terms 'choice', 'male and female roles', 'parenting', 'family', etc. would need problematising. Destabilisation of these and other related terms should result from this process.

Questions asked would initially have to be assessed for the discourses they contain. Taking some of the assumptions of the study, the criteria for involvement required that the father be part of an intact family unit (mother, father and child/ren). But the word 'family' carries with it considerable intellectual baggage. In defining it arbitrarily in this way the researcher is imposing a frame which may be quite different from the way the participants view themselves (as well as quite different from an equally imposed noded and networked frame which underpins the postmodern notion of family.

The discourses evident in the language of the researcher and researched are also important. My focus was on socialisation – a concept which was underpinned by many assumptions, most of which were academically based. What did these men make of this? Most, I think, were tolerant but unconvinced that background had any meaningful influence. If so, what influences did they see as impacting, and what language did they use to clarify this, and how did that language become meaningful to me – how did we negotiate meaning in context and how did that vary from father to father? How did they view their actions and self-identity and what does 'self' and 'identity' mean to both researcher and researched in this context?

DESIGN

Research prior to this study had originated almost solely from the quantitative tradition, focusing on cause and effect, antecedents and consequences, and had been based in the discipline of psychology. The review of literature that was undertaken tracked this influence and the movement in the concept of socialisation across other disciplines, such as sociology, in order to indicate other possible ways of providing interpretations for any results discovered. This analysis of the literature lead to the development of three models of individual action derived from past discourses, with which potential findings from this study could be compared.

A postmodern focus could track these power-laden discourses more precisely and in greater depth, in order to uncover changes and more marginal ideas. Deconstruction could also be undertaken to unravel the arguments within the three models which had been constructed. These processes would not only allow the researcher considerable insight, but would trouble his/her 'neutrality' as well as the strength and impact of such discourses.

Notions of complexity and multi-layered systems would have led me away much earlier from the narrow focus of the original study, which sought the influences from early socialisation which might be seen to facilitate these men's decisions to stay home. The data I collected earlier certainly would have supported a chaotic and complex interpretation – no clear patterns emerged from the fathers' early socialisation patterns (although many of their wives/partners appeared subject to greater pressure from *their* mothers to consider careers in

the workforce rather than mothering as their sole future option). In addition, viewing the family as an open-ended multi-layered system – an organic entity that shifts, changes and adapts - would have enlarged my initial view of the family unit from a couple with children and some vague parental or other influences from earlier times, towards an assumption that each family was simply a node in a network, inter-linked strongly or weakly to nodes of extended family, local community, neighbours, and to friends and other contacts from workplaces, playgroups, hobbies, interests, etc. The capacity of this system to respond dynamically to negative and positive feedback loops from self and other would have added another layer to my data collection and would have provided a different set of lenses with which to view the data.

Monitoring this system would have necessitated closer links with each family, their extended family, neighbours (where relevant), playgroups (where attended) and any other relevant links. This could be done by more regular home, playgroup and extended family visits (as opposed to the three-monthly visits to the fathers that were undertaken). These visits could still be regular in contact but sufficiently flexible so that issues arising and choices being made could also prompt them. Within the networks identified it would be essential to observe movement, interaction, bifurcation and adaptation. The relinquishing of a tight (rigid) design which fits in with the researcher's timetable in favour of flexible contact is essential, as the former is likely to miss the evolvement of key events, leaving only gaps or retrospective recollections. The focus on each family as a discrete unit with its own unique patterns and connections, leads away from an emphasis on seeking homogenisation of data and would encourage the researcher to pursue a smaller number of case studies, but in greater depth. So instead of 25, five or ten might be considered sufficient and this decision might be made as the study progresses in an iterative manner, in order to pursue differing contexts or the evolving of different situations.

DATA COLLECTION

In identifying suitable multiple methods, it is often useful to separate (at least initially) the areas where data collection will need to occur. So focusing first on the fathers and having decided to follow them from role entry until their child went to school (a period of five years), the techniques which appear most useful might be interviewing (face-to-face and by telephone), observations of father-child interaction in the home setting around more formal interviews, and at playgroup, and observations of father and child in the public domain. Visual images are always insightful, perhaps the use of a hand-held videorecorder (by the father to show things of importance to him or to track daily activities with his voice-over comments as to his view of these) would be interesting. Of course a video camera implanted in the main areas of the house triggered by body presence would be ideal, if agreed to, but it would be intrusive.

If video is not a realistic option, then the notion of a diary is still very tempting to allow access to the critical reflective thoughts of the father. The formal written version of the diary is a form of recording rarely undertaken these days but some variation might be possible – a tape recorder could be chatted into at intervals, a regular phone call to the researcher (which could be recorded), or an email to the same at particular times of the day/week, would enable both researcher and participant to track weekly changes. Shadowing the fathers throughout a range of activities would be useful to provide observational data that might reveal the multiple selves of both fathers and the researcher.

The working partner with less flexible non-working time, the extended family, neighbours and other community contacts are probably easiest to access through face-to-face formal and informal interviews, although observation of mother-child and mother-father-child interaction within the focus family would be worth pursuing where it is not too intrusive, as would mother's videos of what she considered most important with regard to the situation at evenings and at weekends. These approaches should provide sufficient reflection and refraction to enable some illumination of the topic, permit the emergence of a range of voices, and allow the complexity of changing situations to be seen.

The multiple links of the multiple self – the joys and the irritations experienced by the researcher as his/her life reflects similar chaotic patterns at home and at work – needs to be documented and run in parallel to the main study. The impact of accrued intellectual baggage can be minimised through regular debriefing of the self (by self/other). Journal maintenance of whatever creative approach suits the researcher (preferably voice-activated computer) is important but must have a critically reflexive orientation rather than just time linear documentation of daily activity.

The removal of any emphasis on predictability, generaliseability or finite endings and the constant troubling of secure patterns by juxtaposing, checking against other nodes, overturning discourses and seeking multiplicity, should prevent simple conclusions being sought or constructed.

DATA ANALYSIS

The collection of data should follow similar patterns to that of any qualitative, iterative approach. The collection or receiving of any data once transcribed should result in preliminary data analysis where the transcription is explored (via a side column for researcher's comments to clarify what is going on by asking questions of the data and troubling it to reveal other aspects which may be pursued in further data collection of the same or of another person. The following is an example of the first part of an interview edged by some overall researcher comments and juxtaposed with an extract from the researcher's diary:

Interview 1. 'Tony'

Preliminary analysis

Interviewer: How do you see yourself in the home situation?

My primary concern in the role is looking after Jane and attempting to relate to her, and the rest is in my view quite an adjunct. I don't see this as having anything to do with housework, I object to the term 'housewife'. I came into it fairly worried because I figure that no one is taught how to be a parent, we just don't do anything about that.

Six weeks after the birth came, she (Sue, wife) drove off and it was just terrifying and I thought 'my god, what am I going to do when she (Jane, daughter) wakes up!' I think I managed to struggle on for the first few weeks, Sue was at X hospital then and I was able to take Jane over at lunchtime for breastfeeding, and that was terrific being able to spend an hour together and have lunch.

Tony has already clarified a role definition for himself. I wonder why he is focusing so strongly on childcare?

What were his objections to the term 'housewife'?

So what is happening about the housework - is his wife doing it? Do they hire a cleaner, visiting mother-in-law/mother or doesn't it get done regularly?

Is Tony just staying with the interesting and creative aspects of the role and leaving the 'polluting', 'dangerous' aspects to others (females). I wonder what level of care he actually had during the first 6 weeks and how did Sue cope with all this? And what did his parents think? And hers, I need to check all these.

Researcher journal: This is my first interview in this study, thank heavens Tony is so confident in the role. He's been doing it for three years now and has also done radio and TV appearances. He appears to be treating the whole father at home thing like a career, or is this the way he justifies his decision to stay home? He seems to be indicating that he concentrates on the childcare aspect rather than on housework? But the house appears very orderly, dishes done, washing hanging on the line, minimum of toys on the floor. Jane appears very demanding, constantly interrupting and asking for food, drink, toys, to go out to the park, etc. Tony moved from calm and patient to harassed over the interview, trying to cope with my demands and Jane's, muttering under his breath about Jane and saying to her 'leave me alone, I'm getting sick of this'. Eventually Jane went down for a sleep and the interview proceeded peacefully.

Here are displayed the voice of the father who is being interviewed and two voices of the researcher: an observational voice from her journal record, looking around, taking a broad view and just noting contradictory aspects in the

location, and a more critical analytical voice bringing to bear questions from particular discourses such as feminism and cultural practices as well as trying to flesh out the text by setting in train movement which will bring into play voices from a range of people. Although this process is usually hidden in more traditional approaches, utilising a postmodern approach encourages display of process in a more transparent manner in order to allow the reader to 'see' into the mind processes of the researcher. Later interviews with other fathers and with their partners could be placed alongside this one to trouble it further.

Language used to frame questions is important. If it is academically oriented, is the participant trying to read the researcher's needs and to answer in a similar manner? I was initially concerned that Tony was flavouring his responses of his view of the fathering role with feminist language in order to meet what he perceived as my way of thinking. It was not until I viewed his previously recorded radio and television interview scripts that I realised that this was his usual way of speaking and had been developed long before my project was conceived.

The purpose in asking questions is not to seek meanings beneath meanings but to trouble the concepts and discourses being used and to clarify the links and influences that are situating the participant. But what impact does the above question actually have? Does Tony 'see' himself – is there any form of critical reflection in his answer or has he just used the question to 'give a spiel', one that he has already provided to other media. This did appear to have been the case.

DATA DISPLAY

Once the data have been pursued to the extent that the researcher is happy with them – bearing in mind that completion is not feasible or an aim and that only a snapshot has been collected - decisions have to be made as to the best ways of consolidating the data for display. Taking the 'father' mentioned above, his unique experiences of the role will connect to and interact with his multiple selves, his view of role entry, views of self, responses from close and distant others, his relationship to his partner, his relationship with his child, and his interaction with other men and women in this situation. All this will serve to construct a massive 'soup' of data which the researcher will need to keep close tabs on, in order not only to make sense of it and to track the directions of changes, but to be true to the reflections and refractions which are occurring. As in deconstruction, the pulling of the end of the thread should separate out major issues and help them achieve visibility, but the important thing is to pursue the thread while not losing the links, nodes and choices which embed and are connected to this thread. Pulling it out of the data will simply decontextualise it, making it thin and formless and lacking in networks.

In decentring the author and displaying a range of voices, which in this case clarify views of Tony as a long-term father at home, a visual display in the form of a collage is one possibility.

Sue (wife)

I do think I missed out on a lot of the baby stuff. I still remember driving off the first day - he was standing at the front door with this little baby and I was feeling absolutely terrible and thinking 'how could I ever let this happen'. ... But because we're very different personalities I think Jane has gained immensely - in that he's much more willing to spend a lot of time with her - those things I'm not very good at doing, so she's got a lot more contact than if I'd stayed home. I think I probably would have come to the decision of going back to work ...

Sue's mother (Sue's report)

My mother never really encouraged us to be at home mothers, she wanted us to be professional women. ... I think she was pleased that I was going to continue on with my career.

Tony's view of mothers at home If you get talking to women at home at any length you often find that they hate it and they themselves wonder why anyone else would want to do it.

Female friends (to Sue)

Isn't he wonderful, I'd really like to have that opportunity.

How could you do it? How could you go back to work when she's so young?

Tony's parents (to Tony)

Mother: I think it's a great idea, but no doubt when Jane gets sick of working you'll go back to work. If you're not prepared to support your wife and child, I'll disown you. I have a brother-in-law who never worked from the day he got married, she (her sister) worked, and none of us thought much of him because of that.

Father: You don't mean you're going to go on and do this forever? You may find that when you want to go back to the workforce, you can't.

Women in community playgroup (to Tony): Aren't you marvellous!

Tony:

It's the most demanding job I've ever had. Isolated, unstructured. People tend to downplay it but after I've talked to them they realise there's a lot more to it than they thought. But being a man who feels a naturalness in that sort of role, you can be made to feel emasculated. From some men there's the attitude that I'm doing a female, lesser role.

Tony's parents to the researcher:

Mother: Well our reactions were commonsense, that one or both or each of them were going to earn money. Sue was going to earn a lot more than Tony. Tony had the sort of temperament that I believe was capable of being a father. I think he was soft, he was quite - not quiet, he was softly spoken - he was intelligent and he had a deep love for that kid... But I do wonder getting right back to the primitive thing of it - is it a natural thing - isn't it more of the woman having the nesting instinct, deep down if she doesn't do it she is missing out. Aren't they going against nature of things? A woman is a woman, that's their function - motherhood, and nothing, no matter what they do can take that away and if its undeveloped, she's not much of a mother, if it is developed its most rewarding. Although there's no doubt about it you get tired of being in the house all the time, you cant live for housework.

