Intertextual turns in curriculum inquiry: fictions, diffractions and deconstructions

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Narrative experiments as curriculum inquiry

In this thesis I explore and enact a methodology for curriculum inquiry that foregrounds the generativity of fiction in reading, writing and representing curriculum problems and issues. This methodology is informed by the narrative and textual 'turns' in the humanities and social sciences – with particular reference to poststructuralist and deconstructive approaches to literary and cultural criticism – and is performed as a series of narrative experiments and intertextual turns.

This introduction provides a historical/autobiographical context for these narrative experiments and intertextual turns in order to position them as both advancements in, and transgressions of, deliberative and reconceptualist curriculum theorising. I bring history and autobiography together in what follows because deliberative and reconceptualist approaches - as discernible and influential positions in curriculum theorising - began to impact on the field of curriculum studies at times that coincided with key stages of my own development as a curriculum scholar. For example, I began my postgraduate studies in education in the year following the publication of Joseph Schwab's (1969b) first germinal paper on 'the practical' as a language for curriculum inquiry, and a number of his previous and subsequent publications (Schwab, 1962; 1964; 1969a; 1971; 1973) provided the conceptual framework for my Master of Education research and thesis (Gough, 1975). Similarly, I began teaching curriculum studies at the Masters level in the year following the publication of William Pinar's (1975b) influential book, *Curriculum Theorizing:* the Reconceptualists, and his autobiographical method of curriculum inquiry (see Pinar, 1975a; Pinar & Grumet, 1976) became a significant component of my teaching and research repertoires from the late 1970s onwards.

I also privilege autobiography in this introduction because I believe that it might be more informative for readers than a less personal account. As William Reid (1981a) writes: When people are asked why they support certain positions and reject others, they usually point to some kind of logical justification. Often, however, this fails to produce an advance in understanding. Logical systems tend towards closure. If you are in them, everything hangs together quite nicely. If you are outside them, the logic is opaque. It is rather like having someone show you how he [sic] won a game of chess when you don't know the moves. An awkward paradox comes into play: only the expert can really have a 'feel' for the system within which he operates, but his very familiarity puts a barrier between him and the outsider looking for enlightenment. A deeper question is why people 'buy into' particular systems in the first place, and that is, literally, a deeper question, in that the reasons (if indeed it makes sense to speak of 'reasons') are hidden even to the individuals concerned. Partly they inhere in character, partly in the accidents of experience, and even that kind of distinction may not hold up very well (p. 168).

I will account as best I can for the 'reasons', personal characteristics and accidents of experience that in various combinations have led me to successively 'buy into' deliberative and reconceptualist approaches to curriculum inquiry and to move beyond them in the work this thesis represents. My discussions of deliberative and reconceptualist curriculum theorising are not exhaustive but, rather, focus on those aspects of the respective approaches that have continuities with my own work during the past decade.

Deliberative curriculum theorising

In reflecting on why I initially favoured a deliberative approach to curriculum inquiry, I can discern some personal preferences. For example, I readily identify with Reid's (1981b) self-appraisal as someone who is 'independently minded' and 'not attracted by theoretical positions that handle human problems through gross generalisations, or abstract principles' (p. 168).¹ As for accidents of experience, as a beginning teacher I had already encountered Schwab in his role as supervisor of the *Biology Teachers' Handbook* (Schwab, 1963), and I was an enthusiastic supporter of the approaches that he recommended to teaching biology as a

^{Also, like Reid (1981b), when I first encountered deliberative curriculum inquiry I would have said that I too was 'peaceable' and shared his dislike for 'social philosophies that stress power and conflict' (p. 168), which might go some way towards explaining my initial reluctance to engage with the neo-Marxist critical curriculum theorising of scholars such as Samuel Bowles and Herbert Gintis (1976), Paul Willis (1977) and Michael Apple (1979). Despite being a child of British working class parents, I was somewhat insensitive to (though not unaware of) the significance of class disadvantage. My eventual embrace of a more socially critical politics of education resulted chiefly from my acceptance of the defensibility and desirability of taking feminist, antiracist, multiculturalist and postcolonialist standpoints on matters of epistemology and methodology.}

'narrative of inquiry' (which he contrasted with the 'rhetoric of conclusions' that characterises conventional science education textbooks).² I maintained my enthusiasm for teaching biology and science through historicised narratives of inquiry when I moved from high school teaching into teacher education in 1972. Although I did not explicitly take up the implications of narrative theorising for curriculum inquiry until the late 1980s, I suspect that part of their attractiveness to me stemmed from years of extolling the virtues of teaching the subject matters of school and higher education curricula as narratives of inquiry.³

My work in teacher education led me to begin exploring the literature of curriculum studies in the early 1970s and my experience was very similar to Reid's (1981b):

Most of what I found ranged from fairly straightforward commonsense at one extreme (not too much of that), to pure fantasy at the other (simplistic talk about objectives, systems, feedback etc.). The first paper that I came across that said it was about curriculum and actually seemed to be talking about real things in a way that transcended commonsense was Schwab's 'The Practical: A Language for Curriculum'... I'm not sure I understood much of it at the time, and I certainly knew nothing of the background from which it came. But it seemed to be saying things about curriculum which responded to my concerns (p. 169).⁴

² The *Biology Teachers' Handbook* was a product of the US Biological Sciences Curriculum Study (BSCS) teacher education program which Schwab supervised in the early 1960s. The Australian Academy of Science supported the adaptation of a number of BSCS components in producing *The Web of Life* curriculum materials, which became the basis for upper secondary biology courses in several Australian states, including Victoria. *The Web of Life* program became the basis for Year 11 Biology in Victoria in 1967 (the year in which I completed my preservice teacher education course) and for Year 12 Biology in 1968 (the year I began teaching).

³ My preference for understanding a subject matter as a 'narrative of inquiry' rather than a 'rhetoric of conclusions' informed my contributions to the development of a number of teacher education programs in areas other than biology and science, including home economics, textiles, and environmental education.

⁴ Two other papers impressed me almost as much as Schwab's in this initial exploration of the literature of curriculum studies, namely, Lawrence Stenhouse's (1970) 'Some limitations of the use of objectives in curriculum research and planning', an early formulation of his 'research model of curriculum' (Stenhouse, 1975), and Elliot Eisner's (1967) 'Educational objectives: Help or hindrance?' I was struck by the affinities among these scholars (although they did not explicitly cross reference one another's work) and my own first contribution to the literature of curriculum inquiry sought to specify the implications of the positions they shared for school-based curriculum development in Australia (Gough, 1978). Reid (1981b) also recognised their convergence and named Stenhouse and Eisner among a small number of educational writers who 'have affinities with the [deliberative] perspective, though they might not identify themselves with it' (p. 172). I am indebted to my Master of Education research supervisor, Gwyneth Dow, for drawing my attention to all three papers.

Schwab's (1969b) contention that some subject matters might more usefully be understood as disciplines of 'the practical' rather than as disciplines of 'the theoretic' proved to be very generative in my research and teaching into the mid-1980s. Schwab's examples of disciplines of the practical included studies in which the outcomes of inquiry are *defensible decisions* to resolve practical problems (curriculum studies, medical diagnosis, the deliberations of juries) rather than warranted conclusions that 'solve' theoretical problems (the natural sciences, philosophy). I extended Schwab's neo-Aristotelean distinction between the theoretic and the practical to include the further distinction of both from 'the technical' (disciplines or arts in which the desired outcomes of inquiry are productive procedures). Table 1 summarises Schwab's (1969) distinctions between the theoretic and the practical and adds my interpretation of the technical drawn from Aristotle's (1955/c.350BCE) Nichomachean Ethics, which I adapted to fit Schwab's criteria for distinguishing between the theoretic and the practical. I used this framework in a number of curriculum design, development and evaluation projects and consultancies in home economics, environmental education, child and personal development studies and vocational education (see, for example, Gough, 1977; 1978; 1979a; b; 1981a; b; c; e; 1982a; 1983; 1984; 1985a).⁵

The influences of deliberative curriculum theorising on the narrative experiments performed in this thesis endure in two principle ways, namely, the refinement of my understandings of 'method' (and methodology) in research, and my appreciation of how speculative fictions can contribute to an aspect of effective deliberation that Schwab (1969) called 'the anticipatory generation of alternatives' (p.315)

Deliberation and 'method'

A deliberative approach to curriculum inquiry emphasises continuous refinement of the means by which curriculum scholars develop, test, and renew their arts. This contrasts with approaches to research in education distinguished by their adoption of theoretical perspectives – research conceived and conducted within

⁵ Two synoptic texts in Australian curriculum studies published during the mid-1980s – Colin Marsh and Ken Stafford's (1984) *Curriculum: Australian Practices and Issues* and Marsh's (1986) *Curriculum: An Analytical Introduction* – explicitly refer to my work up to that time as an Australian exemplification of deliberative curriculum inquiry.

TABLE 1:	Distinctions between the theoretic, the practical and the technical (adapted
	from Schwab, 1969, and Gough, 1985a)

Criteria for	The theoretic	The practical	The technical
distinction			
Aristotle's categories	science (episteme)	practical wisdom (phronesis)	productive knowledge (techne)
of intellectual	'knowing that'	'knowing I/we should'	'know-how'
virtues End or outcome	Propositional knowledge in the form of warranted conclusions: general or universal descriptive and explanatory statements which are durable and extensive in their truth and trustworthiness	Judgment in the form of defensible decisions: (i) decisions guiding choice and action which, before they are put into effect, can be judged as probably better or worse than alternatives (ii) decisions about the relative worth of something	<i>Skill</i> in the form of <i>productive procedures:</i> behaviours which in principle are an effective means of making a given or desired product or causing a given or desired event to occur
Application of end or outcome	Theoretic knowledge applies unequivocally to each member of a large class of occurrences or recurrences and holds good for long periods of time	Practical judgment applies unequivocally only to the case for which it is sought	Technical skill applies unequivocally to each instance in which a particular kind of product is sought
Subject matter	Something taken to be universal (e.g. mass, time) or extensive (e.g. Homo sapiens, igneous rock) or pervasive (e.g. protons, electrons) and treated as if it were constant from instance to instance and impervious to changing circumstances	Something taken to be concrete and particular and treated as indefinitely susceptible to circumstances and liable to unexpected change (e.g. this student in that school in Victoria during the period following the restructuring of the Ministry of Education)	Behaviours, tools and techniques taken generally to be effective in producing an embodiment of an idea, image or pattern (e.g. the means by which poems and houses are made, class control is achieved, public opinion is sampled)
Source of problems	States of mind Theoretic problems arise from areas of subject- matter marked out by what we already know as areas which we do not know	States of affairs Practical problems arise from states of affairs in relation to ourselves—conditions we may wish to be otherwise and we think can be made otherwise	<i>'States of the art'</i> Technical problems arise from 'states of the art' in relation to products or goals—skills, techniques, tools and procedures we wish to be more productive or efficacious
Method of solving or resolving problems	Controlled by a guiding principle: <i>induction</i> (a typical procedure is the experiment)	Not rule-governed: <i>deliberation</i> (no typical procedures)	Controlled by a guiding principle: <i>production</i> (typical procedure: trial- and-error)

Note: Text in shaded areas is paraphrased from Schwab (1969).

theoretic frames similar to those which the social and behavioural 'sciences' borrowed from the natural sciences (or, rather, from stereotypical assumptions about how the natural sciences produce knowledge).⁶ Such research – typified by many of the applications of psychology and sociology to education – attempts to establish propositional knowledge ('warranted conclusions') about teachers, learners, subject matters, schools, classrooms, curricula (and so on) and various interactions among them.⁷ Other approaches to research in education have included inquiries that address normative rather than empirical questions (e.g. questions of what should be taught and learned) but often have treated these as being amenable to procedural principles, such as techniques of philosophical analysis.

Schwab's (1969b) argument for deliberation as 'the' method for resolving practical problems of curriculum work influenced the development of other method-driven approaches, including action research (see, for example, Kemmis & Fitzclarence, 1986; Kemmis & McTaggart, 1988). Methodically defined research is particularly appropriate to a conception of education as a practical (i.e. moral) art, but can also be found in the theoretic disciplines. For example, within the natural sciences, characteristic techniques or methods delimit the problems and subject matters of research specialisations such as chiral molecular technologies and X-ray crystallography and their research goals include the development and improvement of technique and method. The most valued outcome of such research is propositional knowledge and this theoretic end tends to take precedence over the methodic means. But in practical arts the main purpose of research may be the reconstruction of method through its engagement with appropriate subject matter. Method itself then becomes both an end and means of research. For example, the major goal of literary critics who are concerned with the *advancement* – rather than the routine practice – of their art is to establish and defend critical methods. But literary critics exemplify both types of methodic research: some appear to understand the development of method

⁶ Schwab (1962) drew attention to the popular misconception (among many scientists and educators alike) that science was chiefly a matter of patiently seeking the 'facts' of nature and accurately reporting them, arguing instead that scientific knowledge is determined by 'deliberate constructions of the mind' (p. 198).

⁷ Schwab (1958) warned of the limitations of theory-driven research in his essay 'On the corruption of education by psychology'.

as a means of producing generalised propositions about writers, readers and texts, whereas others focus their attention on the refinement of the method itself – the means by which the practical art of literary criticism produces unique interpretations in/of unique literary works. Similarly, deliberative curriculum inquiry engages curriculum workers in the pursuit of unique understandings in/of the unique circumstances of their practice.

Curriculum inquiry might once have seemed very different from literary criticism but significant parallels and convergences have become more apparent in the wake of the narrative turn in the social sciences (Louis Mink, 1974; Lawrence Stone, 1979; Donald Polkinghorne, 1988; Laurel Richardson, 1990). For example, much reconceptualist curriculum inquiry explicitly foregrounds narrative (and textual) criticism, a point to which I will return in a later section of this chapter.

Reid (1981a) distinguishes between 'method' and 'procedure' by arguing that procedure should be 'understood within a context of axiomatic thinking' within which 'procedure is an end-point of enquiry':

Working from first principles, one arrives at a formulation which can be applied universally when a particular kind of problem has to be solved. The logic of the process is to be understood not in terms of the mind of the user, or of the material situation that has to be confronted, but in the goodness of fit between the finished product and the principles that gave rise to it. Method, on the other hand, has to be understood within the context of deliberative thinking. This starts, not from principles, but from problems. The essence of methodic enquiry is to initiate and sustain a process through which the nature of a problem is exposed and a solution converged upon. Each step is contingent on preceding steps: at each moment, method and subject-matter interact. Method is not an end-point of enquiry. It guides enquiry in an openended way. Its existence is guaranteed, not by abstract formulae which can be recorded, but by personal skills that have to be learned. At every point its use is subject to the judgement of individuals, and only retrospectively can its course be charted. Its logic is continuously reconstructed as it interacts with its subject-matter. The answer to anyone who says: 'But that is very esoteric!' is: 'Nevertheless, that is what we do all the time. That is how we deal with the demands of everyday life.' Such responses illustrate how we have become trapped in the very problem we want to solve. The practical concerns of life are at once too trivial and too esoteric to be encompassed by the kinds of theories that it is academically 'respectable' to talk about (p. 148).

Although Schwab and his many successors refer to deliberation as 'method', I have come to think of deliberative curriculum inquiry as a 'methodology' or as a set of methodological dispositions. This is because I find Sandra Harding's (1987)

distinction between 'method' and 'methodology' more useful than Reid's distinction between 'method' and 'procedure'. Harding distinguishes 'methodology (a theory and analysis of how research should proceed)' from 'method (techniques for gathering evidence)':

A research *method* is a technique for (or way of proceeding in) gathering evidence. One could reasonably argue that all evidence-gathering techniques fall into one of the following three categories: listening to (or interrogating) informants, observing behaviour, or examining historical traces and records. In this sense, there are only three methods of social inquiry (p. 2).

In other words, methodology provides a rationale for methods and/or methodological dispositions – for the ways a researcher proceeds and/or is disposed to proceed – and refers to more than particular techniques or methods. I continue to see deliberation as an exploration of defensible ways of proceeding in relation to particular problems (rather than following 'a' method) and this perspective has been an enabling influence on my pursuit of methodologies in curriculum inquiry that cannot be reduced to guiding principles or procedural rules.

Deliberation and 'the anticipatory generation of alternatives'

Because it eschews abstract procedural rules for resolving practical curriculum problems, deliberative curriculum inquiry is exploratory, eclectic and pragmatic in relating knowledge to policy and action. However, although it might be futile to seek universally applicable principles for curriculum decision-making, it is still a form of professional practice that is susceptible to improvement and, therefore, it should be possible to develop strategies by which the course of curriculum deliberations can be affected in constructive ways. Throughout the 1980s I sought some of these strategies among the methods of futures study (see, for example, Gough, 1981d; 1982b; 1985b; 1986; 1987a; b; 1988a; b; 1989b; c; 1990a). Part of my rationale for bringing the methods of futures study to bear on curriculum problems was based on Schwab's (1969) argument that one facet of effective deliberation is 'the anticipatory generation of alternatives':

Effective decision... requires that there be available to practical deliberation the greatest possible number and fresh diversity of alternative solutions to problems. One reason for this requirement is obvious enough: The best choice

among poor and shopworn alternatives will still be a poor solution to the problem. A second aspect is less obvious. Many of the problems which arise in an institutional structure... will be novel problems, arising from changes in the times and circumstances and from the consequences of previous solutions to previous problems. Such problems, with their strong tincture of novelty, cannot be solved by familiar solutions. They cannot be well solved by apparently new solutions arising from old habits of mind and old ways of doing things (pp. 315-6).

Anticipation is central to futures study (and, indeed, to any policy-related study) and it thus seemed reasonable to suppose that some of the methods of anticipating possible futures in areas of social, technological and environmental policy might also be applicable to generating alternative curriculum futures. Generating the widest possible variety of alternative futures requires an eclectic approach to the arts, methods and procedures by which futures can be elucidated, which can be grouped into four broad categories:

- *Extrapolation:* perceived consequences of present trends and events can be elucidated by procedures such as trend analysis and extrapolation.
- *Consensus:* opinions about what might or ought to happen can be elucidated by monitoring cultural and sub-cultural consensus using such procedures as polls, 'expert' commissions, Delphi techniques, and the like.
- *Creativity:* artists in various media imagine alternatives which can be elucidated further by connoisseurship and criticism and, to some extent, by emulating their creative behaviour. For example, scenario-building frequently emulates science fiction (SF).⁸
- *Combinatory:* combining the products of extrapolation, consensus forecasting and creative imagination in various ways produces images of further alternatives. Combinatory techniques such as futures wheels, cross-impact matrices and relevance trees are among the most characteristic tools of professional futurists.

During the 1980s I found very little Australian literature that explicitly anticipated futures in curriculum and the examples I found depended largely on trend

⁸ Science fiction authors and critics generally use the acronym SF rather than the abbreviation 'sci-fi' used by many mass media journalists. As I discuss further in Chapter 1, SF has the advantage of ambiguity, since it now encompasses other generic labels such as speculative fiction and science fantasy.

extrapolation or on a limited sub-cultural consensus among 'experts' and elites (e.g., Hedley Beare & Ross Millikan, 1988; Patrick Griffin, 1986). Thus, I directed my own work towards the extension of consensus techniques to wider publics and on generating creative alternatives in curriculum.

Although I routinely privileged SF stories in teaching futures studies⁹ I did not make explicit connections between reading speculative fiction and curriculum inquiry until 1987 when two of Schwab's most prominent intellectual heirs, William Reid and Ian Westbury,¹⁰ invited me to participate in a symposium at the Annual Meeting of the American Educational Research Association (AERA) in Washington, D.C., USA. The symposium focussed on the complementarity of historical, comparative and futures studies in curriculum inquiry,¹¹ with my specific role being to address the question of the extent to which futures study shared with historical and comparative studies the possibility of providing empirical (as distinct from normative) starting points for curriculum inquiry. I began my presentation¹² by retelling the following story drawn from a speculative novel.

In *Always Coming Home*, Ursula Le Guin (1986) tells stories of the Kesh, a people who 'might be going to have lived a long, long time from now in Northern California' and whose stories are written as translations of 'their voices speaking for themselves'. For example, the biography of a man named Fairweather is briefly recalled by his grandchild. Part of the story tells that during Fairweather's

⁹ I began teaching an elective study now known as Futures in Education, Society and Culture in preservice teacher education programs in 1975 and from the late 1970s regularly conducted professional development workshops on futures in a variety of learning areas for teacher associations, state departments of education, and so on.

¹⁰ Westbury worked with Schwab at the University of Chicago from 1968-1973 and was among the first of the North American curriculum scholars who took up Schwab's ideas with considerable enthusiasm (Westbury, 1972a; b). He also coedited a definitive collection of Schwab's (1978) essays. Reid was among the first of the UK curriculum scholars to pursue deliberative curriculum inquiry and his work has continued in this vein (see, for example, Reid, 1978; 1979b; 1981a; 1992; 1994; 1999). I began a collegial relationship with Westbury in 1984 when he returned on sabbatical leave from the University of Illinois to The University of Melbourne (where he, like me, had completed his Masters research under the supervision of Gwyneth Dow) and we co-taught a Masters course in curriculum studies. I began working with Reid at the University of Birmingham later in that same year when I was on Outside Study Program leave. In 1986 Reid, who was then General Editor of the *Journal of Curriculum Studies*, invited me to join the journal's editorial team as editor for the Australian region (Westbury was then US regional editor).

¹¹ Westbury contributed an example of comparative curriculum research drawn from his work on the Second International Mathematics Study. UK scholar David Hamilton presented an historical perspective on curriculum inquiry and Reid was symposium chair and discussant.

¹² Gough (1987c), published in revised form as Gough (1989b).

adolescence 'he learned arboriculture with his mother's brother, a scholar of the Planting Lodge... and with orchard trees of all kinds'. Fairweather lived in a time and place when 'none of the Valley pears was very good, all were subject to cankers, and most needed irrigation to bear well'. He asked people in the north for help in obtaining different varieties and, by crossbreeding northern seedlings with a pear tree he found growing wild above the oak forests, 'he came upon a strong, small, and drought-hardy tree with excellent fruit... this is the brown pear grown in most orchards and gardens, and people call it the Fairweather pear' (pp. 274-5). Le Guin concludes this deceptively simple story as follows:

TRANSLATOR'S NOTE:

...he learned arboriculture with his mother's brother...and with orchard trees of all kinds.

We would be more likely to say that he learned *from* his uncle *about* orchard trees; but this would not be a fair translation of the repeated suffix oud, with, together with. To learn with an uncle and trees implies that learning is not a transfer of something by someone to someone, but is a relationship. Moreover, the relationship is considered to be reciprocal. Such a point of view seems at hopeless odds with the distinction of subject and object considered essential to science. Yet it appears that [Fairweather's] genetic experiments or manipulations were technically skillful, and that he was not ignorant of the theories involved, and it is certain that he achieved precisely what he set out to achieve. And the resulting strain of tree was given his name: a type case, in our vocabulary, of Man's control over Nature. This phrase, however, could not be translated into Kesh, which had no word meaning Nature except she, being; and anyhow the Kesh saw the Fairweather pear as the result of a collaboration between a man and some pear trees. The difference of attitude is interesting and the absence of capital letters perhaps not entirely trivial (p. 275).

The difference of attitude is indeed interesting; moreover, it is the *difference* between the Kesh view of learning and our own that gives the story its critical edge. The story's capacity to generate questions for curriculum inquiry in our own time and place does not depend to any great extent on knowing precisely when and where we might be able to locate the Kesh. If Fairweather's story, and Le Guin's translation of it, helps us to question the taken-for-grantedness of existing conceptions of curriculum and learning and to generate alternatives, then it matters little whether the Kesh exist as an historical and/or anthropological 'fact' or a speculative fiction of Le Guin's (and ultimately her readers') imagination. The facts of the story's existence and of our critical responses to it are more than sufficient as empirical starting points for curriculum inquiry. To dismiss Le

Guin's story as 'mere' speculative fiction both undervalues the creative imagination as a source of critical insights and overvalues the 'factual' bases of historical and comparative studies.¹³ As Le Guin says of her own work:

The difficulty of translation from a language that doesn't yet exist is considerable, but there's no need to exaggerate it. The past, after all, can be quite as obscure as the future. The ancient Chinese book called *Tao teh ching* has been translated into English dozens of times, and indeed the Chinese have to keep retranslating it into Chinese at every cycle of Cathay, but no translation can give us the book that Lao Tze (who may not have existed) wrote. All we have is the *Tao teh ching* that is here, now. And so with translations from a literature of the (or a) future. The fact that it hasn't yet been written, the mere absence of a text to translate, doesn't make all that much difference. What was and what may be lie, like children whose faces we cannot see, in the arms of silence. All we ever have is here, now (p. xi).

In my symposium presentation I suggested that in much the same way that comparative studies in education help us to avoid the kinds of cultural parochialism that can result from confining educational inquiries to our own localities, both history and futures study can help us to avoid various kinds of *temporal* parochialism, with speculative fiction being one especially useful resource for creative deliberations on 'the anticipatory generation of [curriculum] alternatives'.

I cannot say that either Reid or Westbury ever shared my enthusiasm for speculative fiction, although we agreed that historical, comparative and futures studies could all contribute to generating strategies of *defamiliarisation* – a concept that circulates in educational discourse under such aphorisms as 'to make the familiar strange, and the strange familiar'.¹⁴ Reid (1990) uses this concept in

¹³ For example, as a generative source of questions for curriculum inquiry, Le Guin's speculative account of the Kesh way of learning is comparable to Alma Gottlieb's (2002) anthropological story of the Beng way of learning. Gottlieb's ethnographic study of the Beng villagers of Africa's Ivory Coast focuses on the Beng belief that children are reincarnated souls from whom their parents must learn lessons of the afterlife. Mediated by local seers, Beng parents understand education to be a listening process through which they discover their child's hidden knowledge and capture the essence and destiny of his or her soul. Thus, for example, Beng parents assume that their children are maximally multilingual at birth, because they knew all languages in the afterlife, but that they lose this multilingual capacity around the age of three. 'Language education' is thus a reactualisation process of selecting the 'right' channels that will be useful for communicating with others in this new life; it is a process of forgetting many languages, not learning one.

¹⁴ Daniel Chandler (2001) attributes this phrase to the German poet Novalis (1772-1801, a *nom de plume* of Friedrich von Hardenberg) and notes that the concept is found in the writings of other romantic theorists, including Wordsworth and Coleridge and is also closely associated with surrealism. Russian formalist Victor Shklovsky (1917/1965) introduced the concept of

his article, 'Strange curricula: origins and development of the institutional categories of schooling', to demonstrate that historical records describing curriculum in unfamiliar terms¹⁵ can bring a fresh perspective to the analysis of taken-for-granted aspects of current UK schooling. Reid explicitly acknowledges that futures studies can serve similar purposes (p. 203) and implicitly demonstrates the complementarity of historical and futures studies in his comparisons of early 19th century English 'schoolrooms' – rooms in which large groups of children were taught by monitors – with the late 19th century invention of what we now call 'classrooms':

Discarded inventions, such as schoolrooms, puzzle us, while living ones, such as classrooms, dull our imaginations with their excessive familiarity. Yet they too are inventions of their time, with a beginning and, we can confidently predict, an end. Though the classroom places constraints on the delivery of curriculum, we need not view these constraints as fixed forever (p. 210).

The strategy of defamiliarisation assumes that the tactic of surprise may serve to diminish distortions and help us to recognise our own preconceptions. My disposition towards surprising myself and others with speculative fictions (rather than with, say, Reid's 'discarded inventions') stems partly from my desire to expand the sources of puzzlement that are available to us and partly from my sense that speculative fictions provide qualitatively different puzzles from those that we can find in historical records. The strategy of 'making the familiar strange' might help us to bypass one set of conventions but it remains very difficult – and perhaps impossible – to escape altogether the framing of experience by convention. It is perhaps ironic that deploying speculative fictions to generate alternative futures for curriculum – a move I believed to be entirely consistent with a deliberative approach to curriculum inquiry – helped me to move beyond the framing of my own experience by more than fifteen years of engagement in deliberative curriculum work.

defamiliarisation (or in Russian, *ostraneniye*, literally 'making strange') to literary theory, arguing that, over time, our perceptions of familiar, everyday situations become stale, blunted, and 'automatized': 'After we see an object several times, we begin to recognize it. The object is in front of us and we know about it, but we do not see it – hence we cannot say anything significant about it' (p. 13).

¹⁵ Reid begins by quoting an excerpt from the *Statutes of Elizabeth I* in which the scholastic curriculum at the University of Cambridge in the early seventeenth-century is portrayed through the prescribed activities of 'Commencers' and 'Sophisters'.

Reconceptualist curriculum theorising

Although I can recall with some precision when and how I began to take up and use deliberative approaches to curriculum inquiry, my awareness and appreciation of reconceptualist theorising grew in a more gradual and diffuse way. During the late 1970s and early 1980s I began to take on more responsibility for developing and teaching graduate programs in curriculum studies,¹⁶ and I scanned curriculum journals for inspiration, looking especially for different ways of conceptualising curriculum work from those offered by writers who valorised mechanistic models of instructional design (e.g. George Beauchamp, 1968; Francis Hunkins, 1980; David Pratt, 1980) and those who were refining Lawrence Stenhouse's (1975; 1980) research model of curriculum under the planning rubrics of 'action research' (e.g. Kemmis & McTaggart, 1981; Jon Nixon, 1981; Carr & Kemmis, 1983).¹⁷ Some of the most promising examples I found were in the vein of what would eventually become known as 'arts-based educational research' (Barone & Eisner, 1997). These included Madeleine Grumet's (1978) 'Curriculum as theatre: merely players', Thomas Barone's (1979) 'Effectively critiquing the experienced curriculum: clues from the new journalism', and Elizabeth Vallance's (1980) 'A deadpan look at humor in curriculum discourse (or, the serious versus the solemn in education)'. Some (but by no means all) students found that using the languages and metaphors of theatre, new journalism and humour as registers for examining curriculum problems and issues liberated their imaginations and gave them freedom to question taken-for-granted assumptions.

But it was Grumet's (1981) 'Restitution and reconstruction of educational experience: an autobiographical method for curriculum theory' that provided the impetus for my more systematic engagement with what she and Pinar termed 'the reconceptualisation of curriculum studies' (Pinar & Grumet, 1981). I found Grumet's rationale for an autobiographical method for curriculum inquiry to be compelling, and her account of the procedures through which she enacted the method with her own students seemed to me to be clear and readily adaptable to

¹⁶ This included sole responsibility for teaching up to half of the units in Rusden College of Advanced Education's (later Victoria College's) Graduate Diploma in Curriculum Administration and co-teaching two units of Curriculum Theory and Practice in The University of Melbourne's Master of Education course.

¹⁷ Although I saw action research as being compatible with a deliberative approach to curriculum work (see, for example, Gough, 1982a), I was also concerned that in the absence of robust alternatives it could easily become a new orthodoxy for curriculum inquiry.

my circumstances. The strongly exploratory character of the method – which Pinar (1975a) called *currere*, using the Latin root of 'curriculum' in its infinitive form so as to emphasise experience – appealed to me and I was pleased that many of my students also found it useful in advancing their understanding.

In 1989 George Willis (University of Rhode Island) and William Schubert (University of Illinois at Chicago) provided the impetus for me to perform autobiographical curriculum inquiry (as distinct from merely using it in my teaching of curriculum studies) by inviting me to contribute a chapter to an edited collection, *Reflections from the Heart of Educational Inquiry: Understanding* Curriculum and Teaching through the Arts (Willis & Schubert, 1991). The book is structured in two parts. The first part focuses on various ways in which the arts have influenced the school curriculum and curriculum inquiry and includes several substantial chapters by well-known arts educators including Elliot Eisner and Grumet. The second part consists of personal accounts by 27 (mainly North American) curriculum scholars who were invited to write short autobiographical accounts of how a work (or limited number of works) of art had contributed to their understandings of curriculum and teaching. My chapter, 'An accidental astronaut: learning with science fiction' (Gough, 1991a), describes and reflects upon the succession of what I called 'fortunate accidents' through which particular SF stories influenced my personal and professional development and, eventually, how SF literature and media became significant in my work as a teacher, teacher educator and curriculum scholar. Beginning with my 'childhood dreams', inspired by the comic strip 'Dan Dare: Pilot of the Future', I recall how the influence of my elder brother's fondness for SF predisposed me to notice the incongruous location of Arthur C. Clarke's (1953) novel, Childhood's End, in an Education library and how the experience of reading it seems in retrospect to have quite literally changed my life. Clarke's work eventually led me to a professional interest in futures study and to other SF authors, notably Ursula Le Guin, whose work (as noted above) exemplifies the capacity of this genre to generate questions for curriculum inquiry. I conclude my chapter by reflecting on what I seemed to have learned from authors like Clarke and Le Guin, noting especially my selfrealisation as 'a child in time' and the ways in which SF stories have helped me to appreciate the 'imaginative perspectives of space and time future' that now shape the stories I tell to my children, colleagues, and colearners.

The experience of writing 'An accidental astronaut' forcefully demonstrated to me that Grumet's (1981) claims for *currere* were not far-fetched – that it does indeed have the capacity to reveal how our histories and hopes (both collective and individual) permeate our stories of educational experiences and prompts us to ask how our *interpretations* of these stories influence curriculum thought and action. Grumet (1981) also draws attention to the consequences of our personal involvement in our own stories – the ways in which an individual's attitudes, choices and values might be rendered invisible:

The problem of studying the curriculum is that we are the curriculum. It is we who have raised our hands before speaking, who have learned to hear only one voice at a time, and to look past the backs of the heads of our peers to the eyes of the adult in authority. It is we who have learned to offer answers rather than questions, not to make people feel uncomfortable, to tailor enquiry to bells, buzzers and nods (p. 122).

Although autobiography seemed to provide me (and many of my students) with an accessible and flexible frame for ordering and critically analysing educational experiences in tentative and open-ended ways, I sometimes found reason to doubt the method's capacity to address the 'we are the curriculum' problem to which Grumet refers. Both Pinar and Grumet clearly sought to rescue autobiography from solipsism, from the self-absorption that fuels many educational researchers' mistrust of 'subjectivity'. But I found myself suspecting that at least some students used autobiography to reinforce a unitary sense of an essential self rather than seek a critical perspective on educational experiences that they might otherwise have taken for granted. It was not until I began to work through the implications of poststructuralist understandings of subjectivity for *currere* that I began to see how I might ameliorate this difficulty. My own conceptual breakthrough was prompted by my recognition of the contradiction that seemed to be inherent in the title of William Pinar and William Reynolds's (1992b) edited collection, Understanding Curriculum as Phenomenological and Deconstructed *Text*, namely, that poststructuralist understandings of subjectivity as multiple and continually contested irreversibly destabilise the phenomenological quest for essential meanings (see also Gough, 1994a and Chapter 3 of this volume).

Despite these reservations I continued to encourage postgraduate students in curriculum studies programs to try *currere* for themselves. In the early 1990s I

supplemented Pinar and Grumet's autobiographical method with Michael Connelly and Jean Clandinin's (1990) somewhat similar method of 'narrative inquiry', an approach to teacher education and teacher professional development that focused on personal storytelling. What I initially took from their work was the idea that much of what we claim to 'know' in education comes from telling each other stories of educational experience. Narrative inquiry is thus concerned with analysing and criticising the stories we tell and hear and read in the course of our work – children's stories, teachers' stories, student teachers' stories, and our own and other teacher educators' stories – as well as the metanarratives (or myths) that surround and are embedded in our social interactions. We tell stories informally in our anecdotes and gossip, and we tell them more formally in policy documents, textbooks and journal articles, as well as through the rituals of teaching and conference presentations, and all the other texts and artefacts and media that we use to construct and convey meaning in our daily lives. It was a short step from 'curriculum as story' to the more poststructuralist view of 'curriculum as text' that I began to encounter more frequently in reconceptualist work (including the Pinar and Reynolds collection to which I referred in the previous paragraph).¹⁸ I found the disposition to understand curriculum as story/text to be a more powerful heuristic for research purposes than an autobiographical method, especially for analysing and generating critical perspectives on some of the objects of my inquiries at the time, with particular reference to science education and environmental education (see, for example, Gough, 1993a; b; c; d).