Male friends (to Tony)

How's the holiday? Getting lots of golf?

Parking attendant's response to Tony: At least I've got a job!

Tony's view of Sue

She feels she couldn't do this job at home, that she'd get too angry ... but she's also very sensitive to me being overwhelmed by it.

Researcher's journal. Tony moved into the father-at-home role at the age of 39. His most recent workforce position was that of a real estate valuer - a job he didn't enjoy. When Tony and Sue had been married for some years, it became apparent they were unlikely to have children so Sue had decided to pursue medical qualifications and gain a career in medicine. At the end of her studies she became pregnant. It was decided that as Tony didn't like his job and Sue had just spent a lot of time becoming a doctor (a job she liked), Tony would stay at home long term and Sue would share the early morning and evening childcare tasks.

All the voices collected are represented here, providing an early snapshot of the complexity of responses and experiences. Tension is evident between the traditional societal view of gendered parenting and gendered work responsibilities, and being open, supportive and adaptive to change. Other displays would show that over time the shifts towards adaptation and acceptance from family, friends, community and the media became more defined. However, finite closure is not sought, the current drop in birth rate and the increasing value of children to society may well lead to other shifts and adaptations towards different forms of child-rearing in the protection of such valuable assets.

In this display, the child's voice is missing and a more postmodern orientation could have pursued two areas, which were only minimally explored initially. The first is the different style of interaction between father and child from that observed between mother and child and the child's (later) view of these. Another area would be the changing relationship between the partners and again the child's view of this. In presenting any data, the researcher is clearly being selective in order to allow the reader quick access to the nub of the matter. However, researchers need to be careful that in re-presenting data in this way they are not constructing a neat view which is more a reflection of their own position than the messy complexity, the fragmented, ambiguous and contradictory reality which was actually demonstrated by the data gathered.

The experience of being a primary caregiver over five years can be teased out from interviews and developed into poetic form. This concentration of key statements can provide entry into the world of the participant without further researcher comment:

Tony's story

I came into it fairly worried No one is taught how to be a parent It was just terrifying I think I managed to struggle along for the first few weeks

I went through a stage when I felt I was worthless and had no identity Initially I was very evangelical about the role
But the 'terrible twos!'
Then the grind sets in, three years of being on your own
The isolation, no conversation
I do feel fulfilled
But you can be made (by others) to feel emasculated
Because you don't want to go out and earn a quid
It's like I'm doing a female, lesser role
It's a terribly hard and in some ways unrewarding job
Sue's really into her career doing another five years study
Nights and weekends
we hardly see her (+ 3 years)

I'm feeling more positive now I'm certainly not feeling isolated I'm involved in the peace movement, music Jane goes to childcare two days a week -She's a really fantastic little person Sometimes we have a real laugh together I've got a housekeeper now (once a week for 2 hours) Sue and I seem to have sorted things out well (+ 4 years)

Well Sue and I are split up We were in difficulties the past two years She worked an 18 hour day We didn't do anything as a family It may well have happened anyway She was always going somewhere She has found someone else We still get on well We share Jane half a week about - she appears to be coping well I'm studying to be a primary teacher - one year to go, don't know how employable I am at 47 No cleaning lady, I do it all - I'm much poorer now But I have my men's support group and friends and I'm working through lots of things (+ 8 years)

This strand of Tony's experiences could easily be teased out further into separate poems about his relationship with Sue and his relationship with Jane clearly parallel and interconnected and juxtaposed to show the increasing closeness of the father-child relationship against the increasing distancing of the tie with Sue.

READINGS

It is possible to read through and to read against the grain in seeking to trouble the text. If we take the first piece of text - a retrospective view three years on looking back to the start of role entry: 'I came into it fairly worried/No one is taught how to be a parent/It was just terrifying/I think I managed to struggle along for the first few weeks' - 'worried', 'terrified', 'struggle' are the key terms here, suggesting that the whole experience has been a difficult one – an epic journey. Which discourses are constructing his views? And why? Is this language being used in a resistant manner to create a space for males in the home-caring role so they can avoid being devalued as women have been? Is one tactic to make the role appear over-difficult so they gain sympathy and recognition? At the point of speaking, this man has a very supportive family, whom he visits weekly with his daughter, a wife who takes over before and after work hours and is available at weekends. He attends two playgroups and has already had strong media

exposure because he is so eloquent on the role of fathering. He indicates in other interviews that he views the home role as a job and that he sees it as a career. Is any form of work a problem for him? Does he have difficulty in relating to others in the workplace? Or organising himself on a daily basis? Is the relationship with his wife already sliding away? Was he attracted to a highly organised career-focused woman because he saw that as a lack in himself and now he resents her and realises she is moving beyond him? Reading the text in this way avoids definitive conclusions and allows the complexity and ambiguities of the situation to be further explored in the development of multiple interpretations. Readers are then free to make their own decisions as to what is going on.

Other options of data display could involve juxtaposing and layering *dialogue* collected over time between Tony and Jane, as observed during home visits, at the father's playgroup (among the fathers and between the children), and at a local 'mothers' community playgroup which he also attended.

Metaphor could also be used to intersperse the poetic form of Tony's voice (above) with snippets from a journey such as the Odyssey or a round-theworld solo boat trip, in order to compare the long and lonely task of childrearing with an epic journey.

Short stories are a good way of clarifying surface interaction and revealing the emotions of the researcher. The following is a short researcher-voiced story, constructed from my journal, a *vignette* which explores some of the difficulties of accessing this group of men.

Accessing the group

I started searching for fathers at home in 1983. I knew they would be difficult to find as they were not a demographic group which was listed in any meaningful manner at that time. I rejected the idea of standing outside a supermarket on Saturdays and approaching fathers who were managing their young children alone, and for some time had really no idea how I was going to find these men, apart from conning an acquaintance to be involved. I left notices in community centres where playgroups gathered — nothing. Someone mentioned to someone else that I was planning to undertake a study on such men and the community access page of the local state newspaper contacted me to ask if they could write a short outline about the study and invite interested men to contact me. From this I gained two participants who seemed suitable in that they were in intact relationships with a young child/children whom they were planning to care for during the foreseeable future and their female partner was already/was planning to become the main breadwinner for the family. Several solo fathers were very interested in participating (seemed quite desperate in fact to be part of the project), but were rejected as they did not fit the criteria. So it was in some desperation that I approached the end of the year with only three participants when I had been aiming for twenty-five.

A phone call out of the blue one day indicated that there was a group of men who were the main caregivers for their young children and who had set up a playgroup in the city. I rang the community centre, ascertained the day they met and was there waiting anxiously long before the appointed hour. I talked to all those present (7) and bliss — all agreed to participate! I also gained access to the names and addresses of other men who visited the group occasionally or maybe just once, and pursued them. Most agreed to participate. I was well on my way with twenty-four participants by early 1984. One day I received a call from a father who had heard about the study from someone who had visited the playgroup and was interested in participating. 'Wonderful', my last participant. So I negotiated a time and went out to undertake the first interview with my twenty-fifth man.

It was a hot summer's day (10am). The house was in the suburbs of a lower to middleclass area. Yellow triple fronted brick veneer and a highly polished Harley Davidson had pride of place in the centre of the driveway. The front door was open (screen across) and the sounds of a Bach chorale wafted out. I knocked. A tall, well built male in his late 30s with bleached curly hair appeared, covered in tattoos and wearing very short tight light grey shorts, which concealed nothing and emphasised everything. I introduced myself, 'Lovely music' I said, 'I sing tenor in the State Opera' replied the biker. I took a deep breath, decided I really did need this participant in my study and entered the house. A similar aged woman, slender and tanned in white shorts and pink halter top unfolded herself sensuously from where she had been half lying on a couch and smiled at me while scanning my body in an overt but friendly manner. 'I'm a neighbour' she smiled 'well I'll leave you two to it'. She laughed as if at a private joke. As she passed my potential participant they smiled deep into each other's eyes and she patted his leq. They both chuckled — deep lazy sound full of common knowledge. I was frantically trying to make sense of all this when I was offered a coffee and led to the kitchen. 'The kids are being minded by a neighbour' he said 'we saw you come in and we thought you looked Ok' (Ok for what//presumed he meant as a researcher, although I had a sense that all interactions to date had a subtext — one that was unclear to me). I put my tape recorder down on the table but before I had a chance to sight a power point, I found I was being firmly eyed and it was being suggested that perhaps a little light sexual activity would be a nice way to start (this was communicated with speaking bedroom eyes, a suggestive movement of the pelvis, and a tilt of the head toward an open door leading to an invitingly disheveled and unmade double bed (I suspected it had been very recently occupied and not by his wife). This produced in me

conflicting but silent responses, an underlying langour — well! why not what a great way to spend a warm summer's morning — who would ever need to know — my goodness this would indeed be 'going native', quickly overlayed with 'Jesus you've got to be joking, I'm a mum with three young kids, who do you think you are Casonova? overlaid again with researcher curiosity — 'what's going on here this guy doesn't fit the standard image, I want him in my study.'

So rather than heading straight out the front door I went round and round the kitchen table clutching my tape recorder to my breasts, being pursued purposefully and voicing such inanities as 'I don't do casual sex'; 'My supervisor would kill me' and 'It would pollute my data'. Finally we both ran out of steam and with considerable surprise, he said 'You really do want to interview me?' 'Yes I do' I replied. So the coffee was put on and the interview proceeded. I was very pleased I had hung in there because this incident in time allowed me access to further information. There was a complex network of shared child minding, shopping and shared social activities in train in this neighbourhood and as well as participating in this, my participant was having a wonderful time providing sexual services for the local mums while their partners were at work — to the satisfaction, it appeared, of all — a truly communal spirit and certainly one which had permitted total integration into the networks of local 'mothers' and avoided the loneliness and isolation largely experienced by the other fathers in my study.

Interviewing data

In interviewing these men and taking a traditional approach, the researcher attempted to create an environment where the interviewee was comfortable in giving information in response to questions which the interviewer deemed important or interesting while still leaving sufficient leeway for the interviewee to bring forward issues she/he deemed important.

Shifting to a postmodern approach, the social context of each interview and the historical and social constructions of both interviewer and interviewee would take on considerable importance in the construction of agreed upon understandings. In the above vignette the questions and responses of subsequent interviews were coloured to a certain extent by the initial meeting and the subsequent negotiation of the conflicting desires of interviewer and interviewee. The subtleties of non-verbal interaction of the 'I know that you know that I know variety' were able not only to open up new vistas of cultural construction (Scheurich, 1997), but also to allow the documentation of emotions, and facilitated different questions being asked and answered, providing greater insight into the complexity of the local context. Had the above incident not

occurred, it seems likely that completely different information might have been shared. If sexual or emotional involvement does occur as part of data collection, this clearly allows the documentation of completely different insights, revealing of both researcher and researched.

Let us go back to Tony and see what he had to say about the language used to label his role. First, he contextualises the discussion within the female version as the more well-known one.

The crux for me is how this whole role has been downgraded by the connotations of the word used to describe the role - housewife. Women help to perpetuate this diminishing description when, if they're asked what they do, they reply 'I'm only a housewife'. (emphasis in the original)

To me, this section of the interview has reflections of feminist ideology and woman as victim of a patriarchal society (slaves of the house), which resonates with my views. But although Tony is using this terminology, he seems to be using it to separate out his position from that of subjugated women:

While most men have expressed support for our change of roles, several have made comments that convey a slightly different attitude: such as 'You've got it easy' or 'How's Mum today?'

I am no longer Tony, real estate valuer, male, breadwinner, recognisable easily pigeonholed person. As I'm not now so easily defined, my person – who I am – is more obscure. It's hard to break out of the mould that I've been conditioned to accept as unchangeable. One of the great problems, of course, is that there is no word to describe my role (identify me) 'What do you do? = who you are? It's interesting that some authors choose the Swedish word 'hemmerman' because this shares with the female equivalent hemmerfrau – the concept of working at home, rather than being wedded to the house as the word 'housewife' implies.

Tony goes on to emphasise that he sees his role as a worker at home involved primarily in being the 'nurturer' for his daughter. As researcher, my view of these explorations by Tony was that he was trying to get away from the downgraded female role to emphasise and highlight the work aspect (in order to fit himself into a secure spot) and to enlarge the meaning of the stereotype 'man as worker' to include the home role. His focus on the childcare aspect as the primary aspect of the job and the housework as less important or unimportant may be either part of this redefinition, a rejection of the link to the definition of woman as cleaner and dealer with pollution, safe food preparer and protector and discipliner of the offspring (Douglas, 1966) and/or (and possibly most likely) because he says he hates doing housework and avoids it whenever possible.

There are clearly several discourses being echoed here in both the spoken interview and the thought responses of the interviewer. Where these discourses are heavily impacting on the setting, they may need to be subjected to a proper discourse analysis. Discourses of women's roles and men's roles under patriarchy, male and female cultural identity, the importance of 'work' and the maintenance of these societal views by discursive practices (the reactions of others) provide a few directions which could be pursued. But the researcher also needs to clarify what is going on in the immediate dialogue in deconstructing the local negotiation of meaning in context. In order to clarify the constructed meanings it is necessary to ask further questions so the dual construction can be better appreciated. Thus, further probing needs to occur to tease out what Tony means by 'nurturing' and how this form of 'work' is being defined in terms of tasks actually done (or not done) and how this differs from other men in similar situations and why he feels that a separate definition of the home role is needed for men in that situation.

The instability of these meanings and constructions can easily be demonstrated in longitudinal data. But ultimately it is up to the reader to add his/her understandings in the ongoing construction of meanings so that the information displayed by the researcher is just one part of a never-ending process. There is nothing ultimate or finite about it. There are clearly patterns of order which show only small changes and there are other discontinuities and ambiguities which appear over time, and there are major life changes and bifurcations for which feedback loops can be identified much earlier. Going back to this data 12 years later with a different lens allows me to construct different understandings. The network of extended family was very important to Tony and the breakdown of parental support (through death) appears to have occurred in proximity to the marriage breakdown, which also appears linked to the advent of the men's group. But these are only the standout links and events; there are many others, less evident but also impacting. These interconnections are clearer with the nodal-network option and in retrospect.

Continuums and Continuities

This last short chapter attempts to summarise aspects of change in both social and scientific research, and to glance briefly at potential future changes.

So what changes has postmodernism brought that can be seen to be impacting upon research? First, we have gained an awareness of the power of language to determine meaning, and through this the constructed nature of reality and its impact on individual projects has become revealed. There is an acceptance that beyond researcher and researched are powerful discourses in which we have all been constructed, and which dominate cultural thought. The tracing of these discourses historically is an important aspect of creating an awareness of how our thinking has been shaped. Deconstruction of the texts created by researcher and researched by interrupting and disrupting them can also serve to clarify these discourses and to challenge the constructed text, opening it to a range of interpretations, all of which are transitional and none of which can be finite. No conclusions are possible.

The traditional tools that we choose to confine any research that we undertake are also constructions of earlier discourses. The language and the processes we use originate in a modernist discourse with different values and different ways of viewing the power of the researcher, the reader and those being researched. Notions of validity, reliability, ethics, sampling, interpretation, analysis and presentation of findings all shift quite dramatically under postmodern approaches. Yet there has not been a sudden cut with the past. The present is influenced by this past and traces of it constitute the present. Tracking these traces and their current impact is an important part of research. There needs to be an awareness and a welcoming of this dialogue with the past. Notions of fluidity, fragmentation and continuous flow are useful here.

In scientific research, a move away from linearity and a greater emphasis on complex designs, complexity and chaotic possibilities is occurring, together with the incorporation of qualitative data sets in order to better construct participants' views. In social science, small-scale projects with an emphasis on

the local and detailed are favoured. There is an emphasis on surface information, which involves accepting what those under research tell you without assuming hidden meanings, while still remaining aware of the discourses impacting on any positions taken and being prepared to disentangle these. Also implicit in this research is an acceptance of hybridity and the overlapping of borders, simulacra, hyper-reality and the implosion of image reality boundaries, as well as acceptance of the continuum of time, and the location of individuals within specific cultural and historical matrices which shift, changing the multiple positions of the self and others.

Knowledge is relative and subject to negotiation — extreme scepticism is necessary where the grand narratives of the past are concerned. Representation using a multiplicity of forms and such tools as playfulness, irony, juxtaposition, parody, improvisation, satire, subjectivity and a range of literary forms, serve to interrupt the strength of particular discourses, in particular the powerful discourse of the centredness of the researcher. Greater transparency is one outcome, as readers are brought closer to the reality which has been transitionally constructed in order to enable them to view issues from a range of perspectives and to add in their views and responses in the ongoing construction and reconstruction of the research product.

Overall, this text I have constructed has taken an optimistic view of postmodern/poststructural approaches. Concerns of nihilism and readings of readings of readings and deconstructions of deconstructions leading apparently nowhere are regarded as less of a concern when the notions of chaos and complexity are integrated. This extra layer of possibility allows complex systems, comprising both order and disorder, to change or not to change depending on the interconnection of the situational factors and the feedback loops unique to every occasion. The pursuing of deconstructive techniques to the nth degree then becomes simply personal choice and not an inevitable action that all must pursue.

In my view, postmodernism and poststructuralism are as much an important aspect of today's thinking as modernism was in the 1960s. But the transitional nature of all systems makes future predictions difficult. Those eschewing the waning power of religion, for example, undoubtedly pray for a return to the universal values of modernism and hierarchical pronouncements that the lower orders can follow with minimal questioning. Others undoubtedly fear that chaos is inevitable without fully realising that chaos has always been an integral part of history, however unrecognised or disguised under other signifiers.

So what might the future hold? In seeking the future we need to study the present and the past. The separate nature of bounded science and art and literature is disappearing as boundaries blur and dissolve. This is not to say that they will become an amalgam, but that in some situations separateness will be evident and in others considerable overlap will be the trend, creating new possibilities. Language is clearly a candidate for change. The impact of postmodern/poststructural

influences is already producing more metaphorical thinking and writing, an emphasis on multiple positions and intuition and a move away from linear logic towards undecideability and complex possibilities.

Global and transcultural integration will continue, in particular through 'global nomads' - the adults and children, either refugees or workers, who are culturally fluent – moving from country to country working for multinational and transnational companies and governments. For many, their primary cultural identification will wane, thereby creating a further blurring of the edges of segregated nations. According to Epstein and Genis (1999), many of the concepts which died or were severely critiqued under postmodernism will see a rebirth under the prefix 'trans', for example, trans-subjectivity, trans-idealism, trans-utopianism, trans-originality, trans-lyricism, trans-sentimentality, etc., but in a much more critically aware climate.

The combining of electronic media (radio, television and computers) will provide increasing emphasis on the Internet. Global access to the Internet and an emphasis on hyper-reality is evident. The speedy access and transfer of information and the capacity to link people worldwide and eventually worlds wide at increasing speeds has the tendency to both homogenise knowledge and also to challenge its construction.

On a lighter note, the trend to postmodernism can be seen in the restaurant world. Narrative cooking already exists (Downes, 2002) with its storied layers of different taste and temperature elements and its emphasis on the perfume, texture and flavours of food, entrancing both the oral/aural senses and the intellect. Deconstruction is also evident. Ferran Adria's 'El Bulli' restaurant north of Barcelona in Spain has become the ultimate in avant-garde food. Instead of the traditional entrée, mains, desert and coffee, with associated patron choice, here there are no choices, everyone is served the same thing at the same time as decided by Adria. Up to 24 'courses' may eventuate over a couple of hours, with each course coming at five-minute intervals, and each may be simply a spoonful of coloured liquid or solid with instructions such as 'one bite' or 'two bites, quickly', or 'this is a childhood memory' (Paterniti, 2001). According to Michael Paterniti, the courses can consist of hot and cold margaritas, vinegar pooled in an apple gelatin with ginger, dried quinoa in a paper cone, solidified chicken soup cut into pasta strands, cuttlefish ravioli injected with coconut milk, seaweed nougat, molluscs in gelatin, deep-fried bits of prawn, strawberries filled with Campari, or a caramelised cube filled with yoghurt.

The idea is to cross the boundary between eating as a mechanical survival tool and food as an emotional nostalgic experience, by presenting tastes which may come from childhood foods or which present an inversion of the expected, for example salty ice-cream, dark chocolate with wasabi, bread pieces filled with warm olive oil, a croquette injected with seawater. 'People put them in their mouths expecting the expected – a little crunch, some chew, air – and

126 NEW APPROACHES IN SOCIAL RESEARCH

were suddenly dealing with a burst and flood, victual chaos, palatal dyslexia, a tilting universe' (Downes, 2002).

Regarding postmodernism, I remain optimistic. We will never return to the modernist era as such, nor will the postmodern era ever completely disappear. Both are now part of what we are and how we will move forward.

Change and challenge are inevitable.

Glossary

Absolute rest

This comes from Isaac Newton's notion of absolute motion of an object in absolute space. It clarifies non-objective reality beyond the known world where bodies rest in respect of each other but where their positions cannot be determined by the laws of our planet.

Alatheia transcendentality

A philosophy which seeks truth via transcendentalism which is the capacity to extend beyond the boundaries of ordinary experience with a focus on an elevated and visionary mind capacity that precedes experience (it is derived from Aristotle and was furthered by Immanuel Kant).

Anthropomorphisms

Refers to the giving of human attributes to animals, deities or things.

Being and becoming

These concepts came originally from Plato, who saw them as interrelated dualisms. Being is fixed, stable and universal thought. Becoming is a process of transformation of the objects of sensory perception, which change from one state into a never-ending process. Postmodern interpretations favour an emphasis on a subject/subjectivity which flows from being to becoming in a nomadic, rhizomatic, transformative process of desire and difference.

Bifurcations

Within a system, the division of one mode of behaviour into two modes. A large number of connected bifurcations in an unstable system will usually lead to chaos.

Cubism

Cubism developed in the early twentieth century. It involved an attempt to go beyond mathematical linearity and one-dimensional art in order to show multiple perspectives by providing views from different angles.

Cultural pluralism

Refers to the co-existence of a number of cultures within a society.

Decentre

The process of removing oneself from central authority (as author/researcher) and allowing the views of others to be featured, often with minimal or no interpretation.

Desire

This term is either used negatively in terms of desire as a need for or lack of something, or positively in terms of an active and creative process to bring about change.

Determinism

A belief that there is some overarching plan in the world such that everything that occurs is as a result of or is linked to previous events or laws. For example, economic determinism means that the existence of certain factors determines or can predict particular outcomes.

Deterritorialisation

The process of destabilising identity and meaning.

Différance

Jacques Derrida used this term to clarify the way in which all words (signs) create meanings in terms of their differences from other words or aspects (often not to the forefront of consciousness) and in terms of the constant deferral of meaning (and the impossibility of finite presence).

Discursive practices

The term was developed by Michael Foucault to describe the power–knowledge connection within ways of writing, speaking or acting which have become enshrined in institutions as part of culturalspeak (e.g. media documentation) or professionspeak (e.g. case notes and ritual practices in various professions) in the establishment of 'truth' and 'reality'.

Disequilibrium

Disequilibrium is where there is not an equal balance between opposing forces such that an unstable state arises and change is most likely.

Empirical observation

A process of gaining knowledge by observing and measuring phenomena that can be seen or experienced in the 'real' world 'out here' through validated tools based in reason and logic.

The Enlightenment

This is a period of time from the seventeenth to the nineteenth century when intellectual scepticism challenged the ideas of the Middle Ages. This time was

also termed the Age of Reason because of the strong emphasis on reason, individual autonomy, progress, causality and a critique of previous authoritative discourses.

Epistemologies

Epistemology is concerned with the theory of knowledge related to how we know what we know and what can be known about our world. Its purpose is to identify what can be counted as valid knowledge. Epistemologies are the various ways of knowing.

Feedback loops

These occur in all open and complex systems and are connected with self-renewal. A positive (amplifying) or negative (regulating) loop feeds information back into the system in order to maintain it in an independent state.

Feigenbaum's constant

In any dynamic system approaching chaotic behaviour through period doubling bifurcations, the ratio of intervals between bifurcation points can be calculated. This calculation has a constant value of 4.6692016091029906718532038. In chaos theory, this calculation is a constant.

Fordism

Following Henry Ford (1863–1947) the assembly-line approach and the production of thousands of identical goods reached its height (1940–1960s). Fordism is often used as a metaphor for modernity and the social impact of both mass production and mass consumption on the population.

Fractals

A fractal is a fragmented geometric shape of which each subdivided part is a copy of the larger whole (self-similar). Examples are clouds and coastlines, the Mandelbrot set, Lorenz attractor, Koch snowflake and the Sierpinski triangle.

Fuzzy complexity

Fuzzy logic allows for uncertainty when simple yes/no categories do not apply. For example, a phenomena can exist in more than one category – it can be both partly orangey and partly reddish or somewhat applicable and somewhat inapplicable.

Gaze

The term 'the gaze' was used by Michael Foucault to indicate how power was maintained through surveillance. Observation and confessions extracted by various agents of the state (doctors, police, tax persons, the law, etc.) all serve to control and limit individual activity.