Narratives, fictions, and intertextual turns

In his editorial introduction to a special issue of the *Australian Educational Researcher* on 'the textual turn', Bill Green (1994) characterises the five articles that make up the issue as 'marking out or at least registering a new space in educational research', and suggests that they share a number of qualities:

What links them is a new awareness of and a shared concern for and sensitivity to *language*, broadly conceived; to a linked series of notions such as language, textuality, discourse, information, culture, rhetoric and the

¹⁸ My initial enthusiasm for Connelly and Clandinin's (1990) conception of 'narrative inquiry' was relatively short-lived, principally because I found their silence on the implications of poststructuralism and deconstruction for narrative-based research to be indefensible. This silence persists in their subsequent work (e.g., Jean Clandinin & Connelly, 1995; 1998; 2000).

symbolic. Within this series, representation emerges as a new (and renewed) problematic in and for educational research. This encompasses both the political (who speaks for whom? with what authority? what voices aren't heard, or glossed over?) and the semiotic (that is, questions of meaning and signification, ideology and power). Above all else, then, it is language that can be pointed to as a critical defining feature of postmodern(ist) forms and frames of experience and theory – although, once said, such a statement needs to be firmly and flexibly articulated with matters of technology, economy, cultural change and social formation, as always (p. iii).

My essay, 'Narration, reflection, diffraction: aspects of fiction in educational inquiry' (Gough, 1994b), is one of articles to which Green refers and it also provides the substance of Chapter 1 in this thesis. I have quoted Green here not only because I agree with his characterisation of the interests and imperatives that informed my contribution to the special issue but also because I can see, in retrospect, that the article to which he refers marks the beginnings of my own selfconscious participation in 'the textual turn' in educational research and my determination to explore further the possibilities of fiction and intertextual reading strategies for advancing curriculum inquiry. Some of the qualities to which Green refers were undoubtedly immanent in my previous work but I cannot claim that I would or could have identified them as such. For example, in much the same way that Reid (1979b) couched some of his explorations of practical reasoning and curriculum theory in terms of a 'search' for 'a new paradigm', I had also taken up some of the 'new paradigm' rhetoric in my work on environmental education curricula (Gough, 1987d). However, in what proved to be one of my last substantial contributions to the literature of deliberative curriculum inquiry (Gough, 1989a), I displayed some impatience with this rhetoric:

I have little enthusiasm for any 'quest' for a 'new' educational paradigm. In part, this lack of enthusiasm reflects my antipathy towards the quasi-religious zealotry of such a quest. 'The new paradigm story is a postmodern version of ancient millenarian cults that predicted the imminent coming of a new order, a paradise on Earth' (Michael & Anderson, 1986, p. 119). I simply cannot reconcile much of the rhetoric of new paradigm thinking with the kind of curriculum work that I want to do now and in future (for example, I am suspicious of the quality of life after quests: what does one actually *do* after one has *found* the Holy Grail?). Certainly, this sort of rhetoric is too pretentious for the kind of work I am doing here, now: I am not attempting to write a chapter in one of the Great Books, I am writing a work-in-progress report – a short story – with the intention of engaging you, the reader, in a further exploration of the world it signifies (p. 227).

Characterising my essay as 'a short story' anticipates the more self-conscious explorations of narrative theory that I would begin within a year or two of writing the above words, but I would not have situated my work as 'narrative inquiry' at that time.

Another reason for beginning this thesis with the work represented by Chapter 1 is that the circumstances in which I wrote it are relatively clear-cut. Although I continued to privilege speculative fiction in my teaching and writing, I had not pursued its significance for educational research in any depth beyond a small number of somewhat exploratory conference papers. My desire to focus my attention on elucidating the possible functions of fiction in educational inquiry increased substantially as a direct result of attending a session at the Annual Meeting of the American Educational Research Association (AERA) held in New Orleans, 4-8 April 1994. The AERA Program Committee sponsored a session titled: 'Yes, but is it research? Alternative perspectives on paradigm proliferation within AERA'. The session was moderated by 1993 Program Chair Robert Donmoyer and loosely structured around contributions from a panel of eleven well-known North American researchers who debated this topic in a lively (and often very entertaining) way. The session attracted an enthusiastic, standing-room-only audience of more than 500 registrants.

Donmoyer began the proceedings by referring to a hope that panellist Elliot Eisner (1993) had voiced in his previous year's AERA Presidential Address:

One of my doctoral students once asked me if Stanford's School of Education would accept a novel as a dissertation. At the time she raised this question, about a decade ago, I could only answer in the negative. Today, I am more optimistic, not because all of my Stanford colleagues share my convictions, but because the climate for exploring new forms of research is more generous today than it was then (p. 9).

The question of whether or not a novel could be regarded as research yielded a variety of responses from the panellists – from strongly affirmative, through affirmative-with-reservations, to non-committal. The issue was also the subject of a spirited series of exchanges between Eisner and a member of the audience, Howard Gardner, who was adamant in asserting that he could not see how a novel could, under any circumstances, constitute educational research.

Reflecting on my experience of this session – which included listening repeatedly to an audiotape of the proceedings (Donmoyer, 1994) – I was surprised at two omissions from the debate about novels as educational research. First, nobody volunteered the information that at least one US university (Hofstra) has already accepted a doctoral dissertation in education in the form of a novel (Sellitto, 1991). Second, and more importantly, the only examples of novels-asresearch that were referred to in the session were those that Eisner described as being 'true to life'. For example, frequent references were made to Steven Spielberg's (1992) movie, *Schindler's List*, and to the novel on which it was based (Thomas Keneally, 1982).¹⁹ The debate thus focused on an extremely narrow band of the storytelling spectrum and very few of the qualities of novels that might be pertinent to educational research were considered.

By limiting the debate to novels that are barely distinguishable from investigative journalism (and certainly from the so-called 'new journalism' of writers like Norman Mailer, Hunter S. Thompson and Tom Wolfe), the panellists avoided any discussion of the place of *fiction* in educational research. For example, in challenging Eisner, Gardner described a 'thought experiment' in which he investigated a prison and imagined 'writing six novels', one of which was 'true', in the manner of Schindler's List, while the other five were 'made entirely of whole cloth'. The latter, he intimated, would be worthless as research. The argument in which Gardner deployed this 'thought experiment' was vigorously rebutted by Eisner in terms of a hypothetical reader's ability to judge the 'referential adequacy' of any given account of life in prisons. What no one brought to the debate was any consideration of the worthwhile functions of unequivocally 'made up' stories – stories that do not necessarily purport to be 'true' (or even 'true to life'). This silence prompted me to begin work immediately on a paper for presentation at the following year's AERA Meeting titled 'Yes, it is research: functions of fiction in educational inquiry' in which I sought to specify the contributions that reading and writing fiction – be they 'true to life' stories or those 'made entirely of whole cloth' – could make to both teaching and performing educational research. This paper was virtually identical

¹⁹ Although Keneally's novel is known in Australia and Europe as *Schindler's Ark*, it was retitled *Schindler's List* for publication in North America.

to my contribution to the 'textual turn' issue of the *Australian Educational Researcher*, which appears in this thesis as Chapter 1.

Chapters 2-10 extend and differentiate the work introduced in Chapter 1 in a variety of ways. Each chapter represents and performs 'the textual turn', as Green characterises it, in some way, with particular reference to issues of language, rhetoric, textuality and especially intertextuality. These representational issues raise political and semiotic problems for curriculum inquiry that I examine in relation to research methodology, specific subject matters (such as environmental education) and contemporary issues and debates in curriculum (including the internationalisation and globalisation of curriculum work).

Composition of the thesis

The main substance of this thesis is fashioned from ten articles published in refereed educational research journals between 1994 and 2003²⁰ based on research undertaken during the period 1993-2002.²¹ Each of the chapters that follow this introduction is drawn in very large part from one of these articles. I have lightly edited the original texts, principally to remove some repetition of methodological positions and discussions. I have also made some relatively minor additions to several chapters – chiefly in the form of brief references to more recently published literature or to take the opportunity to include visual material that I omitted from the published versions – but I have deliberately resisted the temptation to bring every essay 'up to date'. This is because the essays perform an evolving methodology that has always been (and continues to be) a work in process, and the process that each essay enacts has always been contingent upon

²⁰ Two of the journals, the International Journal of Applied Semiotics (IJAS) and Managing Global Transitions: International Research Journal (MGT), describe themselves as interdisciplinary research journals rather than journals of educational inquiry. However, the IJAS is sponsored by the Semiotics and Education Special Interest Group of the American Educational Research Association and the editorial board members of MGT (as well as the majority of contributing authors to date) are affiliated with university faculties/schools of management or education.

²¹ Deakin University's *Guide to Candidature: Higher Degrees by Research 2001/2002* states that applicants who 'have a substantial publication record prior to candidature... may be permitted to submit a thesis based primarily on this work... Applicants in this category will normally be required to enrol for a period of about one year during which time they will write a text which incorporates the published work into a coherent whole'. See http://www.research.deakin.edu.au/hdradmin/GuideToCandidature2001/admission_to_candid ature.htm <12 July 2003>

the circumstances in which the essay was written. Where appropriate, I have made these circumstances explicit in prefatory notes or footnotes.

Like the articles on which they were based, each chapter is conceived and produced as an essay. I use the term 'essay' not only as a noun but also as a verb to attempt, to try, to test – and I characterise myself as an essayist²² in order to draw more attention to the process of 'essaying' than to the 'finished' product signified by the noun 'essay'. In conceptual inquiry an essay can serve a similar function to that of the experiment in empirical research – a disciplined and methodic way of investigating a question, problem or issue. Both 'essay' and the related term 'assay' come to English speakers through the French essayer from the Latin exigere, to weigh. Thus I write essays to test ideas, to 'weigh' them up, to give me (and eventually, I hope, my colleagues) a sense of their worth. For me, writing an essay – whether it is for a conference presentation or for a scholarly journal – is a mode of inquiry: most of the time, I do not know what the 'thesis' of the completed essay will be when I begin to write. Ideas about narrative and textuality are the instruments and apparatus with which I produce 'data' in my conceptual laboratory. This is one of my reasons for calling the essays that constitute this thesis 'narrative experiments', although I find more appropriate analogies for my work in the experimental arts than in the experimental sciences. For example, in a 1950 interview, the abstract expressionist painter Jackson Pollock was asked: 'Then you don't actually have a preconceived image of a canvas in your mind?' He replied: 'Well, not exactly – no – because it hasn't been created, you see. Something new – it's quite different from working, say, from a still life where you set up objects and work directly from them' (quoted in Pinar, 1994, p. 7).

Some years ago Reid (1979a) observed that 'the well argued essay' seemed to be the preferred genre of curriculum writing as published up to that time in the *Journal of Curriculum Studies* (of which he was then European Editor). But he warned that preferring to write in just one genre was inherently conservative and suggested that other possible forms should not be excluded without question:

²² Although I have always regarded Schwab as an inspiration rather than a model, I should point out that his major works were essays. He wrote only one book, *College Curricula and Student Protest* (Schwab, 1969a), and the majority of his journal articles and book chapters depend for their considerable impact on the internal strength of his arguments – his essays rarely carry any citations or references.

'Thoughts on curriculum can be pointed, substantive and coherent even if they are only a few lines long; they don't have to run to 5,000 words... Nor need they be in prose, or even in words' (p. 17). Reid might similarly have observed that the well argued essay was also the preferred genre of curriculum *reading* among curriculum scholars, since most of the references cited in the well argued essays to which he referred were other well argued essays. I have not ventured very far beyond this genre in my own curriculum writing, not least because the well argued essay continues to be the genre of choice for most academic journal and book editors and manuscript reviewers. However, the arguments I advance in this thesis draw upon texts from a much wider variety of popular, literary and academic genres and other cultural materials than could be found in the bibliographies of most curriculum books and journal articles from two or more decades ago.

In the decade of research covered by this thesis I published 21 articles in refereed scholarly journals and six 'original' book chapters ('original' in the sense that they were not reprints or revisions of previously published material) that explore the conceptual and methodological territory represented by this thesis. Selecting a sample of essays that does not exceed the word limits of a thesis has meant that I have had to omit some significant dimensions of this body of research. I chose first to ignore all book chapters, although one of these, 'Understanding curriculum systems' (Gough, 1999e) connects narrative theorising, to a significant community of practice (school curriculum leadership) that is otherwise not addressed in the thesis. I have also chosen to omit all of the essays that apply narrative theorising and intertextual reading strategies to science education, chiefly because most of these represent work I undertook in the early to mid-1990s and I prefer to bias my selection towards those that reflect my current practical interests in the internationalisation and globalisation of curriculum work. Finally, I have omitted most of the articles from environmental education research journals, although some of these address significant issues of subjectivity and agency (Gough, 1999b; c), postcolonial politics (Gough, 1999d; 2000a; 2002d), and research methodology (Gough, 2002b). However, because I maintain a practical commitment to reconstructing method through engagement with material problems and issues, I cannot ignore the contributions that my pursuit of environmental education research questions has made to my understandings of

narrative, fiction and intertextuality in curriculum studies. Chapters 5 and 6 represent this aspect of my work.

As Table 2 illustrates, the sequence of essays does not necessarily follow the chronology of their publication and I would add that the connections between them are, in Gilles Deleuze and Félix Guattari's (1987) terms, rhizomatic rather than arborescent. The essays fall roughly into two clusters. Chapters 1-4 explore textual continuities and discontinuities between the various objects and methods of curriculum inquiry and particular fictional genres (such as crime stories and science fiction) and, in the case of Chapter 4, a particular fictional work (Bram Stoker's *Dracula*). These chapters provide a rationale for reading/writing fiction in educational inquiry and demonstrate the generativity of intertextual, deconstructive and 'diffractive' readings of selected fictional works and genres.

TABLE 2:	Conceptual/temporal	'map'	of the thesis
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1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
	Chapter 1									
	1994 (conference paper) 1996 (widely circulated Working Paper) Chapter 2									
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	Chapter 5			to	selected of	objects of	curriculi	ım inquir	y. The sea	quence of
Chapter 6 these chapters reflects my increasing research										
Chapter 7 interests in issues of internationalisation										
Chapter 8 and globalisation of										
						Chapte	Chapte		0	lum work
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1	I					1	1		Chapter	i i
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003

Chapters 5-10 apply the methodological dispositions developed and justified in Chapters 1-4 to selected objects of curriculum inquiry. The sequence of these chapters reflects the shift in my research interests over the past decade which has led to me focusing somewhat less on science and environmental education curricula and more on issues of internationalisation and globalisation in curriculum work.

Chapter summaries and background notes

The following notes provide a brief overview of each chapter and, where appropriate, some details of the times and circumstances in which they (and any antecedent versions) were written.

Chapter 1: Narration, reflection, diffraction: fiction(s) in curriculum inquiry

As noted above the major source of this chapter is a paper written for presentation at the 1995 Annual Meeting of the American Educational Research Association (AERA) but published prior to this Meeting in a special issue of the Australian Educational Researcher (Gough, 1994b). The principal purpose of this essay is to mount a convincing case for enlarging the provenance of fiction in educational inquiry. Although many scholars in education and other disciplines have taken a narrative turn in theorising their practices, at the time I wrote this essay there were relatively few examples of educational researchers explicitly using (or even considering the use of) fiction in their work. I argue that fiction is not only a useful textual form in educational inquiry but that sometimes our purposes might be better served by (re)presenting the texts we produce as deliberate fictions rather than as 'factual' narratives that 'reflect' educational phenomena and experiences. I also argue that some modes of fiction can help us to produce texts that 'diffract' the storylines of educational inquiry and thus move research efforts beyond reflection towards generating *difference* in the worlds of curriculum and teaching. This version of the essay includes some visual material that I was unable to include in the published article and a different example of 'diffraction' from that used previously (although it comes from the same experiential source).

In the interests of clarity and coherence, much of the original essay's discussion of diffraction has been relocated to Chapter 3, where I demonstrate some generative effects of reading one of the dominant discourses of reconceptualist curriculum theorising (namely, autobiographical curriculum inquiry) through the diffractive lens of cyberpunk SF.

Chapter 2: The crime story and educational inquiry

The initial source of this essay was a paper written for presentation at the 1994 Annual Conference of the Australian Association for Research in Education

(Gough, 1994d) in which I examined three intertextual continuities between educational inquiry and detective fiction. First, I appraised the investigatory methods of fictional detectives by reference to their resemblance to various forms of educational inquiry. Second, I compared the characteristic textual strategies used in detective stories with those used in the discursive production of educational research. Third, I considered the extent to which recent transformations of both detective fiction and educational inquiry might be comparable - and intertextually linked - manifestations of cultural shifts signified by various notions of postmodernism and postmodernity. I argued that these intertextual relationships between educational inquiry and detective fiction are pertinent to teaching research methodology, interpreting research literature, and choosing textual strategies for narrating educational research. This paper received wider circulation as part of a Working Paper series (Gough, 1996b) and it was used by a number of colleagues in Australia and Canada in postgraduate courses and teacher professional development activities. By the time it was published in the form presented here (Gough, 2002a) I was able to include references to its use by other researchers.

Although crime fiction became an object of my inquiries more recently than science fiction, I have placed this chapter before my more extensive discussion of SF in Chapter 3. I do this chiefly for convenience, because much crime fiction – especially in the popular mode of the detective story – is more obviously modernist in its representations of inquiry than much SF, and I believe that the arguments I advance about the relations of modernist and postmodernist fiction to curriculum inquiry can be stated more economically by dealing with the crime story genre first.²³

Chapter 3: Diffractive fictions: manifesting cyborgs in curriculum inquiry

The first version of this essay was a paper presented in a symposium, 'Cyborgs in education', at the Annual Meeting of the American Educational Research

²³ Note, however, that a case can be made for asserting that modern SF preceded modern crime fiction. For example, many historians of SF (e.g., Brian Aldiss & David Wingrove, 1986) nominate Mary Shelley's (1992/1818) *Frankenstein* as the first modern SF novel, whereas Edgar Allan Poe introduced the first detective in modern fiction, C. Auguste Dupin, in 'Murders in the Rue Morgue' (1841; see David Pringle, 1987, p. 135).

Association held in New Orleans, 4-8 April 1994. The paper was published with minor modifications as 'Manifesting cyborgs in curriculum inquiry' (Gough, 1995). This essay has two main themes. First I sketch a rationale for using cyborgs as narrative experiments within a postmodernist framing of curriculum inquiry as a textual practice. Then I draw on my experiences of using such narrative experiments in graduate curriculum studies programs to consider ways in which curriculum scholars might respond constructively to the cultural concerns that cyborgs raise for educators.

I conclude Chapter 3 by restating the importance of not only manifesting but actively *proliferating* cyborgs in curriculum inquiry because I recognise that there are limits to the number of stories and meanings that can be presented in a chapter-length essay. For example, I usually provide single rather than multiple readings of the texts to which I refer, and supply only brief excerpts from the multiplicity of stories that my students/colleagues and I typically produce through the mode of inquiry I call a 'postmodernist currere'. Such truncated accounts of experience do not necessarily do justice to a deconstructive orientation to curriculum inquiry because, as Pinar and Reynolds (1992b) write: 'To understand curriculum as a deconstructed (or deconstructing) text is to tell stories that never end' (p. 7). Kenneth Knoespel (1991) puts this another way: 'Deconstruction, rather than reading a single text a single time, promotes the reading of many texts many times for an ongoing confessional comprehension of how meaning is generated' (p. 116). Thus, in Chapter 4, I enact this methodological disposition more explicitly by focusing initially on one reading of one text – a colleague's reading of a movie version of the Dracula legend – and then performing further readings that demonstrate the generativity of going beyond a single interpretive act.

Chapter 4: Textual authority in Bram Stoker's *Dracula*; or, what's really at stake in action research?

This essay owes a great deal to an accident of experience. The section now subtitled 'Erasing Dracula' originally formed part of a worksheet outlining issues of textual authority in curriculum work that I prepared for the course ED-B 580 Interpretive Inquiry at the University of Victoria, Canada, in August 1995. While I was photocopying multiple copies of the worksheet for students I was joined at

the photocopier by a colleague, Terry Carson (University of Alberta), who at the time was also a visiting instructor in the Masters program in curriculum studies. He noticed my reference to Dracula and pointed out that he was just about to make copies of 'Dracula as action researcher', an article recently published by one of his doctoral students, Jean-Claude Couture (1994). Couture's article revisits his involvement in a university action research project with particular reference to his complicity in - and, eventually, resistance to - working for the interests of the university. He uses the 1992 movie, Bram Stoker's Dracula, as a source of metaphors and analogies for rewriting the story of his involvement in the project. In my response to Couture, which is the source of Chapter 4 (Gough, 1996c), I suggest that the movie provides fewer textual resources for the deconstructive reading he offers than does Bram Stoker's original novel. I note that Couture might therefore have overlooked important resources for resisting his positioning as an accomplice of the university and suggest that juxtaposing his story with Bram Stoker's version of the Dracula legend highlights crucial questions about the mobilisation of textual authority in educational action research.

Chapter 5: Playing at catastrophe: environmental education after poststructuralism

This essay was written at the invitation of Madhu Suri Prakesh (University of Pennsylvania) in her capacity as guest editor of a special section on ecological and environmental education of an issue of *Educational Theory* (Gough, 1994c). The essay explores what it means to do ecopolitically committed theoretical work in education in the light of poststructuralism's questioning of narrative authority. I explore this issue by creatively juxtaposing the crisis of representation in academia with what is popularly known as the world's 'ecological crisis' and argue that where ecopolitics and education intersect, the key questions for educational theory are 'eco-rhetorical'. I provide specific criticisms of the ways in which modernist educational discourses construct human subjects alienated from nature-as-other. Drawing on poststructuralist notions of multiple subjectivities and the 'play' of significations across discursive fields, I offer strategies for deconstructing representations of nature-as-text that optimise ecopolitically constructive possibilities for curriculum and teaching as textual practices.

Chapter 6: About the weather: technocultural constructions of self and nature

Ever since I first heard Crowded House sing 'Everywhere you go, you always take the weather with you' I wanted to write an essay in which I could 'play' it as an intertext. I began to get a sense of how such an essay might begin when I was working at Queen's University, Kingston, Ontario, on Outside Study Program leave from September to November 1995. Among the multiple cable TV channels available in our rented apartment were two 24-hour weather channels (anytime we went anywhere we could take the weather with us). But it took a call for papers from the organisers of the *Regulating Identities* conference²⁴ held in Surfer's Paradise, Queensland, 3-4 October 1996, to provide the missing link in my thinking. The paper I prepared for that conference (Gough, 1996a) and subsequently published (very appropriately) in the Canadian Journal of Environmental Education (Gough, 1997) examines some of the ways in which nature is textualised in technocultural discourses, with particular reference to the incorporation of satellite-based weather monitoring and digital imaging technologies into global consumer markets of information and entertainment. I argue that these discourses not only construct and mediate our day-to-day experience of weather, but also help to produce our identities as actors in the world by regulating the social and cultural practices through which we interact with nature. I suggest that critical readings of popular media representations of weather are a necessary part of an approach to environmental education that recognises and problematises our participation in the cultural narratives and processes that produce our understandings of 'nature' and 'culture' and mediate their interactions.

Chapter 7: Globalisation and curriculum inquiry: deconstructing transnational imaginaries

The first version of this essay was presented at the *Globalisation and Education* symposium²⁵ held in Brisbane, Queensland, 5 June 1997 and was subsequently published with minor modifications (Gough, 1999a). In this essay I consider some of the ways in which the processes and effects of economic and cultural

²⁴ Sponsored by the Department of Political Science, Queensland University of Technology

⁵ Sponsored by Queensland University of Technology and the Australian Association for Research in Education

globalisation are being manifested in curriculum policies and school programs, and expressed by teachers and students, with particular reference to the ways in which meanings that circulate in increasingly globalised media (such as television and the internet) are deployed in the construction of school knowledge. I begin by outlining an approach to conceptualising globalisation as a 'transnational imaginary' in curriculum work and then briefly explore two contextual issues that might complicate efforts to inquire into local expressions of this imaginary. The issues on which I focus are (i) global perspectives that are already entrenched in many school subjects and (ii) popular expectations that the globalisation of new information technologies will transform schools and their curricula. I explore the latter issue through a parodic reading of politically conservative education policy as airport fiction.

Chapter 8: Relocating curriculum studies in the global village

This essay was commissioned by Hugh Sockett (George Mason University, Virginia USA) in his role as editor of 'A Special Issue to Mark the Millennium' of the *Journal of Curriculum Studies* and is presented here with minor changes (Gough, 2000b). I use my own spatially located 'encounter with broadsheet globalism' as a point of departure for examining the prospect of internationalising curriculum studies in the context of increasingly complex patterns of global interconnectedness in social production and organisation. I explore some ways in which diverse knowledge traditions can be sustained locally, and amplified transnationally, without being absorbed into an imperialist archive. I argue that emphasising the performative rather than the representational aspects of curriculum work might help us to resist the homogenising effects of economic and cultural globalisation. The internationalisation of curriculum studies can then be understood as creating transnational 'spaces' in which local knowledge traditions in curriculum inquiry can be performed together, not as local representations of curriculum translated into a universal discourse.

Chapter 9: Learning from *Disgrace***: a troubling narrative for South African curriculum work**

I wrote this essay shortly after one of many working visits to South Africa since 1998. It explores some of the challenges we face in talking about issues of

difference in the difficult social and political conditions of post-apartheid South Africa. My own story of working in South Africa is nested within the narrative of J. M. Coetzee's (1999) novel *Disgrace*, which is nested in turn within narrative theories of curriculum inquiry. I use a deconstructive reading of South African curriculum work to generate questions about what has been muted, repressed, and unheard in the discourses/practices within which I and my South African colleagues participate – voices and stories that existing theories, methods, and perceptions might prevent us from hearing. In particular, I trouble two aspects of curriculum work in South Africa: the dominance of the English language and the dominance of race over other inequalities in a politics of transformation.

Chapter 10: Speculative fictions for (re)imagining democracy: two thought experiments

This essay was initially prepared for presentation at the Annual Conference of the Australian Association for Research in Education, Brisbane, 1-5 December 2002, under the title 'Democracy, global transitions, and education: using speculative fictions as thought experiments in anticipatory critical inquiry'. The purpose of a thought experiment, as the term was used by quantum and relativity physicists in the early part of the twentieth century, was not prediction (as is the goal of classical experimental science), but more defensible representations of present 'realities'. Speculative fictions, from Mary Shelley's Frankenstein to the Star Wars cinema saga, can be read as sociotechnical thought experiments that produce alternative representations of present circumstances and uncertainties, and anticipate and critique possible futures. In this essay, which closely follows the published version (Gough, 2003), I demonstrate how two examples of popular speculative fictions, Frank Herbert's Dune (1965) and Ursula Le Guin's The *Telling* (2000), function as thought experiments that problematise global transitions in their respective eras. I argue that critical readings of such stories can help us to anticipate, critique, and respond constructively to social, cultural and educational changes and change environments within nation-states that constitute, and are constituted by, global change processes and their effects.

A note on signposts and segues (and their absence) in this thesis

These essays were originally produced for publication as stand-alone articles. In assembling them into this thesis, I have added some cross-references to draw attention to their interrelationships with one another where this seems to be appropriate. However, apart from the guidance provided by the background notes above, I have tried not to clutter the beginnings and ends of chapters with too many signposts and segues that direct readers in their passage from one essay to the next. Although the sequence in which I present the chapters is not arbitrary, their relationships with one another are not as linear as their numbering implies, and I prefer not to overdetermine the intertextual readings that these essays make possible for one another.

Chapter 1

Narration, reflection, diffraction: fiction(s) in curriculum inquiry

Fiction in particular, narration in general, may be seen... as an active encounter with the environment by means of posing options and alternatives, and an enlargement of present reality by connecting it to the unverifiable past and the unpredictable future. A totally factual narrative, were there such a thing, would be passive: a mirror reflecting all without distortion. ...but fiction does not reflect, nor is the narrator's eye that of a camera.... Fiction connects possibilities... and by doing so it is useful to us (Ursula Le Guin, 1989b, pp. 44-5).

My primary purpose in this chapter is to enlarge the provenance of fiction in curriculum inquiry. In Le Guin's terms, I argue that fiction clearly is 'useful to us'¹ as a 'means of posing options and alternatives' and for connecting 'present reality' with past and/or future possibilities in curriculum inquiry and, indeed, that our purposes often might be better served by (re)presenting the texts we produce as deliberate fictions rather than as 'factual' narratives 'reflecting all without distortion'. Because 'fiction does not reflect', fictional narratives invite suspicion of the passivity of narratives that purport to reflect. But reflection, and its variants in modern Western philosophies of representation, is a privileged optical metaphor in curriculum discourse (as exemplified by the frequent valorisation of reflective practice, reflective teaching, critical reflection, and so on). Like Donna Haraway (1997), I believe that *diffraction* is a more useful optical metaphor:

My invented category of semantics, *diffractions*, takes advantage of the optical metaphors and instruments that are so common in Western philosophy and science. Reflexivity has been much recommended as a critical practice, but my suspicion is that reflexivity, like reflection, only displaces the same elsewhere, setting up the worries about copy and original and the search for the authentic and the really real. Reflexivity is a bad trope for escaping the false choice between realism and relativism in thinking about strong objectivity and situated knowledges in technoscientific knowledge. What we need is to make a difference in material-semiotic apparatuses, to diffract the rays of technoscience so that we get more promising interference patterns on

¹ I intend my use of 'us' (and 'we') to include anyone for whom the term 'curriculum inquiry' signifies a practice they are committed to improving.

the recording films of our lives and bodies. Diffraction is an optical metaphor for the effort to make a difference in the world (p. 16).²

From a commensurable standpoint to Haraway's, I argue that some modes and genres of fictional narrative can function to 'diffract the rays' of perceptual data that reach the 'narrator's eye' and might thus help us to generate stories that will move curriculum inquiry beyond reflection and reflexivity to 'make a difference in the world'. I recognise that 'reflection' and 'reflexivity' have complex meanings that are not limited to the language of optical metaphors and discourses of seeing. However, in their commonplace uses in educational inquiry, both terms connote self-referentiality, including the use of 'reflection' to signify deep thought (as an inward gaze). I take 'diffraction' to be a tactical reminder that light can be directed otherwise than back at oneself - especially at one self - and that enlightenment can be other than self-referential. In some ways, this chapter (and to some extent this thesis) can be read as a lengthy embellishment on the passages I have just quoted from Le Guin and Haraway, since together they encompass my key proposition – that fiction is useful in curriculum inquiry – and introduce two key referents (reflection and diffraction) for my elaboration of some of fiction's specific uses. These quotations are also pretexts for introducing two key characters in the genealogy of my own fictions and thus serve to position this chapter and thesis intertextually (especially for readers who already are familiar with Le Guin's and/or Haraway's work).

Like a number of educational researchers in recent years, I have taken advantage of the emigration of narrative theory from literary studies to other disciplines. As Kenneth Knoespel (1991) writes:

Narrative theory has challenged literary critics to recognize not only the various strategies used to configure particular texts within the literary canon, but to realize how forms of discourse in the natural and human sciences are themselves ordered as narratives. In effect narrative theory invites us to think of all discourse as taking the form of a story (pp. 100-1).

² My initial understanding of how diffraction might work in textual production was shaped by Haraway's (1994) earlier formulation: 'for me, the most interesting optical metaphor is not reflection and its variants in doctrines of representation. Critical theory is not finally about reflexivity, except as a means to defuse the bombs of the established disorder and its selfinvisible subjects and categories. My favorite optical metaphor is diffraction – the noninnocent, complexly erotic practice of making a difference in the world, rather than displacing the same elsewhere' (p. 63).

My initial response to this invitation was to examine some ways in which the discourses of the curriculum subject matters in which I have a special interest – environmental education and science education – are configured as stories, with particular reference to poststructuralism's questioning of narrative authority in the sciences and other disciplines. These inquiries have been framed by my practical interests in appraising the adequacy of the conventional narrative strategies used by science and environmental educators in their work and with exploring ways of expanding their range and variety (see, for example, Gough, 1993a; b). Here I explore ways in which the types of stories we usually call fiction – and the modes of storytelling that produce them – might inform reading and writing practices in curriculum inquiry and educational research writ large. I emphasise from the outset that I take 'research' not only to signify an 'endeavour to discover new or collate old facts etc. by scientific study of a subject, [or] course of critical investigation' (Oxford English Dictionary), but also to describe the means by which a discipline or art develops, tests, and renews itself (Reid, 1981b, p. 1). Within the wide range of textual practices to which the term 'educational research' can thus be applied, I argue that many of them might usefully (and appropriately) be reconceptualised in terms of fictional storytelling.

Reflection and distortion in 'true stories' and fiction

In much everyday speech fiction is equated with falsehood, whereas 'non-fiction' is taken to designate a 'true' story. Indeed, the concept of narrative *per se* sometimes carries connotations of falsehood; for example, I recall that in my childhood 'telling stories' was a colloquialism for 'telling lies'. If we assume that research is primarily concerned with documenting 'facts', without distortion, in 'true' stories, then we might conclude that there is no place for fiction in curriculum inquiry. Rob Walker (1981) was one of the first educational researchers to raise a number of pertinent philosophical questions about these sorts of assumptions in his essay 'On the uses of fiction in educational research – (and I don't mean Cyril Burt)'.³ Walker asked questions such as 'is fiction the

³ Walker's parenthetic reference to Cyril Burt gestures towards colloquial understandings of fiction as a binary opposite of 'truth', since Burt was posthumously accused of having falsified the data in his twin studies that purported to demonstrate the significant contribution of heredity to human intelligence (relative to environmental influences). Burt's work was very influential in UK educational policy during the 1950s and '60s. For example, his conclusions

only route to some kinds of truth?' (p. 147) but did not attempt to address them. Rather, the issues he addressed in detail were for the most part pragmatic, prudential and procedural. For example, he demonstrated that lightly fictionalising case studies of curriculum evaluation and educational action research (by using pseudonyms, composite characters, places or events, and so on) might ameliorate some of the difficulties raised by issues of confidentiality. However, each of the 'fictions' with which he illustrated this proposition was clearly based on extensive empirical data and 'really changes the truth very little' (Walker 1981, p. 163).

In teaching materials I have written for postgraduate coursework in research methodologies in education (see, for example, Gough, 1998d, pp. 4-5), I have argued that Walker's question – 'is fiction the only route to some kinds of truth?' – should be answered in the affirmative. By way of example, I refer students to a well-known work of portraiture, *The Ambassadors, by* Hans Holbein the Younger (see Figure 1).

Holbein's life-sized double portrait memorialises two wealthy, educated and powerful young men. At the left is Jean de Dinteville, aged 29, French ambassador to England in 1533. To the right stands his friend, Georges de Selve, aged 25, Bishop of Lavaur, who acted on several occasions as ambassador to the Emperor, the Venetian Republic and the Holy See. At first sight, the painting seems almost photographic in its scrupulous attention to detail. The two men stand at either end of a side table covered with an oriental rug and a collection of objects that reflect their interests: mathematical and astronomical models and instruments, a lute, compasses, a sundial, flutes, globes, and an open hymnbook with Martin Luther's translations of Veni, Creator Spiritus and the Ten Commandments. These objects are rendered with meticulous care, as are the men themselves, the woven design of the curtain behind them, and the faultless perspective with which the floor tiles are represented. However, there is one departure from realism in the composition, namely, the long grey shape in the foreground that slashes diagonally across the picture plane. This is an *anamorphic* image, an element of a picture that, when viewed straightforwardly, may seem to be meaningless but which, when viewed from a specific lateral perspective (or by

on the relative significance of heredity in the development of intelligence were part of the warrant for introducing assessment procedures such as the 11+ examinations that were used to sort students into educational pathways that were appropriate for their 'innate' capabilities.



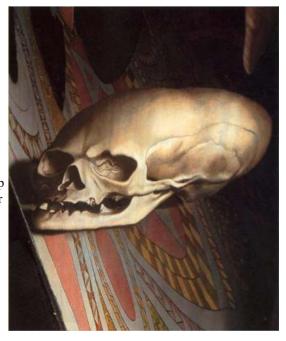
FIGURE 1



FIGURE 2 (AT LEFT): Picture viewed from upper right close to picture plane

on oak, 207 x 209.5 cm. The National Gallery, London, UK.

FIGURE 3 (AT RIGHT): Close-up of skull viewed from upper right close to picture plane



some other means, for example, reflected in a cylindrical mirror), suddenly acquires recognisable contours. In this instance, the distortion is corrected when the image is viewed from a point to the right of the picture and close to the picture plane (see Figures 2 and 3). Slavoj Zizek (1992) writes of *The Ambassadors:*

It is only when, on the very threshold of the room in which the picture is exposed, the visitor casts a final lateral glance at it that this [object] acquires the contours of a skull, disclosing thus the true meaning of the picture – the nullity of all terrestrial goods, objects of art and knowledge that fill out the rest of the picture … rendering all its constituents 'suspicious' (pp. 90–1).