Gothic

The label Gothic applies to art, sculpture, glass works, decorative pieces and illuminated manuscripts from the mid-twelfth to the early sixteenth century. In architecture the characteristics were elaborate, perpendicular buildings with straight lines, intricately decorated with gargoyles and other complex crafting, pointed arches, turrets and pinnacles, elaborate stone-vaulted roofs and coloured terracotta panels. A 'Neogothic' revival of this style occurred in the nineteenth century.

Grand narratives

These are the meta-theories, the large bodies of authoritative thought which dominate belief systems, e.g. Christianity, Buddhism. Narrative refers to the constructed story of these theories. Postmodernists are sceptical about such narratives and seek to unravel them in order to expose previously hidden aspects, contradictions, etc. They prefer mini-narratives, which illuminate the constructed beliefs of particular groups.

High culture

The refined development of behaviours and beliefs, elite knowledge of the arts, music and fine food, everything that is not popular culture. This view creates classes within cultures.

High modernity

For those who do not believe that we have moved from modernity, this period is seen as the last hundred years (the twentieth century) – a period of radicalisation and reflexive modernity where thought and action are refracted back on each other, tradition has no place and chance and risk dominate.

Homogenisation

To make similar or of the same dimensions, or alike and of the same character.

Hyper-reality

This occurs when images and simulations replace reality. Hyper-real models/ experiences are often media created and tend to become more real than the original, which may have disappeared.

Linearity

In systems, linearity presumes that along a defined line (input to output, antecedence to consequence) the output will vary in direct proportion (or be directly linked) to the input.

Logical determinism

Refers to the nature of truth. Individual views and actions are seen as being determined by causal elements, which are linked in processes of logical reasoning.

Logocentrism

Logocentrism is where words and texts have fixed and limited meanings and where the written word is often seen only as a representation of the spoken word. According to Jacques Derrida, logocentrism in western cultures privileges presence and speech over written communication.

Meta-narratives

The term comes from Jean François Lyotard (1984) and refers to the grand unifying theories and universal claims to truth. Meta-narratives are seen as a characteristic of modern thought, and towards which postmodernists should show 'incredulity'.

Metaphor

A figure of speech in which a name or descriptive word is transferred to an object/objects to which it is not normally applied in order to provide a comparison.

Metonym

The substitution of the name of an attribute for the thing.

Non-linear transformations

Most aspects of nature are not linear; they twist and bend in non-linear transformations as they change form.

Objectivity

In research, and under modernity, this was seen as knowledge of reality, which was gained by a subject that was distanced from the object or phenomena by constructed tools, or processes of reason and logic.

Other

From a psychological perspective the Other is one's inner voice (conscious/unconscious) and leading to desire (a lack of something/resistance). In sociology the Other is that which is not the self and may lead to a process of 'othering' (classifying as other certain people because of characteristics of race, colour or different religion) and excluding people with these characteristics.

Period doubling

Period doubling refers to a sequence of periodic vibrations in which the period doubles as some parameter is varied. In the classic model, these frequency-halving bifurcations occur at small and smaller intervals of the control parameter. Beyond a critical accumulation parameter, chaotic vibrations occur.

132 NEW APPROACHES IN SOCIAL RESEARCH

Positivist

The school of philosophy that asserts that reality lies only in things which can be seen with the eye. Traditional scientific and social science research utilising this ideology use controls, random samples, operationally defined variables and statistical analysis.

Post-Fordist

This refers to the move towards fragmented markets, which requires a flexible workforce with an emphasis on multi-skilled workers and the continual upgrading of qualifications and practice. A leaner and meaner workforce has eventuated with less emphasis on mass production and more on variety and boutique products.

Quasi-meta-narrative

As for meta-narrative/grand narrative but resembling this – not quite the same, or almost and within that tradition.

Ouasi-transcendental

Not quite the same but almost transcendental, which is the capacity to extend beyond the boundaries of ordinary experience with a focus on an elevated and visionary mind capacity which precedes experience (it is derived from Aristotle and was furthered by Immanuel Kant).

Random fluctuation

Random fluctuation is where small changes occur but there is no predictable trend to these changes.

Rationalism

A belief that knowledge of the world cannot come from experience, it can only come from inferences gained from known facts ('truths') through processes of reason.

Reductionism

A belief that if we break down complex systems into their components, this will enable a better understanding of the whole.

Reductionist analysis

A reductionist view asserts that a phenomenon's complex properties can be reduced to a simple form.

Referentials

Something which refers to or belongs to something else.

Reflexivity

Reflexivity is concerned with the construction of knowledge claims and how the information presented has been arrived at. It involves the researcher in a constant reflective and self-critical process at all stages of the project.

The Reformation

This occurred between the fourteenth and the seventeenth centuries and involved a reaction against dogmatic theology, economic exploitation (payment for past sins) and the strength of the hierarchy of the Roman Catholic Church. A philosopher called Martin Luther was instrumental in that he provided a list of 95 grievances to the Roman Catholic Church. The Protestant Reformation and the Catholic Counter-reformation were outcomes of this challenge.

The Renaissance

Like the Enlightenment, this was also a response to the Middle Ages. It occurred during the fifteenth and sixteenth centuries and involved a return to culture (classical learning and art), nature (the senses) and humanism (a focus on the social, emotional and spiritual needs of humans).

Reterritorialisation

To put a thing back into its territory.

Romanesque

A style of European architecture (seen largely during the ninth to twelfth centuries) viewed as having particular Roman characteristics such as rounded arches and massive wall constructions. Some paintings and sculptures exhibiting these characteristics are also referred to by this term.

Scientism

A belief that any 'truth' (philosophical, religious, anatomical, etc.) can *only* be discovered through scientific (empirical) approaches.

Self-organisation

This notion is linked to the first and second laws of thermodynamics. It involves the ability of a system to develop a stable structure without other interventions. The natural move in the universe is towards disorder as systems lose energy, however ordered structures can appear in this situation, suggesting there are other processes involved.

Simulations

These are reflections of reality – reflections of real, simulated events.

134 NEW APPROACHES IN SOCIAL RESEARCH

Strange attractors

When a system is dynamic and sensitive to initial conditions, the trajectories of the points defining initial conditions may move apart or closer, resulting in a reduction of volume or strange attractor. The initial points in phase space landing on the attractor form a basin of attraction. Attractors are usually fractal and are an indication that chaos is possible.

Supralinguistic

Above or more superior to the language.

Taylorism

An engineer, Frederick Winslow Taylor (1856–1915) devised a scientific system of industrial management suitable for mass production and line management. Within this approach the manual components of each task were broken down and observed through time and motion studies so that best practice and performance (through scoring and ranking workers) would ensure best profits for manufacturers.

Territorialisation

To create territory, to enlarge bound and protect territory.

Translinguistic

Traverses languages – has a function that belongs to all languages.

Ultralinguistic

Beyond the signs and symbols and signifiers of language.

References

- Acker, K. (1986) Don Quixote: Which was a Dream. New York: Grove.
- Adams, D. (2000) The Death of Tarzan. Available at: http://www.erblist.com/erbmania/nkima/nkimadeathtz.html
- Akindes, F. (2001) Pahala's last (bon) dance: the dead are not dead. *Qualitative Inquiry*, 7 (1): 21–34. February. Thousand Oaks, CA: Sage.
- Altman, R. (1993) Short Cut. From the book by Raymond Carver. Fine Line Features.
- Atkinson, P. and Silverman, D. (1997) Kundera's immortality: the interview society and the invention of the self. *Qualitative Inquiry*, 3 (3): 304–25. September. Thousand Oaks, CA: Sage.
- Austin, D. (1996) Kaleidescope, in C. Ellis and A. Bochner (eds), Composing Ethnography: Alternative Forms of Qualitative Writing. Thousand Oaks, CA: Sage.
- Aycock, A. (1993) Derrida/Fort-da: deconstructing play. *Postmodern Culture*, 3 (2) January. Available at: http://www.iath.virginia.edu/pmc/text-only/issue.193/aycock.193
- Bach, H. (1998) A Visual Narrative Concerning Curriculum, Girls, Photography etc. Alberta: Canada International Institute for Qualitative Methodology/Qualitative Institute Press.
- Baetz, M., Chamberlin, L. and McCown, W. (1996) Strange Attractors: Chaos, Complexity, and the Art of Family Therapy. New York: John Wiley & Sons.
- Bakhtin, M. (1990) *The Dialogic Imagination: Four Essays*. Ed. M. Holquist, trans. C. Emerson. Austin, TX: University of Texas Press.
- Banks, S. (2000) Five holiday letters: a fiction. *Qualitative Inquiry*, 6 (6): 392–405. September. Thousand Oaks, CA: Sage.
- Barthes, R. (1957) Mythologies. London: Paladin.
- Barthes, R. (1964) Elements of Semiology. New York: Hill and Wang.
- Barthes, R. (1972) The Structuralist Activity, in *Critical Essays*. Trans. R. Howard. Evanston, IL: Northwestern University Press.
- Barthes, R. (1974) S/Z. New York: Hill and Wang.
- Barthes, R. (1977a) Image, Music Text. London: Fontana.
- Barthes, R. (1977b) Death of the author: structural analysis of narratives, in *Image, Music Text.* London: Fontana.
- Bateson, G. (1973) A theory of play and fantasy, in G. Bateson (ed.), Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution and Epistemology. St Albans: Paladin
- Baudelaire, C. (1863/1964) The Painter of Modern Life. New York: Da Capo Press. Reprint of an original essay appearing in Figaro, 1863.
- Baudrillard, J. (1988) Simulacra and Simulations, in Jean Baudrillard, Selected Writings. Ed. M. Poster. Stanford, CA: Stanford University Press.
- Baudrillard, J. (1993) The Order of Simulacra, in *Symbolic Exchange and Death*. Trans. P. Beitchman. London: Sage.
- Bauman, Z. (1992) Intimations of Postmodernity. London: Verso.
- Bauman, Z. (1993) Postmodern Ethics. London: Blackwell.
- Behar, R. (1993) Translated Woman: Crossing the Border with Esperanza's Story. Boston, MA: Beacon Press.

- Bell, S. and Apfel, R. (1995) Looking at bodies: insights and inquiries about DES-related cancer. *Qualitative Sociology*, 18 (1): 3–19.
- Bochner, A. (2001a) Narrative's Virtues. *Qualitative Inquiry*, 7 (2): 131–57. April. Thousand Oaks, CA: Sage.
- Bochner, A. (2001b) It's about time: narrative and the divided self. *Qualitative Inquiry*, 3 (4): 418–38. December. Thousand Oaks, CA: Sage.
- Bogdan, R. (1974) Being Different: The Autobiography of Jane Fry. London: John Wiley.
- Boje, D. (1998) The postmodern turn from stories-as-objects to stories-in-context methods. *Research Methods Forum*, 3 (Fall): 1–4.
- Boje, D. (2000) Postmodern detournement analysis of the Popular Mechanics spectacle using stories and photos of the festive community life of Nickerson Gardens. In EJ-ROT Electronic Journal of Radical Organisation Theory, 6 (1). Available at: http://web.nmsu.edu/~dboje/pmdecon9705.htm (accessed 16/08/02).
- Bost, S. (2001) 'Be deceived if ya wanna be foolish': (re)constructing body, genre and genre in feminist rap. *Postmodem Culture*, 12 (1) September. Available at: http://muse.jhu.edu/journals/pmc/v012/12.1bost.html (accessed 24/09/02).
- Bourdieu, P. (1984) Distinction: A Social Critique of the Judgement of Taste. Cambridge, MA: Harvard University Press.
- Brown, K. (1991) Mama Lola: A Vodou Priestess in Brooklyn. Berkeley, CA: University of California Press.
- Bunuel, L. (1972) *La Charme Discret de la Bourgeoise*. 102 minutes. Greenwich Film Productions, France.
- Calder, A. (1927) Cirque Calder. New York: The Alexander and Louisa Calder Foundation.
- Ceglowski, D. (1997) That's a story, but is it really research? *Qualitative Inquiry*, 3 (2): 188–201. June. Thousand Oaks, CA: Sage.
- Cilliers, P. (1998) Complexity and Modernism: Understanding Complex Systems. London: Routledge.
- Clarke, B. and Chetty, R. (2002) Postmodern cancer: the role of human immunodeficiency virus in uterine cervical cancer. *Journal of Clinical Pathology*, 55 (1): 19–28.
- Conquergood, D. (1985) Performing as a moral act: ethical dimensions of the ethnography of performance. *Literature in Performance*, 5: 1–13.
- Crowley, E. (1999) 'I think therefore I am?': a feminist critique of objectivity within sociology. Available at: http://www.sspp.net/archive/papers/3(1)crowley.htm (accessed 01/05/03).
- D'Andrade, R. (1995) Moral models in anthropology. Current Anthropology, 36 (3): 399-407.
- Darwin, C. (1859) On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life. London: John Murray.
- Davies, M. (1996) Delimiting the Law: 'Postmodernism' and the Politics of Law. London: Pluto Press.
- Debord, G. and Wolman, G. (1956) Methods of détournement, in Les Lèvres Nues, 8 May.
- Deleuze, G. and Guattari, F. (1977) *Anti-Oedipus*. Trans R. Hurley, M. Seem and H. Lane. New York: Viking.
- Deleuze, G. and Guattari, F. (1987) *Thousand Plateaus: Capitalism and Schizophrenia*. Trans. B. Massumi. Minneapolis, MN: University Minnesota Press.
- Denzin, N. (1989) Interpretive Interactionism. Thousand Oaks, CA: Sage.
- Denzin, N. (1997) Interpretive Ethnography: Ethnographic Practices for the 21st Century. Thousand Oaks, CA: Sage.
- Denzin, N. (2002) Social work in the seventh moment. Qualitative Social Work, 1 (1): 23-38.
- Derrida, J. (1972/1982) Margins of Philosophy. Trans. A. Bass. Brighton and Chicago: Harvester Press and University of Chicago Press.
- Derrida, J. (1976) Of Grammatology. Trans. G. Spivak, Baltimore, MD: Johns Hopkins University Press.

- Derrida, J. (1978a) Writing and Difference. Trans. A. Bass. Chicago: University of Chicago Press.
- Derrida, J. (1978b) Structure, sign, and play in the discourse of the human sciences, in *Writing and Difference*. Trans. A. Bass. Chicago: University of Chicago Press.
- Derrida, J. (1984) Living on: borderlines, in H. Bloom, P. de Man, J. Derrida, G. Hartman and J. Hillis Miller (eds), *Deconstruction and Criticism*. London: Routledge and Kegan Paul.
- Derrida, J. (1985) Letter to a Japanese friend, 10 July 1983, in D. Wood and R. Bernasconi (eds), *Derrida and Difference*. Warwick: Parousia Press.
- Derrida, J. (1987) The Post Card: From Socrates to Freud and Beyond. Chicago: University of Chicago Press.
- Derrida, J. (1992) Psyche: invention of the Other, in *Acts of Literature*. Ed. D. Attridge. London: Routledge.
- Descartes, R. (1637/1962) A Discourse on Method, 2nd edition. Trans. J. Veitch. Chicago: Open Court Publishing Company.
- Descartes, R. (1641/1960) *Meditations on First Philosophy*, 2nd edition. Trans. L. Lafleur. Indianapolis, IN: Bobbs-Merrill.
- Dewdney, A. (1989) Computer recreations. Scientific American, 261 (1): 110-13.
- Dixon, D. and Jones, J. (1998) My dinner with Derrida or spatial analysis and poststructuralism do lunch. *Environment and Planning*, 50: 247–60.
- Donoghue, D. (1989) The strange case of Paul de Man. New York Review of Books, 29: 32-7.
- Douglas, M. (1966) Purity and Danger: An Analysis of the Concepts of Pollution and Taboo. London: Routledge and Kegan Paul.
- Dowdall, G. and Golden, J. (1989) Photographs as data: an analysis of images from a mental hospital. *Qualitative Sociology*, 12 (2): 183–212.
- Downes, S. (2002) Success story from a strong narrative skill. The Australian, 14/09/02.
- Eco, U. (1979) The Role of the Reader: Explorations in the Semiotics of Texts. Bloomington, IN: Indiana University Press.
- Eco, U. (1984) Postscript to The Name of the Rose. Trans. W. Weaver. San Diego, CA: Harcourt Brace Jovanovich.
- Eco, U. (1993) Misreadings. Trans. W. Weaver. San Diego, CA: Harcourt Brace Jovanovich.
- Einstein, A. (1905/1923) On the Electrodynamics of Moving Bodies in the Principle of Relativity. London: Methuen.
- Ellis, C. (1995a) Speaking of dying: an ethnographic short story. *Symbolic Interaction*, 18 (1): 73–81.
- Ellis, C. (1995b) Final negotiations: A Story of Love, Loss and Chronic Illness. Philadelphia: Temple University Press.
- Ellis, C. (1997) What counts as scholarship in communication? An autoethnographic response. Paper delivered at a National Communication Association Research Board Session entitled What Counts as Scholarship in Communication? Evaluating Trends in Performance Studies, Autoethnography, and Communication Research. November. Chicago, IL. Available at: http://acjournal.org/holdings/vol1/Iss2/special/ellis.htm (accessed 20/09/02).
- Ellis, C. and Bochner, A. (1992) Telling and performing personal stories: the constraints of choice in abortion, in C. Ellis and M. Flaherty (eds), *Investigating Subjectivity: Research on Lived Experience*. Thousand Oaks, CA: Sage.
- Ellis, C. and Bochner, A. (eds) (1996) Composing Ethnography: Alternative Forms of Qualitative Writing. Thousand Oaks, CA: Sage.
- Ellis, C., Kiesinger, C. and Tillman-Healy, L. (1997) Interactive interviewing: talking about emotional experience, in R. Hertz (ed.), *Reflexivity and Voice*. Thousand Oaks, CA: Sage.
- Epstein, M. and Genis, A. (1999) Russian Postmodernism: New Perspectives on Late Soviet and Post-Soviet Literature. Ed. T. Epstein. Trans. S. Vladiv-Glover. Oxford: Berghahn.
- Esquivel, L. (1995) *The Law of Love: A Novel* with *Music*. Trans. M. Peden. Sydney: Random House.

- Featherstone, M. (1991) Consumer Culture and Postmodernism. London: Sage.
- Feigenbaum, M. (1978) Quantitative universality for a class of nonlinear transformations. *Journal of Statistical Physics*, 19: 25–52.
- Fielding, N. and Lee, R. (1998) Computer Analysis and Qualitative Research. London: Sage.
- Fine, M. and Weis, L. (1996) Writing the 'wrongs' of fieldwork: confronting our own research/writing dilemmas in urban ethnographies. *Qualitative Inquiry*, 2 (3): 251–70. September. Thousand Oaks, CA: Sage.
- Foucault, M. (1970) The Order of Things. New York: Random House.
- Foucault, M. (1972) The Archaeology of Knowledge. Trans. A. Sheridan Smith. London: Tavistock.
- Foucault, M. (1984a) Truth and method, in P. Rabinow (ed.), A Foucault Reader. Harmondsworth: Penguin.
- Foucault, M. (1984b) Nietzsche, genealogy, history, in P. Rabinow (ed.), A Foucault Reader. Harmondsworth: Penguin.
- Fowles, J. (1969) The French Lieutenant's Woman. London: Cape.
- Fowles, J. (1981) The French Lieutenant's Woman. Film version. Screenplay by Harold Pinter. Directed by Karel Reisz. Juniper Films, USA.
- Fox, K. (1996) Silent voices, in C. Ellis and A. Bochner (eds), Composing Ethnography: Alternative Forms of Qualitative Writing. Thousand Oaks, CA: Sage.
- Freud, S. (1900/1913) The Interpretation of Dreams. Trans. A. Brill. New York: Macmillan.
- Freud, S. (1955) Beyond the pleasure principle, in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. XVIII. Ed. J. Strachey. London: Hogarth Press.
- Frison, T. (2000) Dynamics of the residuals in estuary water levels, *Physics and Chemistry of the Earth, Part B*, 25 (4): 359–64.
- Fruin, T. (2002) Quilt. Armory Show 2002, New York.
- Gasché, R. (1986) The Tain in the Mirror: Derrida and the Philosophy of Reflection. Cambridge, MA: Harvard University Press.
- Giddens, A. (1990) The Consequences of Modernity. Stanford, CA: Stanford University Press.
- Giorgione (Giorgio Barbarelli) (c. 1508) Concert Champêtre. Paris: Musée de Louvre.
- Gleick, J. (1987) Chaos: Making of a New Science. New York: Penguin.
- Glesne, C. (1997) That rare feeling: re-presenting research through poetic transcription. *Qualitative Inquiry*, 3 (2): 202–21. June. Thousand Oaks, CA: Sage.
- Goffman, E. (1974) Frame Analysis: An Essay on the Organization of Experience. New York: Harper and Row.
- Grbich, C. (1987a) Fathers as primary caregivers: some preliminary findings. *The Australian Journal of Sex, Marriage and the Family*, 8 (1): 17–26. February.
- Grbich, C. (1987b) Fathers as primary caregivers: a role study. PhD dissertation. Monash University, Melbourne, Australia.
- Grbich, C. (1990) Socialisation and social change: a critique of three perspectives. *British Journal of Sociology*, 41 (4): 517–30. December.
- Grbich, C. (1994) The experiences of women as primary breadwinners: the other half of the equation. *The Australian and New Zealand Journal of Sociology*, 30 (2): 105–18.
- Grbich, C. (1995) Male primary caregivers and domestic labour: involvement or avoidance? *Journal of Family Studies*, 1 (2): 114–29.
- Grbich, C. (1997) Primary caregiving males: workforce or ideological change. *Acta Sociologica* (Scandinavia), 40 (4): 335–56.
- Green, D. and Klomp, N. (1998) Environmental informatics a new paradigm for coping with complexity in nature. *Complexity International*, 6. Available at: http://www.csu.edu.au/ci/vol06/green/green.html (accessed 03/08/02).
- Habermas, J. (1987) The Philosophical Discourse of Modernity. Boston, MA: MIT Press.
- Halberstam, J. and Livingston, I. (1995) Posthuman Bodies. Bloomington, IN: Indiana University Press.

- Haraway, D. (1988) Situated knowledges: the science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14 (3): 575–99.
- Haraway, D. (1991) A cyborg manifesto: science, technology, and socialist-feminism in the late twentieth century, in Simians, Cyborgs and Women: The Reinvention of Nature. New York: Routledge.
- Harvey, D. (1989) The Condition of Postmodernity. Oxford: Basil Blackwell.
- Hawkinson, T. (1998) Uberorgan. New York: Ace Gallery.
- Hayles, N. (1990) Chaos Bound: Orderly Disorder in Contemporary Literature and Science. Ithaca, NY: Cornell University Press.
- Heidegger, M. (1943/1998) On the Essence of Truth. Ed. W. McNeill, trans. J. Sallis. Cambridge: Cambridge University Press.
- Heisenberg, W. (1927) Über den anschaulichen inhalt der quantentheoretische kinematik und mechanik, Zeitschrift für Physik, 43: 172–98.
- Heisenberg, W. (1949) *The Physical Principles of the Quantum Theory*. Trans. C. Eckart and F. Hoyt. New York: Dover.
- Hepworth, J. (1999) The Social Construction of Anorexia Nervosa. London: Sage.
- Hertz, R. (ed.) (1997) Reflexivity and Voice. Thousand Oaks, CA: Sage.
- Hilbert, R. (1990) The efficacy of performance science: comment on McCall and Becker. Social Problems, 32: 133–4.
- Hucheon, L. (1989) The Politics of Parody. The Politics of Postmodernism. New York: Routledge.
- Hume, D. (1758/1975) Enquiry concerning human understanding, in *Enquiries concerning Human Understanding and concerning the Principles of Morals*. Ed. L. Selby-Bigge (3rd edition by P. Nidditch). Oxford: Clarendon Press.
- Inayatullah, S. (1998) Causal layered analysis: post structuralism as method. *Futures*, 30 (8): 815–29.
- Irigaray, L. (1985) *The Sex Which is Not One.* Trans. C. Porter. Ithaca, NY: Cornell University Press. Jackson, S. (1995) *Patchwork Girl, or a Modern Monster.* Watertown, MA: Eastgate Systems. Software for IBM and Macintosh.
- Jago, B. (1996) Postcards, ghosts, and fathers: revising family stories. Qualitative Inquiry, 2 (4): 495–508.
- Jagtenberg, T. and McKie, D. (1997) Eco-impacts and the Greening of Postmodernity: New Maps for Communication Studies, Cultural Studies and Sociology. Thousand Oaks, CA: Sage.
- Jameson, F. (1991) Postmodernism or the Cultural Logic of Late Capitalism. Durham, NC: Duke University Press.
- Jefferson, T. (1776) The Declaration of Independence. Washington, DC: US National Archives and Records.
- Jencks, C. (ed.) (1980a) Post modern classicism: the new synthesis. Architectural Design, 42.
- Jencks, C. (1980b) The architectural sign, in G. Broadbent, R. Bunt and C. Jenks (eds), Signs Symbols and Architecture. Chichester: John Wiley and Sons.
- Jencks, C. (1993) Los Angeles Future of Heteropolis. London: Academy Editions.
- Joyce, J. (1922) Ulysses. Paris: Sylvia Beach's Shakespeare and Company.
- Kant, I. (1781/1933) Critique of Pure Reason. Trans. N. Kemp Smith. London: Macmillan.
- Kant, I. (1784) An Answer to the Question: 'What is Enlightenment?' Konigsberg, Prussia, 30 September. Available at: http://eserver.org/philosophy/kant/what-is-enlightenment.txt (accessed 12/07/02).
- Kant, I. (1788/1949) What is orientation in thinking?, in *Critique of Practical Reason and Other Writing on Moral Philosophy*. Trans. L.W. Beck. Chicago: University of Chicago Press.
- Katz, S. (1991) Three poems. Postmodern Culture, 13 (1). 3 May. Available at: http://www.iath.virginia.edu/pmc/text-only/issue.591/katz.591
- Katz, S. (1997) Felon busters: when the cops are outgunned, LAPD SWAT breaks up the party. Popular Mechanics, May. Available at: http://popularmechanics.com/science/law_enforcement/ 1997/5/lapd_swat/index4.phtml (accessed 01/05/2003).