Although I do not agree with Zizek that there can be a 'true meaning' of the picture, recognising that the anamorphic image is a skull – a symbol of mortality – is likely to *change* the meaning of the picture for the viewer. This becomes evident if we try to imagine the painting *without* the anamorphic image. Both the actual and the imagined portrait can be understood as different interpretations of the same research 'data'. Nothing about the 'reality' of the ambassadors' appearance or material circumstances would be changed, but the portrait as it stands clearly constitutes a very different interpretation of this 'reality' from its imagined alternative. The imaginary painting might seem to be a straightforward representation of the two men, with the material objects testifying to their adoption of the Humanist values to which many renaissance men of their class and position subscribed. But such photographic realism could also be seen as a distortion of these same values, since Humanists abhorred the pursuit of material possessions for their own sake. In Walker's terms, the 'fiction' of the distorted skull offers a 'route to some kinds of truth' about the ambassadors - it offers viewers a *less* distorted portrait of the two men by inviting a specific intertextual reading of the picture. Holbein's painting is thus a fiction that might nonetheless be *less false* (though not necessarily 'more true') than a more 'realistic' representation. Of course, Holbein might also have intended the image to be read in other ways and, regardless of his intentions, viewers are free to make further interpretations of his 'data' by reading the picture from other positions and in relation to other texts.

Writing a decade after Walker, Thomas Barone (1992a) argued that moral imperatives, such as the desire for social justice, should drive qualitative researchers in education to include 'critical storytelling' in their methodological

repertoires. Reflecting on an earlier experience (Barone, 1989) of documenting the life story of a potential school dropout, Barone (1992a) describes storytelling as an artful practice which 'eschews formal theory' (of either the scientific or philosophical type) and 'systematic method' (p. 143). However, Barone (1992a) also suggests criteria for 'the crafting of worthwhile stories', one of which is 'honesty':

more specifically, a kind of honesty achieved through a heightened *empiricism*, a determined scrutinizing of the world around us. Like all good art, honest stories are powerfully observed, carefully detailed. They must tend to generate in the reader awareness of the locations of (actual or fictitious) characters' thoughts, beliefs, desires, and habits, in the webs of contingencies that constitute their life-worlds (p. 143, emphasis in original).

Barone implicitly rejects the idea that fiction equals falsehood by asserting that stories characterised by 'honesty' and 'heightened empiricism' can also be 'fictitious'. According to Barone (1992a), 'critical stories *par excellence'* include works of investigative journalism, such as Norman Mailer's (1968) *Armies of the Night*, as well as novels such as John Steinbeck's (1967/1939) *The Grapes of Wrath*. Of the latter Barone (1992a) asserts that 'this novel's power to persuade... emanates from a careful and committed empiricism that is made manifest through such features of writing as powerfully "thick" description and invented but convincing dialogue' (p. 145); he adds:

Does it matter that this story... [is] fictional? Hardly. I would argue that the ultimate purpose of the critical storytelling I have described can be served equally well through journalistic or novelistic modes... In that sense, critical storytelling moves qualitative researchers and readers not only beyond theory and method but beyond genre as well (p. 146).

At the time I began my inquiries concerning the uses of fiction in educational inquiry, novels and other forms of fictional writing were being used both to teach about social and educational phenomena and to study them.⁴ However, as Barone (1992b) writes:

In the past, of course, a masterpiece of educational inquiry such as *Hard Times* would not have sufficed as, say, a doctoral dissertation. But in the new world view we see how dismissing literary works as 'merely subjective'

⁴ See, for example, Patricia Brieschke (1990; 1992; 1993), Gough (1993b) and various chapters in Willis and Schubert (1991).

wildly misses the point... In succeeding in their critical purposes, novelists such as Dickens have, in my judgment, earned entrance into the hallowed Citadel of Educational Inquiry (p. 32).

To the best of my knowledge, at the time Barone expressed this view only one US university (Hofstra) had accepted a novel as a doctoral dissertation (Sellitto, 1991). Debate as to whether or not novels should count as doctoral dissertations in education has continued (see, for example, A.L. Saks et al., 1996) and cases for the affirmative have been made by both argument (Brent Kilbourn, 1999; Lorri Neilsen, Ardra Cole & Gary Knowles, 2001) and example (Rishma Dunlop, 1999; Brent Kilbourn, 1998).

Realist fictions like those Barone mentions – *Hard Times, The Grapes of Wrath* – clearly exemplify Richard Rorty's (1989) proposition that novels can serve the purposes of socially critical inquiry insofar as they 'help us to see how social practices which we have taken for granted have made us cruel' (p. 141). However, although fictions of this type might well serve the moral interests of scholars engaged in emancipatory projects, many educational researchers are likely to share Walker's (1981) fear that there could be 'dangers inherent in the approach':

Can fiction ever be as 'good' as reality? What are the limits on the uses of fiction? How much of an account can be invented? How far can the data be altered, distorted or changed? Should the 'story' emerge from the data (as in the examples I have given), or should the story control the use made of the data (as a serious fiction writer might feel)[?] (p. 163)

Accepting that such questions signal 'dangers' depends to some extent on accepting the categorical distinctions they imply, although Walker (1981) acknowledges that it is difficult to distinguish 'pure fiction from fictional research styles' (p. 163).⁵ Walker's questions assume that it is possible, at least in principle, to establish intersubjectively reliable distinctions between 'fiction' on the one hand and particular constructions of 'reality' on the other – namely, 'reality' as represented by 'data' that have*not* been 'invented... altered, distorted or changed'. But although it is defensible to assert that reality exists *beyond* texts,

⁵ For example, Walker (1981) cites Truman Capote's *In Cold Blood* and Tom Wolfe's *The Last American Hero* as works that elude categorisation as either research reports or 'pure fiction' – a blurring of journalistic and novelistic modes that Barone, as quoted above, refers to as moving critical storytellers 'beyond genre'.

much of what we think of as 'real' is – and can only be – apprehended *through* texts. For example, most of what we call history is inaccessible to us except in textual form. Furthermore, much of what we call 'direct' experience is mediated textually and intertextually (see, for example, Gough, 1993e and Chapter 3, this volume). What is at issue here is not *belief* in the real but confidence in its representation. As Richard Rorty (1979) puts it, 'to deny the power to "describe" reality is not to deny reality' (p. 375) and 'the world is out there, but descriptions of the world are not' (Rorty 1989, p. 5).⁶

The conventional binary opposition of reality and fiction – and other binaries implied by this opposition, such as fact/fiction and real/imaginary – obscures the difficulty of distinguishing clearly between textual representations of the world 'out there' and other worlds constructed in texts. My own doubts about the referential adequacy of such binaries do not constitute an antirealist position but, rather, contribute to my distrust of storytelling practices that seem to be motivated by what Sandra Harding (1986) calls 'the longing for "one true story" that has been the psychic motor for [modern] Western science' (p. 193). Desires for 'one true story' have driven the construction of narrative strategies in which fact and fiction are mutually exclusive categories and particular kinds of facts, such as 'scientific facts' and 'historical facts', are equated with 'reality' – claims to ontological status for the worlds that scientists and historians imagine.

Fact and fiction are much closer, both culturally and linguistically, than these narrative strategies imply. A fiction, in the sense in which it derives from *fictio*, is something fashioned by a human agent. The etymology of 'fact' also reveals its reference to human action; a fact is the thing done, 'that which actually happened', the Latin *factum* being the neuter past participle of *facere*, do (*OED*). In other words, both fact and fiction refer to human performance, but 'fiction' is an active form – the act of fashioning – whereas 'fact' descends from a past participle, a part of speech that disguises the generative act. Facts are testimonies to experience and, as Linda Hutcheon (1989) asserts, are 'events to which we have given meaning' (p. 57). Thus, for example, historical facts are testimonies to historians' experiences of using disciplined procedures of evidence production and interpretation to *construct* meaning – to *produce* events that are meaningful

⁶ On problems of reality and representation see also George Levine (1993).

within their traditions of social relationships and organisation. Similarly, scientific facts are testimonies to the experiences of scientists as they use their specialised technologies to generate and inscribe data. Haraway (1989b) demonstrates the close relationships that are possible between fact and fiction in her description of biology as a narrative practice:

Biology is the fiction appropriate to objects called organisms; biology fashions the facts 'discovered' from organic beings. Organisms perform for the biologist, who transforms that performance into a truth attested by disciplined experience; i.e., into a fact, the jointly accomplished deed or feat of the scientist and the organism... *Both* the scientist and the organism are actors in a story-telling practice (p. 4).

Doing educational research as 'actors in a story-telling practice' means, in part, understanding that fact and fiction are mutually constitutive - that facts are not only important elements of the stories we fashion from them but also that they are given meaning by the storytelling practices which produce them. Thus, for example, part of Patti Lather's (1991) rationale for using experimental forms of textual construction to report an instance of feminist empirical research in education is her realisation that 'the so-called facts that one "discovers" are already the product of many levels of interpretation' (p. 106). However, in contrast to Haraway's characterisation of biology as a storytelling practice, Lather does not seek 'the fiction appropriate to' one construction of the 'objects' of her curiosity, but 'fashions the facts' into several kinds of 'fiction', each of which narrates the production of 'a truth attested by disciplined experience'. Lather works from a data base of 'interviews, research reports, journal entries, and [her] own insights/musings collected over the course of a three-year inquiry into student resistance to liberatory curriculum in an introductory women's studies course' (p. 83), from which she chooses to 'craft four narrative vignettes, to tell four different "stories" about [her] data' which she labels 'a realist tale, a critical tale, a deconstructivist tale, and a reflexive tale' (p. 87).⁷ Lather self-consciously foregrounds the generative acts through which she produces these stories, and there is thus a sense in which all four tales are reflexive, but their juxtaposition in

⁷ Cleo Cherryholmes (1993) demonstrates a complementary process by enacting three readings of a research report – feminist, critical and deconstructive – rather than alternative readings of the data it purports to interpret.

her multivocal text demonstrates convincingly that no 'one true story' can be fashioned from the data.

Within a categorical framework defined by a binary opposition of fact and fiction, many researchers might be reluctant to refer to Lather's four tales as fictions, because she quite clearly fashions them from empirical data (that is, although Lather provides 'suspicious' and even perverse readings of her data, she does not appear to *invent* any). But this binary opposition is itself a fiction – part of a story fashioned by researchers in the sciences and social sciences to rationalise the strategies they use to produce facts. Rather than thinking in these terms, I suggest that there might be some virtue in reconceiving all the stories we tell in education as fictions⁸ – as stories fashioned for particular purposes – especially those that most resolutely proclaim that they are 'factual'. Like Le Guin (1989b), I am sceptical that there can be such a thing as 'a totally factual narrative... a mirror reflecting all without distortion' (p. 45). As Malcolm Ashmore (1989) asserts, we cannot pretend that any story 'is not a *product* of processes which have a determinate effect on what it claims to be showing' (p. 198, emphases in original). If we think of all stories of educational inquiry as being fictions, we might be less likely to privilege without question those that pretend not to be, and more likely to judge each story on its particular merits in serving worthwhile purposes in education.

Andrew Brookes (1995) exemplifies the tendency for educational researchers to be suspicious of apparently fictionalised accounts of experience in his review of Florence Krall's (1994) *Ecotone*. Brookes draws attention to Krall's insistence that 'personal narrative [is] the only honest way for researchers to express their views' (p. 187) and then raises his 'concerns about Krall's authenticity claims':

The second chapter [of *Ecotone*], 'Navajo Tapestry', rang a bell, and I found my copy of a paper with the same title and author in the *Journal of Curriculum Theorizing* (Krall 1981). I wanted to see if the two were the same, since no mention is made in the book of the earlier paper. The 1981 paper is longer, but draws on the same journal entries, italicised in the book. What I had assumed would be identical verbatim journal extracts turned out to be

⁸ This suggestion echoes a position adopted by Michel Foucault (1980): 'I am well aware that I have never written anything but fictions. I do not mean to say, however, that truth is therefore absent. It seems to me that the possibility exists for fiction to function in truth, for a fictional discourse to induce effects of truth (p. 193).

different. There were changes of tense, and some sections had been shortened, but I also found meanings altered.

For example, a face that in 1981 'radiates warmth, friendliness, beauty' (p. 191) was no longer beautiful in 1994 (p.57) and 'long, beautiful hair' (p. 191) in 1981 is 'long, black hair hanging to her waist' in 1994 (p. 58). Perhaps feminine beauty is out, post-feminism. In the 1981 paper, Krall (p. 171) says: 'I began seeing the beauty that exists in nature that had somehow escaped me since my childhood on a sheep ranch where survival and hard times had transformed nature into an enemy to be conquered' (my emphasis). In 1994 this becomes: 'Slowly the beauty and meaning that had surrounded me unacknowledged since childhood on that sheep ranch, where survival dominated our thoughts, emerged in a flood of recognition' (p. 41). The omission of nature-as-enemy makes sense, given that by chapter one in 1994 nature (presumably friendly) was 'calling' (p. 7), but where does this leave 'truth'? One more example: in 1981 Krall applies a bandaid to a Navajo preschooler, Lenny, then: 'I search in my pack for my binoculars, take them out, and scan the hillside. What about me? asks Lenny. I place the strap around his neck. To my amusement, he mimics me, scans the hillside. Suddenly I am part of a pre-school organism. Plump, brown hands tug, pull, tap' (p. 190). By 1994, with the clarity of hindsight, serendipity has become crafty intentionality. Krall applies a bandaid to a Navajo preschooler, Danny, then: 'Needing something further to mediate interaction, I lifted my binoculars to my eyes and scanned the hillside. A small, plump, brown hand tapped me on the shoulder. "What about me," asked Danny. I placed the strap around his neck. He mimicked my actions precisely, scanned the landscape. Suddenly I became a part of a preschool organism. Tugs, pulls, taps' (p. 56).

In narrative, meaning, if not God, dwells in the details. Krall's two versions of 'Navajo Tapestry' highlight some of the difficulties inherent in her insistence that narrative provides reliable access to truth (pp.148-9).

Although I sympathise with Brookes' concerns, I do not entirely agree with his implied assumption that such terms as 'honest', 'authentic', 'reliable' and 'true' can be applied to personal narrative as if they were synonymous. I am not surprised that a memoir fashioned for publication in 1981 has been refashioned for publication in 1994. Krall fashions similar facts (testimonies to her experience) into different fictions (stories) at different times for (what I assume to be) different purposes. Would recounting 'identical verbatim journal extracts' in both stories have served her purposes any better? For some readers, the answer clearly will be 'yes', but I suspect that such a procedure might result in other distortions. To write an identical memoir of an incident after more than a decade of personal growth, development and change might no longer seem to the author to be 'authentic' or even 'true'. For example, perhaps there was 'crafty intentionality' in Krall's encounter with the Navajo preschooler, but in 1981 she did not recognise it as tacit pedagogical knowledge (and thus chose to represent it then as 'serendipity'), whereas in 1994 she admits to that possibility. However, I can only speculate on such matters and Krall has left herself vulnerable to the types of criticisms that Brookes levels – and missed an opportunity to demonstrate the virtues of critical storytelling – by not drawing attention to her different versions of 'Navajo tapestry'. Since nobody else can do it, Krall could have used her different stories to demonstrate how each is fashioned as an expression of situated knowledge – or (to repeat Ashmore's formulation quoted above) 'a *product* of *processes* which have a determinate *effect* on what it claims to be *showing*'.

Reflexivity and metafiction

If we agree with Reid (1981a) that 'reality is more complex than any account that can be given of it' (p. 182), then one sure way of falsifying stories of educational experience is to produce the illusion of a transparently clear reality in them without drawing attention to the narrative strategies through which that illusion is produced. For example, the 'critical stories par excellence' identified by Barone (1992a) might be 'ideologically open' (p. 145) to the extent that they reveal their authors' moral and political commitments, but the storytelling modes they exemplify – investigative journalism and realist fiction – do not necessarily lend themselves to questioning the *ideology of representation* they embody. In this respect, many empirically based reports of educational research deploy similar narrative strategies to those found in mimetic novels like Hard Times or Grapes of Wrath. Both types of text sustain the illusion that they do not mediate between reader and an exterior world but, rather, that they offer transparent windows onto that world. That is, the languages of much empirical educational research and literary realism are similar insofar as they present descriptions as if they were selections from a whole that is the 'real' world. A key difference is that authors of realist fiction are usually conscious of their own artistry in sustaining the reader's belief in the verisimilitude of the artificial world 'revealed' by the text, whereas many authors of empirical educational research reports seem to assume – or want their implied audience to assume – that they have constructed a neutral transmitter of the real to the reader.

To avoid accusations of naïvety or deception, educational researchers who claim to be representing reality in their stories need to demonstrate that they are aware of the ways in which they have deliberately constructed their texts to work as generators of meaning and significance. As Wenche Ommundsen (1993) writes, 'true stories about the world, in order to be "true", must be self-conscious, must acknowledge the story-telling process' (p. 19). This is not to say that all research reports must be reconstructed as fictions that self-consciously display every aspect of their own fictionality. Rather, in most circumstances, there will be limits to the extent to which such reflexivity is possible and desirable. David Caute's (1971) warning is pertinent here: 'total exposure of a process is never possible because the actor has to *act* his [sic] exposure of acting just as the writer has to *write* his [sic] exposure of writing' (p. 212, emphasis in original).

We can write our 'exposure of writing' in various ways. For example, Barone (1989) begins his case study of a potential high school dropout by declaring his own position in the narrative:

Billy Charles Barnett... is a member of the rural 'disadvantaged,' a 15-yearold nominated by the vice principal as the student least likely to remain in Dusty Hollow Middle School. I am a middle-aged urban academic who, secure in a tenured university position, will *never* leave school (p. 147).

With these words, Barone immediately invites suspicion of the narrative authority that academics usually take for granted by suggesting that, in telling Billy Charles's story, he might be 'disadvantaged' by his own privilege (from which he will *'never'* escape). Later in the story, Barone (1989) quotes at length from Billy Charles's account of the arts of 'jugging' for turtles, catfish and bass, which ends with the boy asking: 'do you know how to make turtle soup?' Barone continues:

I find myself squirming in my seat. But why should I? Why should *I* be the one feeling inadequate and defensive? No, I didn't know – until Billy Charles told me – that the market was bearish on coon-skins this year, and that I could expect no more than \$40 for a flawless one of average size. The topic had simply never arisen in any graduate course in curriculum theory. Moreover, E.D. Hirsch and his co-authors had included no such items in their *Dictionary of Cultural Literacy: What Every American Needs to Know.* So I take comfort: not only am I the better informed, but also apparently the better *American*... (p. 148).

Thus Barone (1989) interrogates his own assumptions about the purposes of American schooling – and, more pointedly, questions taken-for-granted notions of

'cultural literacy' that ignore 'the fundamentals of a world no longer honored in the dominant culture' (p. 148).

Barone (1992a) offers a further 'exposure' of his writing when he retrospectively analyses his story of Billy Charles Barnett as an example of critical storytelling and qualitative problem solving. In this later account, Barone leaves his readers in no doubt as to the types of stories and storytellers he admires and which of their qualities he attempts to incorporate in his own writing. If this information had been provided in the earlier story, it would have been more reflexive but it might also have been less effective. The particular purposes our stories are intended to serve, and the audiences for whom they are intended, are significant considerations in determining the appropriate level of reflexivity they should display. In this particular case, Barone's (1989) purposes in arguing to an audience of American teachers and administrators that 'we would not necessarily be better off were the dropout rate to decrease rapidly tomorrow' (p. 151) are different from his purposes three years later (Barone 1992a) in extolling the virtues of critical storytelling to an audience of qualitative researchers. For each argument, and each audience, different approaches to reflexivity are defensible. Of course, audiences are also fictions – discursive constructions fashioned by authors and the institutions that support the circulation of their texts. For example, John Hartley (1993) argues that 'audiences may be imagined empirically, theoretically or politically, but in all cases the product is a fiction that serves the need of the imagining institution' (p. 166).⁹ The fictionality of the audiences we imagine for our stories presents us with further strategic choices about what to expose (or not to expose) in reflexive research writing.

Another approach to reflexivity in educational inquiry is demonstrated by Alison Jones (1992) who revisits a critical story she had written previously (Jones, 1989) about the interaction of class, gender and race in the school lives of adolescent girls in New Zealand. Jones's earlier story is 'ideologically open' (a critical ethnography explicitly informed by feminist and neo-Marxist politics) but she later admits that her stance is 'authoritative and distanced' and that she is an 'invisible, neutral, observing presence' in her written text (Jones 1992, p. 19). As

⁹ Hartley is referring here to the institutions that construct television and its audiences, but my experiences of academic publishing suggest that his proposition is equally applicable to textual production in educational research.

she reflexively reconstructed her research in the light of postmodernist understandings of the 'constructedness' of texts, Jones (1992) found that 'every sentence of [her] original text became suspect':

I now confronted not a carefully observed scholarly account but a 'story' – my own partial story of the girls in the classroom... My 'invisibility' mocked me. I needed to change my position from a presence hidden in the text, to a new visible entity. I needed to *decentre* myself. I was to become one partial observer, telling one partial story... (p. 21).

Jones (1992) sees 'the old distant voice of the objective observer/writer... as a fiction, and as a mechanism of power' (p. 18) which, in the case of her earlier story, reinscribes power dynamics to which she was theoretically opposed. However, I regret Jones's implicitly disparaging reference to fiction here, since she also admits 'that our accounts of the world *can only be* constructions, made up from the language meanings and ideas historically available to us' (p. 18, emphasis in original) and, in this sense, her new, self-consciously 'partial story' is also a fiction. Nevertheless, Jones is right to link the status of her earlier account as an *undisclosed* fiction with the way that it functions as 'a mechanism of power' (p. 18). To paraphrase Heide Ziegler and Christopher Bigsby (1982), the power of fiction to coerce is never greater than when it falsely pretends to surrender that power (p. 121).

A reflexive account of educational research in some ways resembles the literary form known as *metafiction*, which Patricia Waugh (1984) describes as a story that 'draws attention to its status as an artefact in order to pose questions about the relationship between fiction and reality' (p. 2). But whereas reflexive accounts of educational research are usually concerned with the production of meaning from empirical data, metafiction is not restricted to representations of 'real' worlds. Indeed, metafiction demonstrates that it is not necessary for a story to be 'realistic' or in any way 'truthful' for it to be useful to us in exploring questions about 'the possible fictionality of the world outside the literary fictional text' (Waugh 1984, p. 2). According to Waugh (1984), 'in showing us how literary fiction creates its imaginary worlds, metafiction helps us to understand how the reality we live day by day is similarly constructed, similarly "written"" (p. 18). Thus, for example, Marlene Barr (1992) argues that 'the contrived nature

of patriarchal reality, the fiction about women's inferiority and necessarily subordinate status, is best confronted by metafiction':

sexist societies are artificial environments constructed by patriarchal language which defines sexist as normal.... Feminist SF [science fiction] writers create metafiction, fiction about patriarchal fiction, to unmask the fictionality of patriarchy. When these authors use language to construct nonsexist fictional worlds, they develop useful models for learning about how patriarchy is constructed... Feminist SF metafictionally facilitates an understanding of sexism as a story authored by men who use their power to make women the protagonists of patriarchal fictions (pp. 7-8).

Metafiction is increasingly evident in popular media. For example, Douglas Rushkoff (1994) writes of the attractiveness of 'metamedia' to his 'twentysomething' generation (also known to marketing industry demographers as 'Generation X' and/or 'generation why?'): 'we are particularly attracted to media that use bracketing devices to comment on media methodology. Built into our favourite shows are characters and narrative techniques that constantly remind us of our relationship to the program we are watching' (p. 160). In a move that parallels the feminist use of metafictional SF to 'unmask the fictionality of patriarchy', Rushkoff (1994) valorises self-reflexive popular artists who 'keep the audience aware of its relationship to media' (p. 160). These include the creators of characters such as Bart Simpson who 'demonstrate proper aloofness toward media iconography as well as the skills to dissect and reconstitute television imagery against its original purposes' (p. 160).

Such strategic uses of fiction are not restricted to social and cultural criticism. Sociologists of scientific knowledge also recognise the generativity of fiction in posing questions about the complex interrelationships between 'reality' – or, rather, the fictionality (the textual and intertextual construction) of what we experience as 'reality' – and the stories we construct in texts of all kinds. For example, Ashmore (1989) describes how 'new literary forms' are being used to inform approaches to reflexivity in this field:

The idea is that the format of the standard empiricist research report inhibits the development of any serious and sustainable reflexive practice, and that therefore other alternative formats are to be preferred... The various experimental forms include the play, the limerick, the parody, the parable, the dialogue, the antipreface, the anti-introduction, the parallel text – analytical and meta-analytical, the narrative collage, the lecture, the encyclopedia, the

examination, and the press report. In addition to all of these, occasional use has also been made of such self-referential devices as the self-engulfing photograph and self-referring footnote...

What characterises many of these experiments is their use of explicitly fictional forms of writing. This aspect of these new literary forms implies a critique of the distinction between the fictional and the factual; a distinction which constitutes the most basic interpretative prop for the production of scholarly/scientific (nonfiction) discourse...

Of course, epistemologically sophisticated analysts of scientific knowledge are unlikely to accept the analytic validity of a crude disjunction between fact and fiction; however, the majority practise their trade as if the distinction held. The importance of experiments in fictionalising in this area of discourse is, therefore, to show the inadequacy of the distinction in practice (pp. 66-7).

The inadequacy of the distinction between fact and fiction is not simply a matter of pointing to 'borderline' stories like *Hard Times* or *The Grapes of Wrath* in which the distinction is blurred. As Barr's comments on feminist science fiction indicate, and as I discuss in more detail below, stories that are unequivocally 'made-up' can serve important purposes in social and educational inquiry.

Diffractive fictions

Fiction might be particularly useful to us when we are attempting to reconceptualise or reconstruct some aspect of our work. Reading and writing fiction can help to move us beyond the naïve empiricist dream of representing 'reality' without distortion, beyond the 'heightened empiricism' of critical storytelling, and even beyond the reflexivity of texts that self-consciously display the narrative structures through which we produce realist, critical and reflexive stories. Fiction also provides potential discursive spaces within which new knowledge and understanding can be produced. This heuristic potential of fiction underlies the argument advanced by Gillie Rowland, Stephen Rowland and Richard Winter (1990) for writing fiction in research on professional practice:

if we were asked why, as teachers, we encourage children to write stories, we would explain that writing stories is a way of 'learning' about our experiences by ordering and exploring them.... In writing (and responding to) stories, we exercise our imaginations by playing with the relationships between experiences and with the ideas they evoke: the structure of a story is an implicit set of general ideas about a segment of life experiences. This, briefly, is the rationale for our proposal that writing fiction can be a valuable mode of inquiry into professional practice: we recommend it for children; why not for ourselves?

Writing in a fictional form enables familiar ideas and experiences to be brought into new relationships, and new ideas to be set alongside the familiar. Through fictional writing related to our professional context we can test out new ideas and explore the values upon which our practice is based... we can draw into our narratives those crucial but subtle textures of thought and feeling which are not readily accessible to more standard forms of 'research' (p. 291).

This rationale echoes Le Guin's (1989) claims that fiction 'connects possibilities', poses 'options and alternatives', and enlarges present reality 'by connecting it to the unverifiable past and the unpredictable future' (pp. 44-5).¹⁰ Moreover, such speculative thinking is not just an intellectual exercise, because some of the 'new relationships' and 'new ideas' that fiction generates can become the kinds of cultural inventions that materially affect – and are part of – our social reality. For example, there is a sense in which George Orwell's (1949) phrase, 'Big Brother is watching you', can be regarded as 'pure fiction'. But in the forms in which it has been mobilised in arguments against bureaucratic surveillance or centralised information systems, it has clearly become part of our 'reality'. When the Australian federal government attempted to introduce a national identity card in the late 1980s, both headline writers and those who opposed the idea of the Australia Card made frequent references to 'Big Brother'.¹¹ The ways in which images, symbols and metaphors drawn from such fictions as Karel Capek's (1923) R.U.R. (in which he coined the term 'robot'), Aldous Huxley's (1932) Brave New World, Orwell's (1949) Nineteen Eighty-four, and Mary Shelley's (1992/1818) *Frankenstein*, have been strategically deployed, over long periods of time, clearly demonstrate that made-up stories can both create and critique a real world. In terms of the optical metaphors to which Haraway (1997) refers, these fictions are diffractions rather than reflections of the social and material realities in and from which they were generated, and they continue to 'make a difference in the world' through their direct and indirect influences on successive generations of readers and authors.

The overlapping literary modes and genres collectively signified by the umbrella term 'SF' are among our richest sources of diffractive fiction. As

¹⁰ See Andy Convery (1993) for an example of Rowland et al.'s (1990) approach.

¹¹ Similarly, a newspaper report by P. P. McGuiness (1990) on the uses of tax file numbers and the extension of government access to taxation records was headed 'Spectre of Big Brother refuses to fade away' (p. 2).

Haraway (1989b) explains, SF designates 'a complex emerging narrative field in which the boundaries between science fiction (conventionally, sf) and fantasy became highly permeable in confusing ways, commercially and linguistically'; SF also signifies 'an increasingly heterodox array of writing, reading, and marketing practices indicated by a proliferation of "sf" phrases: speculative fiction, science fiction, science fantasy, speculative futures, speculative fabulation' (p. 5). This broad conception of SF subsumes the category that Barr (1992) calls 'feminist fabulation', which she describes as a 'specifically feminist corollary to... structural fabulation' (p. 11 – yet another 'sf' phrase). Barr takes her notions of 'fabulation' and 'structural fabulation' from Robert Scholes (1976) who describes fabulation as 'fiction that offers us a world clearly and radically discontinuous from the one we know, yet returns to confront that known world in some cognitive way' (p. 47).¹² Scholes (1976) adds that

in works of structural fabulation the tradition of speculative fiction is modified by an awareness of the nature of the universe as a system of systems, a structure of structures, and the insights of the past century of science are accepted as fictional points of departure.... It is a fictional exploration of human situations made perceptible by the implications of recent science (pp. 54-5).

Since I borrowed the idea of textual 'diffraction' from Haraway, it is fitting to note that *Primate Visions* (1989), her critical history of the development and cultural effects of primatology, remains one of the finest exemplars of the scholarly work that can be accomplished with SF. Haraway (1989) begins *Primate Visions* by acknowledging John Varley's (1978) SF story, *The Persistence of Vision*, as part of the inspiration for her elucidation of the ways in which the storytelling practices of science 'structure scientific vision' and, in turn, construct myths of gender, race and nature in our culture:

monkeys, apes, and human beings emerge in primatology inside elaborate narratives about origins, natures, and possibilities. Primatology is about the life history of a taxonomic order that includes people. Especially western people produce stories about primates while simultaneously telling stories

¹² In this context it is also worth noting that many feminist SF stories are explicitly pedagogical insofar as they use an approach that Janeen Webb (1992) calls 'educating the alien' – a mode in which the author 'discusses the human condition as it is revealed through attempts to render humanity explicable to an astonished or appalled alien intelligence' (p. 187). In so doing, feminist SF texts educate not only the alien but also their readers.

about the relations of nature and culture, animal and human, body and mind, origin and future. Indeed, from the start, in the mid-eighteenth century, the primate order has been built on tales about these dualisms and their scientific resolution (pp. 4-5).

One of the ways in which Haraway (1989) 'reads' primatology is 'as science fiction, where possible worlds are constantly reinvented in the contest for very real, present worlds':

Placing the narratives of scientific fact within the heterogeneous space of SF produces a transformed field. The transformed field sets up resonances among all of its regions and components. No region or component is 'reduced' to any other, but reading and writing practices respond to each other across a structured space. Speculative fiction has different tensions when its field also contains the inscription practices that constitute scientific fact. The sciences have complex histories in the constitution of imaginative worlds and of actual bodies in modern and postmodern 'first world' cultures (p. 5).

The results of using SF as a conceptual 'space' within which to read the primatology story are particularly apparent in the final chapter of *Primate Visions* which alternates between 'reading primatology as science fiction' and 'reading science fiction as primatology'. Haraway (1989) begins this chapter by using one of Isaac Asimov's SF novels to recapitulate the themes of *Primate Visions*. She then reviews the work of several women SF writers in the light of her reconstructed narratives of primatology. Her reasoning is that:

mixing, juxtaposing, and reversing reading conventions appropriate to each genre can yield fruitful ways of understanding the production of origin narratives in a society that privileges science and technology in its constructions of what may count as nature and for regulating the traffic between what it divides as nature and culture (p. 370).

Haraway clearly demonstrates that intertextual readings of SF mediated and facilitated her studies of the social, textual and material history of primatology in important ways, and that these readings were especially helpful in deconstructing and demystifying primatology's contemporary orthodoxies. My own attempts to deploy comparable strategies in curriculum inquiry focused initially on critiquing and reconceptualising the narrative practices of science education, environmental education, and outdoor experiential education by reference to such postmodernist

literary modes as 'cybernetic fiction'¹³ and cyberpunk SF (see, for example, Gough, 1993a; b; e). Haraway's work also inspired me to experiment with intertextual reading strategies when I was teaching in the Masters Program in Curriculum Studies at the University of Victoria, British Columbia, Canada, during the (northern hemisphere) summers of 1992 and 1993, although I did not use the term 'diffraction' to name these strategies until I read Haraway (1994). I describe one form that these experiments took in Chapter 3, but I will conclude this chapter with a brief example of reading curriculum inquiry as science fiction and reading science fiction as curriculum inquiry that I facilitated in 1993.

Diffracting autobiographical recollections with Blade Runner

In 1992 a curriculum studies class had responded very positively to reading autobiographical accounts of curriculum work as intertexts of selected SF novels or short stories, and in 1993 I added several SF movies to my list of recommended 'readings'. A number of students already shared my enthusiasm for one of these movies, Ridley Scott's (1984) *Blade Runner*, and they suggested that we view it as a whole class activity. Discussions immediately following its screening focussed largely on the extent to which it problematised various taken-for-granted boundaries, such as human/machine, human/animal, nature/culture and culture/technology. I also invited students to revisit (at their leisure) their autobiographical writings in the light of viewing *Blade Runner*. A majority of students responded in some explicit way to this invitation through their journals. For example, one found traces of a 'naïve appeal to human nature' and another suspected that 'whatever [he] meant by "a return to nature" would be likely to require more rather than less technology'. Others indicated that *Blade Runner* had

¹³ David Porush (1985) used the term 'cybernetic fiction' to characterise an 'elusive body of works generally called postmodern fiction' (p. ix), exemplified by authors such as Donald Barthelme, John Barth, Thomas Pynchon, Samuel Beckett, William Burroughs and Kurt Vonnegut, who deploy images and literary techniques influenced by concepts of cybernetics and artificial intelligence. Although the continuities between the work of these authors and writers of cyberpunk SF (whose work I discuss in more detail in Chapter 3) now seem obvious, the former were not usually identified with 'science fiction', although their work clearly fits Haraway's broader conception of SF discussed earlier in this chapter. Porush (1991; 1994) acknowledged these continuities in subsequent studies of specific works by cyberpunk SF authors such as William Gibson and Bruce Sterling's (1991) *The Difference Engine* and Neal Stephenson's (1992) *Snowcrash*, both of which appear to be influenced by chaos and complexity theories.

confounded their expectations of 'sci-fi movies' by demonstrating what they saw as unexpected compassion for the movie's 'replicants' (humanoid machines).

Another set of diffractive readings was prompted less by the movie's thematic concerns than its visual syntax. I had not screened the 'original' movie but *Blade Runner: the Director's Cut* which had recently been released on video. This is Scott's preferred version of the film and is presented in the 'letterbox' widescreen format, which shows forty percent more of the full Panavision frame than the previously released video cassette version.¹⁴ Throughout *Blade Runner*, Scott mostly frames the actors either screen left or screen right – rarely centred. The lighting design usually places the actors half in light, half in shadow, which accentuates the impression that most of the characters are living their lives on the fringes, edges and margins – an existence that is perpetually off-centre and, perhaps, off-balance. In the earlier videocassette version, the frame proportion required for standard television screens is achieved by an automated 'pan and scan' editing technique that places the actors as close as possible to centre screen. But removing the 'dead space' in *Blade Runner* also diminishes the movie's pervasive sense of marginalisation and alienation.