- Katz, S. (2002) How to speak and write postmodern. Available at: http://www.infiltec.com/j-postmd.htm (accessed 16/08/02).
- Koopmans, M. (1996) Application of chaos theory to family interaction. Proceedings of the Winter 1995–96 ChaoGathering in Vermont. Available at: http://chiron.valdosta.edu/whuitt/files/chaosfmy.html (accessed 03/08/02).
- Krieger, S. (1983) *The Mirror Dance: Identity in a Woman's Community*. Philadelphia: Temple University Press.
- Krieger, S. (1985) Beyond subjectivity: the use of the self in social science. Qualitative Sociology, 8 (4): 309–24.
- Kristeva, J. (1974) La revolution du language poetique. Paris: Seuil. Parts published in Revolution in Poetic Language (1984). Trans. M. Waller. New York: Columbia University Press.
- Kristeva, J. (1980) Desire in Language: A Semiotic Approach to Literature and Art. New York: Columbia University Press.
- Kristeva, J. (1986) The system and the speaking subject, in Toril Moi (ed.), *The Kristeva Reader*. New York: Columbia University Press.
- Kristeva, J. (1989) Language: The Unknown. New York: Columbia University Press.
- Kurasawa, A. (1950) Rashomon. 88 minutes. Daiei Productions, Japan.
- Kwa, S. (1999) Masking selves, making subjects: Japanese American women, identity, and the body. *Biography*, 22 (4): 630–2. Honolulu.
- Lacan, J. (1957) The insistence of the letter in the unconscious. Trans. J. Miel, in J. Ehrmann (ed.), *Yale French Studies*, 36/37 (1966).
- Lacan, J. (1981) The Four Fundamental Concepts of Psychoanalysis. Trans. A. Sheridan. New York: Norton.
- Langton, C. (1986) Studying artificial life with cellular automata. Physica, 22D: 120-49.
- Lashof, D., DeAngelo, B., Saleska, S. and Harte, J. (1997) Terrestrial ecosystem feedbacks to global climate change. *The Annual Review of Energy and the Environment*, 22: 75–118.
- Lather, P. (1993) Fertile obsession: validity after poststructuralism. The Sociological Quarterly, 34 (4): 675–93.
- Lather, P. (1996) Troubling clarity: the politics of accessible language. *Harvard Educational Review*, 6 (3): 525–76.
- Lather, P. and Smithies, C. (1995) Troubling the Angels: Women Living with HIV/AIDS. Columbus, OH: Grevden Press.
- Lee, R. (2002) The self, lucid dreaming and postmodern identity. *Electric Dreams*, 9 (3). Available at: http://dreamgate.com/pomo/lucid_lee.htm (accessed 01/08/02).
- Lévi-Strauss, C. (1963) Structural Anthropology. New York: Basic Books.
- Lévi-Strauss, C. (1962/1966) The Savage Mind. Chicago: University of Chicago Press.
- Lewin, R. and Regine, B. (1999) The Soul at Work: Complexity Theory and Business (as if People Matter). London: Simon & Schuster.
- Lorenz, E. (1963) Deterministic nonperiodic flow. Journal of Atmospheric Sciences, 20: 130–41.
- Lupton, D. and Chapman, S. (1995) A healthy lifestyle might be the death of you: discourses on diet, cholesterol control and heart disease in the press and among lay public. Sociology of Health and Illness, 17 (4): 477–94.
- Lyotard, J. (1979) *The Postmodern Condition: A Report on Knowledge*. Trans. G. Bennington and B. Massumi. Manchester: Manchester University Press.
- Lyotard, J. (1988a) *The Differend: Phrases in Dispute*. Trans. G.Van Den Abbeele. Minneapolis, MN: University of Minnesota Press.
- Lyotard, J. (1988b) Peregrinations. New York: Columbia University Press.
- Lyotard, J. and Thébaud, J. (1985) *Just Gaming*. Trans. W. Godzich. Minneapolis, MN: University of Minnesota Press.
- Macbeth, D. (2001) On 'reflexivity' in qualitative research: two readings, and a third. *Qualitative Inquiry*, 7: 35–68.

- MacLaren, G. and Reid, I. (1994) Framing and Interpretation. Melbourne: Melbourne University Press.
- Mandel, D. (1995) Chaos theory: sensitive dependence and the logistic equation. *American Psychologist*, 50: 106–7.
- Manet, E. (1863) Le Déjeuner sur L'Herbe. Oil on canvas. Paris: Musée d'Osray.
- Marcus, G. (1992) Cultural anthropology at Rice since the 1980s. Provost Lecture, 17 February. Available at: http://www.ruf.rice.edu/~anth/provost.html (accessed 19/07/02).
- Mark, A. (2001) Integrating conservation with hydro-electric development of Lakes Manapouri and Te Anau, New Zealand: an exercise in complexity. *Complexity International*, 8 (1): 1–19.
- Mazur, J. (2000) Labour's new internationalism: the Seattle message. *Foreign Affairs* (United States), 79 (1) (Jan./Feb): 79–93.
- McCall, M. and Becker, H. (1990) Performance science. Social Problems, 32: 117-32.
- McGettigan, T. (1997) Uncorrected sight: metaphor and transcendence 'after truth' in qualitative inquiry. *Qualitative Inquiry*, 3 (3): 336–83. September. Thousand Oaks, CA: Sage.
- McLaren, P. (1997) The ethnographer as postmodern *Flâneur*, in W. Tierney and Y. Lincoln (eds), *Representation and the Text: Reframing the Narrative Voice*. Albany, NY: State University of New York Press.
- Mienczakowski, J. (1992) Syncing Out Loud: A Journey into Illness. Brisbane: Griffith University Reprographics.
- Mienczakowski, J. (1996) An ethnographic act: the construction of consensual theatre, in C. Ellis and A. Bochner (eds), *Composing Ethnography: Alternative Forms of Qualitative Writing*. Thousand Oaks, CA: Sage.
- Mienczakowski, J. and Morgan, S. (1993) Busting: The Challenge of the Drought Spirit. Brisbane: Griffith University Reprographics.
- Mienczakowski, J., Smith, R. and Sinclair, M. (1996) On the road to catharsis: a theoretical framework for change. *Qualitative Inquiry*, 2 (4): 439–63. December. Thousand Oaks, CA: Sage.
- de Montaigne, M. (1575/1993) The Complete Essays. Trans. M. Screech. New York: Penguin.
- Nicholson, L. (ed.) (1990) Feminism/Postmodernism. New York and London: Routledge.
- Nietzsche, F. (1882/1974) Die Frohliche Wissenschaft (The Gay Science). Trans. W. Kaufmann. New York: Random House.
- Nietzsche, F. (1887/1967) Essay 3: What is the meaning of ascetic ideas?, in *On the Genealogy of Morals*. Trans. W. Kaufmann and R.J. Hollingdale. New York: Random House.
- Nietzsche, F. (1888/1982) Belief in the 'Ego'. 'The Subject', in *The Will to Power: Attempt at a Revaluation of All Values (Studies and Fragments)*. Trans. W. Kaufmann and R.J. Hollingdale. Cambridge: Cambridge University Press.
- Nietzche, F. (1911/1954) On truth and lies in an extra-moral sense. Fragment from the *Nachlass* (1873): 1, in *The Viking Portable Nietzsche*. Trans. W. Kaufmann. New York: Vintage Books.
- Oleson, V. (2001) 'Do whatever you want': audience(s) created, creating, recreating. *Qualitative Inquiry*, 7 (3): 276–83. June. Thousand Oaks, CA: Sage.
- Paterniti, M. (2001) Ferran Adria. Esquire Magazine, 36 (1): 1–11.
- Payne, D. (1996) Autobiology, in C. Ellis and A. Bochner (eds), Composing Ethnography: Alternative Forms of Qualitative Writing. Thousand Oaks, CA: Sage.
- Peshkin, A. (2001) Angles of vision: enhancing perception in qualitative research. *Qualitative Inquiry*, 7 (2): 238–53. April. Thousand Oaks, CA: Sage.
- Phelan, P. and Rogoff, I. (2001) 'WITHOUT': a conversation. Art Journal, Fall. New York.
- Picasso, P. (1907) Les Demoiselles d'Avignon. Oil on canvas. New York: The Museum of Modern Art.
- Picasso, P. (1965) Art as an individual idea, in R. Ellman and C. Feildson (eds), *The Modern Tradition: Backgrounds of Modern Literature*. New York: Oxford University Press.

- Pierce, C. (1894/1998) 'What is a sign?', in *The Essential Pierce. Selected Philosophical Writings*. Vol. 2 (1893–1913). Bloomington, IN: Indiana University Press.
- Pifer, D. (1999) Small town race: a performance text. *Qualitative Inquiry*, 5 (4): 541–62. December. Thousand Oaks, CA: Sage.
- Poincaré, J. (1889/1993) New Methods of Celestial Mechanics. Ed. D. Goroff. New York: American Institute of Physics.
- Poincaré, J. (1908) Science and Method. New York: Dover.
- Polkinghorne, D. (1997) Reporting qualitative research as practice, in W. Tierney and Y. Lincoln (eds), *Representation and the Text: Reframing the Narrative Voice*. Albany, NY: State University of New York Press.
- Prigogine, I. (1997) The End of Certainty: Time, Chaos and the New Laws of Nature. New York: The Free Press.
- Prigogine, I. and Stengers, I. (1984) Order Out of Chaos: Man's New Dialogue with Nature. New York: The Free Press.
- Radnofsky, M. (1996) Visually representing complex data in an image/text balance. Qualitative Inquiry, 2 (4): 385–400. Thousand Oaks, CA: Sage.
- Raimondo, M. (c. 1516) The Judgement of Paris (after a fresco by Raphael). Rome: Villa Farnesina.
- Richardson, L. (1992) The consequences of poetic representation: writing the other, rewriting the self, in C. Ellis and M. Flaherty (eds), *Investigating Subjectivity: Research on Lived Experience*. Thousand Oaks, CA: Sage.
- Richardson, L. (1994a) Nine poems. Journal of Contemporary Ethnography, 23 (1): 3-13.
- Richardson, L. (1994b) Writing: a method of inquiry, in N. Denzin and Y. Lincoln (eds), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Richardson, L. (1997) Fields of Play: De-disciplining an Academic Life. New Brunswick, NJ: Rutgers University Press.
- Richardson, L. (1998) The politics of location: where am I now? *Qualitative Inquiry*, 4 (1): 41–8. March. Thousand Oaks, CA: Sage.
- Roberts, M. and Reich, M. (2002) Ethical analysis in public health. *The Lancet*, 359 (March): 1055–9.
- Ronai, C. (1992) The reflexive self through narrative: a night in the life of an erotic dancer/researcher, in C. Ellis and M. Flaherty (eds), *Investigating Subjectivity: Research on Lived Experience*. Thousand Oaks, CA: Sage.
- Ronai, C. (1998) Sketching with Derrida: an ethnography of a researcher/erotic dancer. *Qualitative Inquiry*, 4 (3): 405–20.
- Rorty, R. (1979) *Philosophy and the Mirror of Nature*. Princeton, NJ: Princeton University Press
- Rorty, R. (1989) Contingency, Irony and Social Solidarity. New York and Cambridge: Cambridge University Press.
- Rosenau, P. (1992) Postmodernism and the Social Sciences: Insights, Inroads and Intrusion. Princeton, NJ: Princeton University Press.
- Rousseau, J.J. (1762) *The Social Contract or Principles of Political Right.* Trans. G. Cole. New York: Simon & Schuster. Also available at: http://www.constitution.org/jjr/socon.htm (accessed 25/07/02).
- Salvo, M. (2001) Ethics of engagement: user-centered design and rhetorical methodology. *Technical Communication Quarterly*, 10 (3): 273–91. St Paul, MN.
- Sanmiguel, L. (2000) From 'career woman's disease' to 'an epidemic ignored': endometriosis in US culture since 1948. Doctoral dissertation. University of Illinois, Urbana-Champaign, IL.
- Sarup, M. (1993) An Introductory Guide to Poststructuralism and Postmodernism, 2nd edition. New York: Harvester.