These differences between the two video versions of *Blade Runner* prompted me to think about how we 'frame' the other actors in the day-to-day comedies, dramas and soap operas in which we participate in schools and universities. What sense of 'real' life would we get if we 're-edited' our perceptions of our students and peers and their interactions with one another and with their settings? What difference would it make to place some of the peripheral actors in our everyday lives at 'centre screen' (and vice versa)? More importantly, perhaps, how do the frames we put around actors get there? What cultural mechanisms are the equivalents of 'pan and scan' editing? How many of the people with whom we interact (students, colleagues, etc.) are surrounded by 'dead space' *that we do not see*. How can we put the material conditions of those who are marginalised and alienated by our perceptual editing processes onto the 'screens' of our visual imaginations?

¹⁴ Blade Runner: the Director's Cut differs in some small but significant ways from the original wide-screen cinema release, the Embassy Home Entertainment video cassette (which also cropped the image to fit television screen proportions), and The Criterion Collection laserdisc (which restored the wide-screen format). For detailed notes on differences between these previous versions see William Kolb (1991).

Sharing these questions with students drew their attention to the significance of Le Guin's (1989b) thoughts on narrative, as quoted in the opening of this chapter. By imagining ways in which they might 'recut' their autobiographical accounts, they recognised their stories as 'active encounter[s] with the environment', as fictions that do not 'reflect... without distortion' but instead offer 'options and alternatives' for enlarging (and perhaps improving upon) present realities. Such experiences reinforce my preference for focussing my (and my students') intellectual efforts on taking responsibility for the fictions we choose to privilege rather than being diverted by unproductive struggles to distinguish between stories of the imagination and of 'reality'.

Chapter 2

The crime story and educational inquiry

In this chapter I explore the work of fiction in educational inquiry by focusing in particular on the genre of the crime story. The theme I develop here is a variation on Richard Rorty's (1979) invitation to 'see the social sciences as continuous with literature' (p. 203), with my particular purpose being to demonstrate that strategically positioned readings of crime fiction can inform our understandings of storytelling practices in educational inquiry. Following Cleo Cherryholmes (1993), I want this chapter to contribute to breaking 'the silence of the research literature on the textuality of research findings' (p. 1) by attending to *some* of the 'many ways to read and interpret and criticize' (p. 1) research texts. Working from a poststructuralist position, I am disposed to read, interpret, and criticise stories intertextually – to seek to understand at least some of the ways in which, in the production of meaning, 'every text is related to every other text' (Julia Kristeva, 1980, p. 36). Consider, for example, the intertextual continuities between the literature of educational inquiry and crime fiction implied by the appearance in each of such variations on the word 'investigate' as follows:

Most qualitative researchers maintain a stance best described as 'investigative' (David Lancy, 1993, p. 30).

In undertaking educational research, the first problem is to find a problem to investigate (Robert Burns, 1994, p. 17).

there is that word again – 'investigate' – invoking the crime narrative, that investigatory hermeneutic which seeks to reveal, disclose, to *know*, and thence, so the myth goes, to empower (Sally Munt, 1994, p. 173).

My strategy is to read crime stories by reference to the 'investigatory hermeneutics' they seem to share with forms of educational inquiry, and to read stories of educational research by reference to the literary tropes (analogies, metaphors, synecdoches, etc.) and textual structures they seem to share with crime fiction. I emphasise that my interest is focused on the hermeneutic and semiotic codes *shared* by educational inquiry and crime fiction rather than on the generativity of constructing the fictional investigation of crime as a metaphor for educational research. In this respect, my project complements, but also extends beyond, the work of other writers who have demonstrated the merits of understanding qualitative research metaphorically as, for example, jazz (Penny Oldfather & Jane West, 1994), and dance (Valerie Janesick, 1994; 1998; 2001). I am not merely asserting that educational inquiry *resembles* the fictional investigation of crime, but also that readers and writers of research texts and crime stories are materially connected by the cultural articulations of the discourses and sign systems in which they are interpellated. I also emphasise that both detective stories and research texts are, as Cherryholmes (1993) writes of the latter, 'subject to multiple readings' (p. 2), and thus recognise that the readings I offer here are partial and incomplete. Nevertheless, I argue that generating intertextual relationships between educational research literature and other literary forms is pertinent to such activities as teaching graduate programs in educational research methodology, interpreting reports of educational research, and choosing textual strategies for narrating educational inquiry.

At least three kinds of intertextual continuities appear to link stories of educational inquiry with detective fiction, and I explore each of them here. First, and perhaps most obviously, reports of educational research resemble detective stories insofar as they narrate quests to determine 'the truth' about something that is problematic or puzzling - stories in which 'investigators' seek (to reiterate Munt's terms) 'to reveal, disclose, to know, and... to empower'. In considering this analogy, my concern is with the extent to which the characteristic investigatory methods of fictional detectives resemble forms of educational inquiry. Secondly, following Umberto Eco's (1984) characterisation of the novel as 'a machine for generating interpretations' (p. 2), I consider the extent to which the characteristic ways in which detective stories generate interpretations resemble the textual 'machineries' used in the discursive production of educational research. Thirdly, I consider some of the ways in which recent transformations of both detective fiction and educational inquiry can be understood as comparable – and intertextually linked – manifestations of cultural and discursive shifts signified by various notions of postmodernism and postmodernity.

Watching the detectives

For more than a century, detective fiction has both modelled and provided a critique of culturally privileged forms of social inquiry, although the extent to which detective stories are indeed critical of dominant social institutions and discourses is a matter for debate. For example, in *Delightful Murder: A Social History of the Crime Story*, Ernest Mandel (1984) argues that the 'original detective story' (as exemplified by Sherlock Holmes stories) is 'the purest, most elementary expression of bourgeois society' (p. 84). Conversely, in *Uncommon Cultures: Popular Cultures and Post-Modernism*, Jim Collins (1989) argues that the proliferation of crime fiction in the nineteenth century represented a widespread disillusionment with the state (p. 35). Nevertheless, when teaching research methodology courses, I invite students to consider undertaking educational research by 'watching the detectives'¹ – that is, by imagining educational inquiries conducted in the manner of fictional detectives with whom they are familiar and by comparing fictional crime investigation methods with various paradigms or traditions of social inquiry.

Even a fairly superficial analysis of this kind reveals that educational research might not always have kept pace with developments in the methods of fictional detection that have accompanied the cultural changes of the late modern era. Scientific rationalism is still privileged in much educational research even though its apparent personifications in fiction – notably Sherlock Holmes and other heroes of the classic 'logic and deduction' detective story² – are no longer taken for granted as appropriate models of how we can or should obtain worthwhile knowledge of the world. During the 1920s and '30s the detachment and 'objectivity' of Holmes's method of inquiry began to give way to a variety of more involved and subjective approaches. For example, Agatha Christie's Miss Marple, who first appeared in *The Murder at the Vicarage* (1930), investigates crimes in the manner of an ethnographer: her detailed observations (thick descriptions) of life in the village of St Mary Mead provide her with a grounded theory of human behaviour which she deploys in solving mysteries both within

¹ This phrase is the title of a popular song by Elvis Costello (1977) – one among many instances of the tropes and images of detective fiction spreading beyond the common forms of popular narrative media that constitute the genre (novels, comics, movies etc.).

² Note, however, that a strong case can be made for reading Holmes's method as *abduction* rather than deduction (see, for example, Eco, 1983a).

that community and elsewhere. 'Hard-boiled' detectives such as Dashiell Hammett's (1930) Sam Spade and Raymond Chandler's (1939) Philip Marlowe display a different kind of involvement and subjectivity; they often are deeply implicated (as actors rather than spectators) in the mysteries they are called upon to explicate. In addition, Marlowe and his successors usually tell their stories in the first person, a change in narrative perspective that further problematised the role of the participant-observer in the dialectic of truth versus deception decades before interpretivist styles of inquiry seriously challenged positivistic social science. From the 1960s, fictional detectives have adopted more explicitly socially critical standpoints such as feminism, exemplified in different ways by Amanda Cross's (1964) Kate Fansler and Sara Paretsky's (1982) V. I. Warshawski. Via their journals and other writings, a number of my students have reported that they have been pleasantly surprised by the generativity of making such comparisons. For example, students who have read many 'cosy' mysteries for recreation, have found it intriguing to speculate on how the investigative methods of Agatha Christie's Miss Marple might translate into educational research and compare these with, say, the approaches taken by Amanda Cross's Kate Fansler. Such comparisons bring into sharp focus the differences between (and different consequences of) essentialist and interactionist interpretations of human behaviour.

However, methods of fictional detection are not strictly analogous to the forms of social inquiry that they might at first seem to resemble. For example, although Sherlock Holmes often appears to emulate procedures stereotypically associated with research in the natural sciences, the relationships that are assumed to hold between 'facts' and the meanings that can be ascribed to them are very different for fictional detectives and natural scientists. The 'facts' that natural scientists 'discover' are usually *produced* in circumstances designed and more or less controlled by scientists themselves and thus are already the result of many acts of interpretation. Conversely, the 'facts' to which fictional detectives ascribe meaning often result from deliberate acts of deception by guilty parties. But the problem of deception – deliberate or otherwise – is by no means irrelevant to educational research, especially when it comes to interpreting what students and/or teachers say and/or do when they are being observed or interviewed or are responding to questionnaires. As a methodological issue, the possibility of

deception often is subsumed by questions about 'authenticity' – questions frequently raised in circumstances involving research subjects who are clearly less powerful/privileged than the researchers, as in much research on minority groups (see, for example, Michèle Foster, 1994; 1999). Critics of such research argue that we cannot assume that people who see themselves as oppressed, exploited, or marginalised by culturally dominant groups will necessarily tell the truth when interrogated by members of those groups. However, the question of whether or not researchers are being 'told the truth' in the course of their investigations might be pertinent in many more situations than are suggested by these criticisms.

One of Sherlock Holmes's well-known dialogues exemplifies another way in which the classic fictional detective departs from conventional understandings of scientific rationalism:

'Is there any other point to which you would wish to draw my attention?' 'To the curious incident of the dog in the night-time'.

'The dog did nothing in the night time'.

'That was the curious incident', remarked Sherlock Holmes.³

Holmes's willingness to apprehend and ascribe meaning to a silence – to perceive the absence of a trace as itself a trace – is a disposition that, in retrospect, seems more in keeping with recent critical and postcritical discourses of social inquiry than with nineteenth century conceptions of 'scientific method'. However, in terms of the broad analogies that can be constructed between fictional crime investigation and social inquiry, it might be more significant to note that this dialogue is just one among many instances of a fictional detective's methods – often represented as eccentric or idiosyncratic – being compared with the more conventional methods used by the police, usually to the latter's disadvantage. Variations on this kind of comparison are also found in the 'police procedural' type of crime novel, where the more 'successful' detectives often are those whose methods are in some kind of conflict (ranging from subtle subversion to outright rebellion) with bureaucratised versions of 'official' knowledge. For example, Sheri Kinney (1998) bases part of her argument for using experiential knowledge and unobtrusive observations in educational inquiry on a comparison of the

³ From 'The adventure of Silver Blaze', first published in *The Strand Magazine* Vol. IV December 1892 and reprinted in Doyle (1986, pp. 271-96).

methods used by the (unsuccessful) police detective and the (successful) amateur investigators in Alfred Hitchcock's (1954) film, *Rear Window*.⁴ We can use such characteristics of crime fiction to frame and generate questions about educational inquiry, including questions about the relative strengths and limitations of individualistic and collectivist forms of inquiry and the merits and demerits of institutionalising research efforts. Is there, for example, any place for 'private investigations' in educational research? Under what circumstances, if any, might it be defensible to assert, as a popular song puts it, that 'this is *my* investigation – it's not a public inquiry' (Mark Knopfler, 1982)?

Although it is important that such questions are raised in the study and critique of educational research methodologies, I want to emphasise that, as a pedagogical strategy, I see 'watching the [fictional] detectives' chiefly as an accessible and pleasurable preliminary to exploring the much more interesting questions that arise from watching (as it were) the ways in which stories of fictional detection generate interpretations.

Crime fictions as model narratives of inquiry

The meanings that any given text generates are, at least in part, a function of the storytelling genre in which authors and readers perceive it to be situated. When we read an article in *Educational Researcher* or the *International Journal of Applied Semiotics* we are likely to mobilise a very different set of expectations and intertextual referents from those that we bring to reading a crime novel. Each storytelling practice incorporates a particular selection of narrative strategies and conventions, the implicit or explicit knowledge of which influences the author's craft, the audience's expectations and the meanings that are mutually constructed. However, given that both research reports and crime stories are narratives of inquiry, it seems reasonable to ask if we can learn anything by comparing them.

According to Roland Barthes (1978), the crime story sets up a central enigma to be explicated by the detective and/or the reader. Indeed, as Slavoj Zizek (1992) writes, detective fiction can be understood as a quest to tell a story that concludes not when the solution to the mystery is revealed but when the detective is able to tell 'the true story' of the mystery in the form of a coherent linear narrative:

⁴ Kinney's essay was initially written for a research methodology course I taught at the University of Victoria, Canada, in August 1995.

What we have at the beginning is a void, a blank of the unexplained, more properly, of the *unnarrated* (How did it happen? What happened on the night of the murder?). The story encircles this blank, it is set in motion by the detective's attempt to reconstruct the missing narrative by interpreting the clues. In this way, we reach the proper beginning only at the very end, when the detective is finally able to narrate the whole story in its 'normal,' linear form, to reconstruct 'what really happened,' by filling in all the blanks (p. 58).

In the classic form of detective fiction this 'missing narrative' often is reconstructed in the form of an historical recount. The author – usually through the voice of an 'omniscient' narrator or the detective's Watsonian companion – opens what Dennis Porter (1981) calls a 'logico-temporal gap' (p. 24) between the time of the crime's commission and the time of its telling. The function of the detective *and the narrative* is to close that gap and restore the logical temporal order. In hard-boiled crime fiction the 'missing narrative' is more likely to reconstruct a map of social order or disorder. These stories usually are narrated in the first person by the detective him/herself and the 'gaps' opened by the narrative tend, at least metaphorically, to be spatial. For example, Fredric Jameson (1983) notes that the form of Raymond Chandler's books reflects an initial 'separation of people from each other, their need to be linked by some external force (in this case the detective) if they are ever to be fitted together as parts of the same picture puzzle' (p. 131).

Such differences in narrative perspective and strategy between classic and hard-boiled crime fiction have clear parallels in social and educational inquiry. These include the shift away from impersonal styles of reporting – the supposedly 'objective' accounts in which the researcher's presence in the text is disguised or hidden – towards textual strategies that foreground the subjectivity of the narrator and the ways in which she or he is implicated in, and indeed responsible for, the story. As crime fiction and educational research have evolved during the past half-century, authors in both fields seem to have become more self-conscious of the inherent reflexivity of their respective narrative forms – increasingly aware that they are telling stories of quests to tell stories. If we accept Katherine Hayles's (1990) view of cultural dynamics, in which 'issues become energized in theories because they are replicated from and reproduced in the social' (p. 285), then these parallels are not coincidental but, rather, reflect the multiple discursive currents

and feedback loops through which the production of educational theories and popular fictions are culturally connected.

Similar currents and feedback loops also operate in the *consumption* of educational theory and popular fiction and thus it seems reasonable to ask how our approaches to reading and writing educational research might be influenced by what we learn about structuring narratives of inquiry from reading crime fiction. As Eco (1984) suggests, our curiosity about 'the structure of conjecture as such' is one plausible explanation for the popularity of crime fiction:

I believe people like thrillers not because there are corpses or because there is a final celebratory triumph of order (intellectual, social, legal, and moral) over the disorder of evil. The fact is that the crime novel represents a kind of conjecture, pure and simple. But medical diagnosis, scientific research, metaphysical inquiry are also examples of conjecture. After all, the fundamental question of philosophy (like that of psychoanalysis) is the same as the question of the detective novel: who is guilty? To know this (to think you know this), you have to conjecture that all the events have a logic, the logic that the guilty party has imposed on them. Every story of investigation and of conjecture tells us something that we have always been close to knowing (pseudo-Heideggerian reference) (pp. 54-7).

It is not difficult to make a case for asserting that 'the fundamental question' animating much educational inquiry is also 'the same as the question of the detective novel: who is guilty?' For example, much socially critical educational research – feminist, neo-Marxist, antiracist, postcolonialist – is concerned with identifying 'who is guilty' of reproducing a given society's structural inequalities through its education system. To determine this, critical educational researchers 'have to conjecture that all the events [the power relations and material conditions that constitute structural inequalities] have a logic, the logic that the guilty party has imposed on them' – the 'guilty party' being (as many such researchers 'have always been close to knowing') the patriarchal hegemony constructed by white, middle-class, Eurocentric, heterosexual, able-bodied men and their fellow travellers. The notion that critical research in education 'tells us something that we have always been close to knowing' is captured by Reid's (1981a) characterisation of curriculum inquiry conducted in this vein:

The assumptions underlying such work... are: that no worthwhile curriculum improvement is possible without a radical transformation of social and political institutions; that abstract concepts like 'class', 'capitalism' or

'hegemony' are, in some way, 'real' and provide the key to what is wrong with society; that the needed remedies are already known, at least in principle, and that the function of research and theorising is to increase the power of already known facts (p. 165).

The analogy between critical educational research and crime fiction can be taken further. As Zizek (1992) writes, 'the scene of the crime with which the detective is confronted is... as a rule, a false image put together by the murderer in order to efface the traces of his [sic] act' (pp. 53-4). The scene's 'organic, natural quality is a lure, and the detective's task is to denature it' by decoding the 'doubly inscribed' signifying materials that become known as 'clues' (p. 54). These doubly inscribed signifiers are sometimes verbal, as in the Sherlock Holmes story in which a dying woman's words - 'It was... the speckled band!' - are used by her murderer to throw suspicion on gipsies camped nearby. The 'true story' is told when Holmes is able to read 'band' as a synonym for 'ribbon' rather than 'gang'⁵. However, in the majority of cases, the doubly inscribed signifying materials are nonlinguistic although, as Zizek notes, they are nevertheless 'already structured like a language' (p. 54) because they are elements of a story written by the guilty party. Critical educational researchers are similarly concerned with decoding doubly inscribed data. They do not 'read' events such as the participation rates or achievement levels of girls in science and mathematics as part of the educational scene's 'organic, natural quality' but set out 'to denature it', to reveal the 'true' structure of the story inscribed by the guilty party. For example, in 'Ned Ludd was framed', Pat Thomson (1998) offers an alternative interpretation of the historical events and circumstances that produced the term 'Luddite' as a pejorative description of someone that is reluctant to take up new technologies. Thomson suggests that the story of the Luddites as misguided vandals is 'framed' by a dominant discourse that silences and forecloses debate on social and technological change by reinforcing a simple binary opposition between those who are for and against 'progress'.⁶

There is, of course, another reason for the 'clues' at the scene of a fictional crime already being 'structured like a language', namely, that the scene is indeed

⁵ 'The adventure of the speckled band', first published in *The Strand Magazine* Vol. III February 1892 and reprinted in Doyle (1986, pp. 194-209).