- de Sassaure, F. (1907–1911/1916/1983) Course in General Linguistics. Trans. R. Harris. La Salle, IL: Open Court.
- Scarry, E. (1985) *The Body in Pain: The Making and Unmaking of the World.* Oxford and New York: Oxford University Press.
- Scheurich, J. (1997) Research Method in the Postmodern. Washington, DC and Brighton: Falmer Press.
- Schwartz, D. (1989) Visual ethnography: using photography in qualitative research. *Qualitative Sociology*, 12 (2): 119–54. Summer.
- Scott, R. (1982) Blade Runner. 117 minutes. USA Columbia, Tri Star Productions, USA.
- Seale, C. (1999) The quality of qualitative research. *Qualitative Inquiry*, 5 (4): 465–78. Thousand Oaks, CA: Sage.
- Shelley, M. (1818/1990) Frankenstein, or The Modern Prometheus, in B. Bennett and C. Robinson (eds), The Mary Shelley Reader. Oxford and New York: Oxford University Press. Shields, C. (1990) Mary Swann. London: HarperCollins/The Fourth Estate.
- Singer, L. (1993) Erotic Welfare: Sexual Theory and Politics in the Age of Epidemic. New York: Routledge.
- Sluzki, C. (1998) Strange attractors and the transformation of narratives in family therapy, in M. Hoyt (ed.), *The Handbook of Constructive Therapies*. San Francisco, CA: Jossey-Bass.
- Sorkin, J. and Bayer, S. (2001) Managing financial risk with fractal geometry. *Futures*, 30 (10): 56–9.
- Sparkes, A. (1996) The fatal flaw: a narrative of the fragile body-self. *Qualitative Inquiry*, 2 (4): 463–95. December. Thousand Oaks, CA: Sage.
- Thompson, C., Thompson, B. and Hocking, B. (1992) Application of chaos theory to the management of occupational health and safety. *Journal of Occupational Health and Safety*, 8 (2): 109–19.
- Thompson, C. and Troester, M. (2002) Consumer value systems in the age of postmodern fragmentation: the case of the natural health microculture. *Journal of Consumer Research*, 28 (4): 550–7. Gainesville, FL.
- Tsonis, A. (1992) Chaos: From Theory to Applications. New York: Plenum Press.
- Tykwer, T. (1999) Run Lola Run. 87 minutes, Sony Pictures, Germany.
- Voithofer, R., Foley, A. and Ross, S. (2002) Post-IT: putting postmodern perspectives to use in instructional technology a response to Solomon's 'Toward a Post-Modern Agenda in Instructional Technology'. *Educational Technology, Research and Development*, 50 (1): 5–15. Washington, DC: Association for Educational Communications & Technology.
- Walker, A. and Moulton, R. (1989) Photo albums: images of time and reflections of self. *Qualitative Sociology*, 12 (2): 155–82.
- Walters, G. (1999) Crime and chaos: applying nonlinear dynamic principles to problems in criminology. International Journal of Offender Therapy and Comparative Criminology, 43 (2): 134–53.
- Wendt, R. (1998) The sound of one hand clapping: counterintuitive lessons extracted from paradoxes and double binds in participative organizations. *Management Communication Quarterly*, 11 (3): 323–71. February. Thousand Oaks, CA: Sage.
- White, S. (1991) *Political Theory and Postmodernism*. Cambridge: Cambridge University Press. Williams, M. (2001) Complexity, probability and causation: implications for homelessness research. *Social Issues*, 1 (2) October. Available at: http://www.whb.co.uk/socialissues/(accessed 24/01/02).
- Wolf, M. (1992) A Thrice-Told Tale: Feminism, Postmodernism, and Ethnographic Responsibility. Stanford, CA: Stanford University Press.
- Woodruffe-Burton, H. (1998) True life tales of postmodern consumers Emily's story. Irish Marketing Review, 11 (2): 5-15. Dublin.
- Worhol, A. (1962) Marilyn Monroe. New York: Museum of Modern Art.

Worhol, A. (1963) Mona Lisa. New York: Eleanor Ward Collection.

Young, T.R. (1991) Chaos theory and the knowledge process. The Red Feather Institute. Available at: http://www.tryoung.com/chaos/003knowledge.html (accessed 03/08/02).

Young, T.R. (1994) Chaos and Crime in explorations in postmodern criminology. Available at: ftp://csf.colorado.edu/psn/authors/Young.TR (accessed 03/08/02).

Yuthas, K. and Dillard, J. (1999) Ethical development of advanced technology: a postmodern stakeholder perspective. *Journal of Business Ethics*, 19 (1): 35–50. Dordrecht.

Index

A Thrice-told Tale 104	being and becoming 52, 127
abortion 77, 79	Bell, Susan 106
absolute rest 127	Bentham, Jeremy 40-1
Acker, Kathy 23	bifurcations 27, 52-3, 54, 61
Adams, David 100	business management 56
Adria, Ferran 125	definition 127
AIDS 72–3, 77–8	family therapy 55
Akindes, F. 97–8, 100	reflexivity 60
alatheia transcendentality 127	binary opposites 33, 34, 36, 40, 43-4
alienation 16	Blade Runner 23–4
Altman, Robert 99	Bochner, Art 77, 79, 83-4, 86, 95
androcentrism 7	Bogdan, Robert 74–5
androgyny 21	Boje, David 46, 70, 102
anorexia 43	Bost, Susan 85
anthropomorphism 127	boundaries 18, 124, 125
Apfel, Roberta 106	Bourdieu, P. 69
Aquinas, Thomas 4	bricolage 23,71
archaeology 41	bricoleur 23, 34
architecture 11-12, 15, 22-3, 32	Brown, Karen 77, 78
art	Bunuel, Louis 14–15
modernism 12-13, 15	business management 55-6
postmodernism 23-4	Butterfly Effect 10
AT&T building 22	
Atkinson, P. 83	Calder, Alexander 23
Austin, Deborah 105	cancer 106
autobiology 107	capitalism 7, 9, 16, 20, 38
autoethnography 60, 64-5, 97	Carver, Raymond 99
Aycock, Alan 46	Casa Milá 11–12
	catharsis 96, 97
Bach, Hedy 106	causal layered analysis 63-4
Baetz, M. 55	Ceglowski, Deborah 103
Bakhtin, Mikhail 90	centred individuals 5-6
bandita 71	centred systems 43-4
Banks, Steven 103	centring 29, 67
Barthes, Roland 30, 33, 34, 35, 44-5, 67, 92	certainty 10-11, 27
Bateson, G. 80	chaos 27, 62, 110, 123, 124
Baudelaire, Charles 75	research design 52-3, 54-61, 65
Baudrillard, Jean 20-1, 31, 36	sampling 61
Bauman, Zygmunt 61, 89	Chapman, Simon 42
Bayer, S. 56	Le Charme Discrete de la Bourgeoisie 14–15
Becker, Howard 95	Chetty, R. 58
Behar, Ruth 74, 78	Cilliers, P. 58, 89

circum textual frames 81	deconstruction cont.
Cirque Calder 23	language 109
Clarke, B. 58	layered analysis 64
class 81	postmodern research 110, 114
closed texts 94-5	restaurants 125
codes 33	deduction 5
collage 114–15	Le Dejeuner sur L'Herbe 12
colonialism 7	Deleuze, Giles 37–8, 71, 73
Complex Adaptive Systems 53	democracy, postmodernism 31
complexity 27, 62-5, 123, 124	Les Demoiselles d'Avignon 12
postmodern research 110	Denzin, Norman 29
research design 52-3, 54-61, 65	audience 93
validity 59	epiphany 97
complex layering 98–9	self 69
Concert Champêtre 12	Derrida, Jacques 8, 35, 36, 39-40, 43-5,
Conquergood, D. 95–6	46, 60
conservation management 56	ethics 89
consumer value 91	meaning 58
context 93	metaphor 100
criminology 57–8	tympanum 102
Crowley, E. 60	Derridean validity 59
crystals 59	Descartes, René 5
cubism 12–13, 127	desire 36-7, 73, 128
cultural pluralism 20, 127	determinism 8, 27, 128
culture 73	deterritorialisation 38, 73, 128
high 20, 130	detoxification 96
postmodernism 20–1	Dewdney, A. 65
cyborgs 71	dialogue 95
-,	architecture 22
D'Andrade, Roy 31	fictional 87
Darwin, Charles 8	diaries 75–7, 112
data analysis 112–13, 123	diethylstilbestrol 106
data collection	différance 44–5, 58, 60, 128
ethics 90–1	Dillard, Jesse 90
postmodern research 111–12	discourse 47, 123–4
data display 114–18	discursive practices 128
data re-/presentation 94–107, 123	postmodern research 114, 117–18, 121–2
Davies, Margaret 26	poststructuralism 39–43
Debord, G. 102	disequilibrium 128
decentralisation 19	dissimulation 21
decentring 29–30, 31, 41, 47, 84–5	dissipative structures 27
data display 114	Dixon, D. 78
death of the author 67–8	Donoghue, D. 47
definition 128	double coding 100
ethics 81	Douglas, M. 121
participant highlighting 82–3	Dowdall, G. 106
poetry 105	Downes, S. 125–6
deconstruction 30, 36, 38, 39–40, 43–6,	dreaming, lucid 60
123, 124	areaning, fueld 00
criticisms 47	economics
ethics 89	modernism 9, 15
iuxtaposition 102	modernity 6–7
juntaposition 102	modermy 0-7

economics cont.	fictional dialogue 87
postmodernism 19-20	Fielding, N. 63
Eco, Umberto 25, 30, 67-8, 93, 94	film, postmodernism 23-4
gaps 99	Fine, Michele 81–2, 84
irony 100	Fiordland National Park lakes 56
Einstein, Albert 10	Flâneur 75–6
electronic media 125	Foley, Alan 91–2
Elliot, T.S. 9	Fordism 7, 129
Ellis, Carolyn 64-5, 68, 72, 77-8, 79, 95, 103	Fort-da game 46
emergent patterns 52, 60, 61, 62-3	Foucault, Michel 38-41
emic 83	Fowles, John 24
empirical observation 5, 128	Fox, K. 46, 98
engineer approach 34	fractals 53, 55-6, 62, 129
Enlightenment 4, 128–9	frames/framing 80-2
entrainment 53	The French Lieutenant's Woman 24
environment 20	French Revolution 6
environmental informatics 56-7	Freud, Sigmund 10, 13, 34, 46, 70
epiphany 86, 87, 97, 98, 102	Frison, Ted 57
epistemologies 129	Fruin, Tom 23
Epstein, M. 125	Fry, Jane 75
equilibrium 53	fuzzy complexity 129
Esperanza 74	
Esquivel, Laura 18–19	games 88
ethics 88-92, 123	gaps 99
ethno drama 96-7	Gasché, R. 90
ethnography 29, 76, 77, 87-8, 106	Gaudi, Antonio 11
autoethnography 60, 64-5, 97	the gaze 73, 76, 81, 129
photoethnography 106	Gehry, Frank 22
evolutionary theory 8	gender 81, 92
external return 89	genealogy 39
extra textual frames 81	Genis, A. 125
	Giddens, Anthony 17
family therapy 54–5	Giorgione 12
Featherstone, Mike 26	Gleick, J. 53
feedback loops 52-3, 55, 61, 124	Glesne, Corrine 85–6, 104
business management 56	globalisation 7
criminology 57	postmodernism 19, 20, 31
definition 129	research design 51
environmental informatics 56	Goffman, 80
medicine 58	Golden, J. 106
positive 27	Gothic 130
reflexivity 60	grand theories 8, 25-6, 31, 61, 124, 130, 131
Feigenbaum, M. 53	Green, D. 56
Feigenbaum's constant 56, 129	Guattari, Felix 37-8, 71, 73
femininity 43	Guggenheim Museum 12
feminism	
binary opposites 36	Habermas, J. 43
gender positioning 70	habitus 69
modernity 13	Halberstam, J. 71
quasi-meta-narratives 26	Haraway, D. 71
reality 10	Harvey, D. 7
fiction 103	Hawkinson, Tim 23

Hayles, N. 66	Jagtenberg, Tom 65
health and safety, chaotic systems 62	Jameson, Frederic 101
Heidegger, M. 4	Jefferson, T. 4
Heisenberg, Werner 10–11	Jencks, Charles 22, 23
Hepworth, Julie 42–3	Johnson, Philip 22
Hertz, R. 71	Jones, J. 78
heterogeneity 61, 63	Joyce, James 14
high culture 20, 130	Juana, Dona 85–6
high modernity 17, 130	The Judgement of Paris 12
Hilbert, R. 95	juxtaposition 15, 19, 100, 102, 118
hip hop 85	architecture 22
HIV (Human Immunodeficiency Virus) 58, 72	deconstruction 46
Hocking, Bruce 62	literature 24
homelessness 62–3	
homogeneity 61	Kafka, Franz 9
homogenisation 130	Kant, Immanuel 4, 5, 6, 89
HPV (Human Papilloma Virus) 58	Katz, S. 102, 105, 107
Hucheon, L. 100	Kiesinger, C. 72
humanism 4, 25	Klomp, N. 56
Hume, David 5	Kmart book 72
hybridity 124	knowledge 124
hyper-reality 20, 124, 130	foundation 5, 6
hypertext pastiche 101	genealogy 39
hypertextuality 72	inscriptions on the body 73–4
71	modernism 11
ideology 83	modernity 8–9
imperialism 7	postmodernism 25–7
Inayatulla, Sohail 63–4	poststructuralism 47
individualism 5–6	prior 74
individuality 69	researcher position 69–70
individuals	Koopmans, M. 55
modernism 13–14	Krieger, Susan 72, 75, 78, 79
postmodernism 21–2	Kristeva, Julia 37, 69
responsibility 89–90	Kurasawa, Akira 14
structuralism 37–8	Kwa, S. 81
induction 5	
information technology 56–7, 91–2	Lacan, Jacques 34, 36-7, 70, 73
interest groups 19	Langton, C. 53
Internet 125	language 45, 58, 123, 124–5
interpretation 123	Foucault 39
intersubjectivity 59–60	intersubjectivity 60
inter textual frames 81	modern phraseology 107
intertextuality 29–30, 31, 38, 45, 65	postmodernism 30, 31
interviews 112–14, 120–2	postmodern research 109–10, 114, 117, 121
interwoven voices 85–6	poststructuralism 46–7
intra textual frames 81	signifiers 36
Irigaray, Luce 36, 70	structuralism 32–3, 34, 35, 36
ironic validity 59	subject positioning 69
irony 24, 83, 99, 100	Lashof, D. 27
,, , , , , , , , , , , , , , , ,	Lather, Patti 59, 72–3
Jackson, Shelley 101	law, postmodernism 26
Jago, Barbara 97, 100	The Law of Love: A Novel with Music 18–19
,	In of Love, 11 1 1000 will 1111000 10 17

layering 118	meta-textual frames 80
complex 98–9	metonym 99, 131
postmodern research 110-11	Mienczakowski, J. 96, 97
simple 97–8	mini-narratives 26, 130
Le Corbusier 12	modernism 9-16, 18, 29, 30
Lee, R. 60, 63	modernity 3-9, 34, 60
lenses 82-3, 92	high 17, 130
Lévi-Strauss, Claude 34–5	Montaigne, Michel de 5
Lewin, Roger 55	Morgan, S. 96
life stories 63, 74–5	Moulton, R. 106
Lincoln, 65	multiple identities 28
linearity 130	multiple narratives 38
literature	music 94
modernism 14–15	mystory performance 96-7
postmodernism 24-5	myths 33, 34-5, 40
structuralism 34	
Livingstone, I. 71	Nabokov, Vadimar 100
logic 31	narrative cooking 125
logical determinism 130	narrative poems 105
logocentrism 44, 131	narratives
longitudinal data 108–22	author as subject 86-8
Lorenz, Edward 10	decentred author 84–5
Lupton, Deborah 42	interwoven voices 85-6
Lyotardian validity 59	postmodernism 25-6, 31
Lyotard, Jean François 18, 20, 22, 25–6, 69, 70, 88	researcher position 70–1
, ., .,	self as other 104
Macbeth, D. 71, 72	structuralism 35, 38-9
McCall, Michal 95	voices 83–8
McGettigan, Timothy 87–8	nationalism 7
McKie, David 65	naturalism 47
MacLaren, G. 80, 81	neo-pragmatic validity 59
McLaren, Peter 75–6	neural networks 58
Mandel, D. 52	Nicholson, Linda 26
Manet, Edouard 12	Nickerson Gardens 102
Marcus, G. 29	Nietzsche, Friedrich 11, 36, 39, 89
Mark, A. 56	nihilism 30, 47, 124
Marx, Karl 9, 34, 38	nodal points 70
Mary Swann 24–5	non-linear science 52
mass consumerism 7	non-linear systems 27
Matisse, Henri 9	non-linear transformation 131
Mazur, J. 19	non-verbal interaction 120-1
meaning 58, 60, 73, 81, 109, 123	normalisation, discourse 40
deconstruction 44, 45	normality 13
discourse 40	•
poststructuralism 47	objectivity 8, 31
structuralism 32–4, 35, 36	definition 131
medicine 58	research design 59-60
meta-narratives 5–9, 25–6, 52, 61, 123, 130, 131	researcher position 73
metaphors 87, 100, 105, 118, 131	writing 14
lenses 83	oceanography 57
rhizomatic 98	Oleson, V. 97
tropes 46, 47, 99	open readings 30

open systems 27, 28	postmodernism cont.
open texts 94-107	ethics 88, 89, 90, 92
oral history 74–5	frames 81
originality 35-6	metaphor 99-100
Other 7, 105	modern phraseology 107
binary opposites 36	pastiche 101
definition 131	research design 51-66
responsibility 89	researcher position 67-79
self as 104, 105	short stories 102
	poststructuralism 39-47, 124-5
Panopticon 40-1	criticisms 47
parody 24, 100	research design 51-66
pastiche 101	power, discourse 40
hypertext 101	prediction 10-11, 28
Paterniti, Michael 125	Prigogine, Ilya 27, 52-3, 55
patterns	production, post-Fordism 19
emergent 52, 60, 61, 62–3	psychoanalysis 13-14, 34, 37
lenses 83	
Payne, David 107	qualitative research 28, 59
performance texts 95-6	quantitative research 28, 59
period doubling 53, 131	quasi-meta-narratives 26, 132
personification 23	quasi-transcendental 89-90, 132
Peshkin, Alan 82-3	
phase-plane analysis 62	race 81–2, 96
Phelan, P. 95	Radnofsky, M. 102
photoethnography 106	Raimondi, Marcantonio 12
Picasso, P. 9, 12-13, 87	random fluctuation 132
Pierce, Charles 33	Raphael 12
Pifes, Darryl 96	Rashomon 14
Plato 127	rationalism 8-9, 132
pleated text 103-4	rationality 7, 31
pluralism, cultural 20, 127	rational man 3
poetic transcription 85-6	reader, position of 30, 92-3
poetry 104-5, 116-17	reality
Poincaré, Henri 10	modernism 9-10
politics	postmodernism 26-7, 28
modernism 15	poststructuralism 47
modernity 7	structuralism 33, 34
postmodernism 19	reason 4, 5, 6, 8, 31
Polkinghorne, D. 68	recycling 23
popular culture 20	reductionism 8, 54, 132
Popular Mechanics 102	referentials 132
positionality 83	reflexivity 28-9, 78, 80
positional reflexivity 71-2	complex layering 98
positive feedback 27	definition 133
positivism 26, 132	positional 71–2
post-Fordism 19, 132	research design 60-1
posthuman bodies 71	researcher position 71–3
postmodernism 17-31, 108-22, 124-6	self-reflexivity 14, 28-9, 60, 71-2, 75
architecture 12, 22–3	textual 72
consumption 84	The Reformation 6, 133
critiques 30–1	Regine, Birute 55

Reich, M. 89	self cont.
Reid, I. 80, 81	postmodern research 109, 112
relativity, laws of 10	researcher 69
reliability 28, 123	signifiers 36–7
religion, modernity 8	structuralism 37–8
The Renaissance 6, 133	self-disclosure 60–1
research design 51-66, 110-11	self-knowledge 5, 6
researcher 80–93	self-monitoring 41
author's story 103-4	self-organisation 53, 133
position 29–30, 67–79	self-reflexivity 14, 28-9, 60, 71-2, 75
research participants 80–93	self-similarity 53
responsibility, individual 89–90	semanalysis 37
restaurants 125–6	semiology 33, 37
reterritorialisation 38, 73, 133	semiotics 33, 92
rhizomatic 38	sexual abuse 98
metaphors 98	Shelley, Mary 101
subjectivity 71	Shields, Carol 24–5
validity 59	Short Cuts 99
Richardson, L. 59, 86–7, 100, 104–5	short stories 103–4, 105, 118–20
Roberts, M. 89	signifiers 22, 30, 33, 35, 36–7, 44, 47
Rogoff, I. 95	signs 33, 35, 36–7, 38, 44, 45, 46–7, 58
Romanesque 133	silence 83
Ronai, Carol 68, 76–7, 100	Silverman, D. 83
Rorty, Richard 25, 89	simple layering 97–8
Rosenau, Pauline 31, 45–6, 68, 82	simulacra 20–1, 59, 124
Ross, Steven 91–2	simulations 21, 133
Rousseau, Jean Jacques 5	Sinclair, M. 96
Run Lola Run 24	Singer, Linda 68, 70, 71
Run Lota Run 24	situated validity 59
Salvo, M. 91	Sluzki, C. 55
sampling 61, 123	Smithies, Chris 72–3
Sanniguel, L. 96–7	Smith, R. 96
Sarup, Madan 25	social bonds 22
Saussure, Ferdinand de 33, 35, 36	social changes, modernity 7–8
Scarry, E. 70	social construction 21, 24, 25, 29, 30–1, 33, 34
Scherherazade 70	social context 21, 80
Scheurich, J. 120	socialisation 110
schizoanalysis 38	societal structures/values 13
Schwartz, Dona 106	
· · · · · · · · · · · · · · · · · · ·	Sorkin, J. 56
science 31	space 99
power 10–11	postmodernism 22
principles 9	space-time models 70
rationalism 8	Sparkes, Andrew 98
scientism 8, 133	statements 41–2
Scott, R. 23	Stengers, I. 27, 55
Seale, Clive 60–1	strange attractors 53, 57, 62, 134
self 76–8, 109	stream-of-consciousness technique 14
decentring 82–3, 105	strikes, United Parcel Service 19
epiphany 86	structuralism 32–9, 40, 43
ethics 89–90	subjectivity 28, 37
as other 104, 105	research design 59-60
postmodernism 21–2	researcher position 70–1

supralinguistic 134	transnationalism 19, 20
synecdoche 99	transparency 124
	Troester, Maura 91
Takens embedding 62	tropes 46, 47, 99
tape recordings 112	truth 4, 8-9, 69
Taylorism 7, 134	art 87
Telecom Australia 62	discourse 40, 41
territorialisation 38, 73, 134	modernism 9–10
texts	postmodernism 26-7, 28, 31
A Thrice-told tale 104	poststructuralism 47
author's story 103-4	relative 11
autobiology 107	social constructions 14
closed 94–5	structuralism 36, 38
complex layering 98–9	Tsonis, A. 53
data presentation 94–107	Tykwer, T. 24
deconstruction 43–6, 123	tympanum 102
ethno drama 96–7	, 1
fiction 103	Uberorgan 23
irony 100	ultralinguistic 134
metaphor 99–100	Ulysses 14
open 94–107	uncertainty principle 10–11
parody 100	unconscious 10, 14, 34, 36–7
pastiche 100–1	unions, United Parcel Service 19
performance 95–6	United Parcel Service 19
photoethnography 106	
pleated 103–4	validity 28, 59, 123
poetry 104–5	video 111–12
poststructuralism 47	vignettes 106, 118–20
reader's position 92–3	Villa Savoye 12
short stories 102–4, 105	viruses, medicine 58
simple layering 97–8	Voithofer, Rick 91–2
spaces and gaps 99	voluptuous validity 59
structuralism 33–4, 35, 36, 38	voodoo 77
vignettes 106	
textual reflexivity 72	Walker, A. 106
Thébaud, J. 88	Walters, G. 57
themes 83	Warhol, Andy 23, 36
Thompson, Benjamin 62	Weis, Lois 81–2, 84
Thompson, Colin 62	Wendt, Ronald 100-1
Thompson, Craig 91	White, Stephen 89
Tierney, 65	Williams, Malcolm 62–3
Tillman-Healy, L. 72	Wolf, Margaret 104
time	Wolman, G. 102
lenses 83	Woodruffe-Burton, Helen 84–5
postmodernism 22, 23-4	work in progress 69, 94
relativity 10	Wright, Frank Lloyd 12
time-space compression 7, 20	5 7 " " " " " " " " " " " " " " " " " "
Titian, 12	Young, T.R. 26, 57
Toffler, Alvin 27	Yuthas, Kristi 90
translinguistic 134	·
-	