⁶ Thomson's essay was written for a research methodology course I taught at Deakin University, Australia, in 1996.

written by an author whose intent is not so much to delude the fictional detective and the fictional representatives of 'official' knowledge but, rather, to mystify the 'real' reader. The 'false' solution towards which readers are enticed is so ubiquitous as a narrative strategy in detective fiction that Zizek (1992) concludes that it a 'structural necessity' of the mystery story form:

The status of the false solution is epistemologically internal to the detective's final, true solution. The key to the detective's procedure is that the relation to the first, false solutions is not simply an external one: the detective does not apprehend them as simple obstacles to be cast away in order to obtain the truth, rather it is only *through* them that he can arrive at the truth, for there is no path leading immediately to the truth... The detective does not simply disregard the meaning of the false scene: he [sic] pushes it to the point of self-reference, i.e., to the point at which it becomes obvious that its sole meaning consists in the fact that (others think) it possesses some meaning (pp. 54, 57).

I have no systematic empirical evidence to support the view that the 'false' solution is also a 'structural necessity' of the stories produced in the traditions of critical (or, indeed, any other forms of) educational research. However, the rhetorical strategy of demolishing a so-called 'straw argument' as a means of advancing a counter-argument is hardly unknown in the literature of educational inquiry. Furthermore, given that the objects of most postpositivistic methods of educational research are assumed to be social constructions rather than 'naturally occurring' phenomena, it seems likely that the narrative structures of conjecture that they deploy are indeed analogous to those of crime fiction,⁷ and might be recognised as such by some researchers.

For example, in their editorial introduction to *Rethinking Curriculum Studies: A Radical Approach*, Martin Lawn and Len Barton (1981) raised the possibility of approaching curriculum inquiry in a manner that 'owes something to the attitude and procedure of Dashiell Hammett's detective, the "Continental Op"" (p. 17). They elaborated this position by quoting from Steven Marcus's (1977) introduction to a collection of Hammett's Continental Op stories:

The Op is called in or sent out on a case. Something has been stolen, some dire circumstance is impending, someone has been murdered – it doesn't matter. The Op interviews the person or persons most immediately accessible. They may be innocent or guilty – it doesn't matter; it is an indifferent

⁷ One point at which this analogy might break down is in ascribing such qualities as 'guilt' and 'deception' to the agents of the 'false' solution.

circumstance. Guilty or innocent, they provide the Op with an account of what they really know, of what they assert really happened. The Op begins to investigate; he compares these accounts with others that he gathers; he snoops about; he does research; he shadows people, arranges confrontations between those who want to avoid one another, and so on. What he soon discovers is that the 'reality' that anyone involved will swear to is in fact itself a construction, a fabrication, a fiction, a faked and alternate reality – and that it has been gotten together before he ever arrived on the scene. And the Op's work therefore is to deconstruct, decompose, deplot and defictionalize that 'reality' and to construct or reconstruct out of it a true fiction, i.e., an account of what 'really' happened (pp. 15-16).⁸

When I first read Lawn and Barton's text in the early 1980s I was not aware that a literary scholar like Marcus might have intended the word 'deconstruct' to signify something more than common English usage suggested at the time – a compound verb in which the prefix 'de-' signalled either the removal or reversal of 'construct'.⁹ Certainly, neither Lawn and Barton nor any of the other contributors to their collection made any reference to Derrida's work or to literary and philosophical understandings of deconstruction or poststructuralism and their implications for curriculum inquiry. But when I returned to Lawn and Barton's (1981) text in the early 1990s I knew that Marcus's (1977) assertion that 'the Op's work ... is to deconstruct' *could* have referred to Jacques Derrida's (1972) sense of deconstruction as 'being alert to the implications, to the historical sedimentation of the language we use' (p. 271). Such a speculation seems reasonable, given that Marcus was a professor of English and Comparative Literature at Columbia University, and that by the time he wrote his introduction to The Continental Op Derrida was well-known among US literary theorists (see, for example, Paul de Man (1971).¹⁰ Nevertheless, I doubted the suggestion (intended or not) that the Continental Op worked as a Derridean deconstructionist

⁸ Lawn and Barton (1981, p. 17) incorrectly attribute this quotation to Hammett rather than to Marcus.

⁹ The seventh edition of *The Concise Oxford Dictionary* (1982) has no separate entry for 'deconstruct' as it does, for example, for 'decompose'.

¹⁰ John Caputo (1997) notes that 'Derrida was first welcomed to the United States by literary theorists, first at Johns Hopkins University in the 1960s and then in the 1970s at Yale and Cornell' (p. 205). Caputo indicates that US philosophers 'caught on to Derrida' sometime later, and their disputes with literary theorists' readings of Derrida were not represented in print until the early 1980s. Poststructuralism and deconstruction had little impact in US educational theory and curriculum studies until scholars such as Cleo Cherryholmes (1987; 1988) began to publish their 'poststructural investigations' in the mid- to late-1980s. According to Pinar and Reynolds (1992a), two Quebecois scholars – Jacques Daignault and Clermont Gauthier – were, for most of the 1980s, 'the only curricularists working post-structurally' (p. 245).

(or that Hammett's stories might represent Derridean deconstruction at work), because my readings of crime fiction (and related literary criticism) up to that time had led me to suspect that crime fiction was an irredeemably modernist genre. However, I began to wonder if poststructuralist detective fiction was indeed possible and my curiosity about this possibility initially guided the inquiries documented in this chapter.

If narratives of educational inquiry are structurally analogous to crime stories then it seems reasonable to suppose that those of us who write educational research might find some clues to the improvement of our textual practices by examining some of the more innovative and adventurous examples of crime fiction. During the past twenty years or so, one relatively superficial innovation has been to characterise the detective as a much less stereotyped identity – we can now find many more fictional detectives than previously who are something other than white, middle-class, Eurocentric, heterosexual, able-bodied men. However, it seems to me that relatively few of the stories that are categorised as, say, feminist detective fiction have departed markedly from the dominant narrative forms of the genre. Among the possible exceptions are the Kate Fansler stories written by 'Amanda Cross', a pseudonym of Carolyn Heilbrun, a distinguished feminist academic whose publications include studies of the representation of women in such narrative forms as literary fiction, biography and autobiography (see, for example, Heilbrun, 1989; 1997; 1999). Like her creator, Kate Fansler is a professor of English literature and the mystery novels in which she features can be read as critiques of taken-for-granted representations of the storylines which give substance and pattern to the dominant cultural discourses into which women's subjectivities are interpellated.¹¹ Julianne Moss (1999; 2003) takes a similar approach to interpreting the practice of inclusive schooling in Tasmania, Australia, between 1996 and 1998 as an 'educational detective story' – a quest to expose the relations of dominance perpetuated by the special education knowledge tradition.¹²

¹¹ In this judgment I depart from Munt (1994), who sees the Kate Fansler stories chiefly as expressions of liberal feminism. Although I agree that the gender politics of these stories might appear to be relatively conservative, I also believe that they make sufficient gestures towards poststructuralist conceptions of narrative framing – including subtle dispersals of the subject, and hints of multivocality – to interpret their textual politics as being rather more adventurous.

¹² Moss undertook the doctoral research reported in her 1999 dissertation under my supervision.

Another step in the evolution of detective fiction that seems to have preceded an analogous transformation of educational research is signalled by the emergence of what William Spanos (1987) calls the 'anti-detective story': stories which 'evoke the impulse to "detect"... in order to violently frustrate it by refusing to solve the crime' (p. 154).¹³ Anti-detective stories can be seen to have evolved as part of the wider cultural transformations that tend to be subsumed by the concept of postmodernism. As Jeanne Ewert (1990) writes, 'the detective novel is eminently suited to postmodern manipulation because its tacit dependence on the hermeneutic code offers the possibility of disabling that code' (p. 167). Although postmodernist scepticism towards modernist versions of rationality and agency supports Stefano Tani's (1984) suggestion that the classic detective story is 'doomed', literary postmodernism continues to provide explicit and implicit narrative models of 'detection' - of methodological and textual inquiry strategies. Thus, the explication of continuities between educational inquiry and postmodernist anti-detective fiction might be helpful in framing educational research as a postmodernist textual practice.

Postmodernisms and fictional 'detection'

In some ways, the detective story can be regarded not so much as *a* modernist form of storytelling but as *the* modernist genre *par excellence*. Brian McHale (1992) argues that modernist fiction is characterised by an 'epistemological dominant', its plot organized as 'a quest for a missing or hidden item of knowledge' (p. 146). Thus, in its structure and thematics, 'a modernist novel looks like a detective story', centrally concerned with 'problems of the accessibility and circulation of knowledge, the individual mind's grappling with an elusive or occluded reality' (p. 147). The detective is the archetype of the modernist subject – a quest(ion)ing 'cognitive hero', an 'agent of*re*cognitions... reduced synecdochically to the organ of visual perception, the (private) eye', seeking to understand the *uni*verse, a unified and objective world. Modernist fiction might offer multiple perspectives on the world, but does so without disturbing the

¹³ Few of the examples of anti-detective stories that Spanos cites – including Franz Kafka's *The Trial* and Graham Greene's *Brighton Rock* – evoke the detective fiction genre *per se* but all were written prior to 1960 and it is noteworthy that Spanos sees them as relatively early gestures towards the postmodernist literary imagination.

essential unity of the self: 'each perspective is lodged in a subjectivity which is itself relatively coherent, relatively centered and stable' (McHale, 1992, pp. 254).

By contrast, McHale sees postmodernist fiction as being characterised by an 'ontological dominant' in which neither the world nor our selves are assumed to be unitary (p. 247). Rather, postmodernist fiction explores the possibility that we function in an ontologically plural *multi*verse of experience – that selves and worlds operate in many modalities. According to McHale, the characteristic genre of postmodernism is SF (which, as I explained in Chapter 1, is an acronym for something much more complex than many popular stereotypes of 'science fiction'), with its stock-in-trade of a potentially infinite variety of bodily forms, beings and cultures:

while epistemologically-oriented fiction (modernism, detective fiction) is preoccupied with questions such as: what is there to know about the world? and who knows, and how reliably? How is knowledge transmitted, to whom, and how reliably?, etc., ontologically-oriented fiction (postmodernism, SF) is preoccupied with questions such as: what is a world? How is a world constituted? Are there alternative worlds, and if so, how are they constituted? How do different worlds, and different kinds of world, differ, and what happens when one passes from one world to another, etc.? (p. 247)

I take up the question of what narratives of educational research might look like if they were modelled on SF rather than detective fiction in Chapter 3. Here it will suffice to note that SF narrates ontological inquiries by such strategies as exposing a plurality of worlds by staging confrontations among them (or focusing attention on boundaries between them) rather than by personifying inquiry in the figure of a detective. Indeed, as Scott Bukatman (1993, p. 142) notes, SF detective stories have rarely enjoyed success. The combination is difficult because the boundary between possible and 'impossible' in SF is so flexible and, because SF stories often are predicated upon some imagined future event or technological innovation, the 'solution' to the mystery may involve an unforeseeable twist (aliens, a time machine).¹⁴ Douglas Adams's (1987; 1988) novels, *Dirk Gently's Holistic Detective Agency* and its sequel, *The Long Dark Tea-Time of the Soul*, are

¹⁴ Larry Niven (1976) summarises some of the difficulties that authors face in writing hybrid SF/detective stories. The distinctions that McHale draws between the detective and SF genres are demonstrated particularly clearly by George Alec Effinger (1988) whose SF detective, Marîd Audran, literally and materially embodies the shift from epistemological to ontological investigation when he deliberately shifts his mode of 'being' by augmenting and modifying his brain functions through the use of neural implants.

rare instances of SF and detective genres being blended, albeit in the guise of humorous parodies of both.¹⁵ However, Adams's Dirk Gently novels are also examples of the anti-detective story which, in the light of McHale's reasoning, can be read as a postmodernist literary deconstruction of modern fiction's paradigmatic genre.

One of the most celebrated anti-detective stories is Umberto Eco's (1983b) novel, *The Name of the Rose*, which takes some well-known examples of generic detective fiction as its intertextual models,¹⁶ but – as Eco (1984) himself puts it – 'is a mystery in which very little is discovered and the detective is defeated' (p. 54).¹⁷ In *The Name of the Rose*, Eco uses the narrative form of detective fiction to deconstruct, disrupt and undermine the rationality of the models of conjecture conventionally provided by the genre – which is why, as Eco (1984) writes, his 'basic story (whodunit?) ramifies into so many other stories, all stories of other conjectures, all linked with the structure of conjecture as such' (p. 57). Eco provides a physical model of conjecturality in the abbey's labyrinthine library but also demonstrates that his detective – William of Baskerville – cannot decipher the complex social milieu of the abbey by assuming that it has a comparably logical (albeit complicated) structure. Following Gilles Deleuze and Félix Guattari (1983), Eco (1984) likens 'the structure of conjecture' to the infinite networks of a rhizome rather than to the finite (and hierarchical) roots and branches of a tree:

The rhizome is so constructed that every path can be connected with every other one. It has no center, no periphery, no exit, because it is potentially infinite. The space of conjecture is a rhizome space... the world in which William realizes he is living already has a rhizome structure: that is, it can be structured but is never structured definitively... it is impossible for there to be *a* story (pp. 57-8).

¹⁵ Parody is symptomatic of other attempts to postmodernise detective fiction. As Munt (1994) explains: 'The few feminist crime novels appropriating a post-modern aesthetic express their sense of play and experimentation through parody' (p. 173).

¹⁶ These include, for example, Conan Doyle's *The Hound of the Baskervilles*, Dorothy Sayers's *Gaudy Night* and Edgar Allan Poe's 'The purloined letter'.

¹⁷ By way of reflecting on my own textual strategies, I must point out here that I am not privileging Eco's interpretation of *The Name of the Rose* merely because he wrote it. I agree with the spirit of Eco's (1984) dictum that 'The author should die once he [sic] has finished writing. So as not to trouble the path of the text' (p. 7). I quote Eco for the same reasons that I use or paraphrase other authors' words: because their formulations and interpretations are agreeable to me and because I am self-consciously writing in a genre of academic journalism characterised by the rhetorical deployment of frequent quotations and citations. For a thorough analysis of *The Name of the Rose*, both as detective fiction and as an example of 'the literature of semiotic possibility', see Peter Trifonas (1999).

This message is repeated in other anti-detective stories, including Paul Auster's (1987) *New York Trilogy* and Sophie Calle's (1999) remarkable *Double Game*.¹⁸ Peter Høeg (1993) makes a similar point quite explicitly in the final paragraph of *Miss Smilla's Feeling for Snow* (published in North America as *Smilla's Sense of Snow*): 'Tell us, they'll come and say to me. So we may understand and close the case. They're wrong. It's only what you do not understand that you can come to a conclusion about. There will be no conclusion' (p. 410).

Thus, the anti-detective story not only subverts the rationality of the investigatory methods modelled by conventional detective fiction but also denies the defensibility of the dominant cultural expectations (such as a desire for *the* 'true' story) that animate such investigations. The literature of educational inquiry is replete with examples of researchers not understanding what they come to conclusions about, lured by the possibility of telling 'one true story' and encouraged by the cultural pervasiveness of detective stories as intertextual models of how research should be narrated. The significance of anti-detective stories for educational inquiry is that they model ways of narrating research differently and, furthermore, they might help us to reshape our expectations about what it is possible and desirable to narrate. For example, Valerie Harwood (2001) names 'being undetective' as a deliberate strategy for 'working in ways that do not nourish searches for truth' but at the same time sustaining an 'obligation to truth' (p. 151). She quotes the narrator of The Name of the Rose who observes that 'William was not at all interested in the truth, which is nothing but the adjustment between the thing and the intellect. On the contrary, he amused himself by imagining how many possibilities were possible' (Eco, 1993, p. 306). Harwood

¹⁸ Sophie Calle is a photographer and installation artist whose work explicitly resembles that of spies and detectives, including unobtrusive surveillance of herself and others. For example, Calle (1999) writes that she produced one exhibition by having her mother hire a detective agency 'to follow me, to report my daily activities, and to provide photographic evidence of my existence' (pp. 122-3). Parts of *Double Game* are playful collaborations with novelist Paul Auster. In Leviathan, Auster (1992) used episodes from Calle's life to create a character named Maria. In Double Game, Calle responds by enacting some of Maria's character sketches while Auster switches roles with Calle by putting her under observation. Calle pushes the play of art imitating art imitating life further by asking Auster to invent an entirely fictitious character whose 'scripted life' she follows. Double Game has three parts. Part I is 'the life of Maria and how it influenced the life of Sophie' (pp. 10-11), Part II is 'the life of Sophie and how it influenced the life of Maria' (pp. 34-5), and Part III is 'one of the many ways of mingling fact with fiction, or how to try to become a character out of a novel' (pp. 233-4). In Double Game, Calle deconstructs not only the detective 'story' but also the performance of both detective and author.

suggests that asking 'how many possibilities are possible?' is an 'undetective' way to create 'vigilance to truth' without searching for *the* truth.¹⁹

The pedagogical usefulness of *The Name of the Rose* in teaching and learning about educational research methodology is enhanced by the availability of the contrast between the postmodernism of the novel and the modernism of Jean-Jacques Annaud's film version. As McHale (1992) observes:

the William of Baskerville whom we encounter in the film is a *successful* detective. He suffers a defeat, of course, in the burning of the library and particularly of the lost volume of Aristotle; but he has not been defeated *as a detective*, but rather (like Sherlock Holmes himself in story after story) vindicated in the end. By contrast, Eco's original William of Baskerville conspicuously *fails* as a detective. He discovers the truth, yes, but by stumbling upon it, not by a successful chain of deductions...(p. 149).

William's failures as an exemplary modernist detective provide opportunities for the novel to foreground productive narrative strategies from postmodernist repertoires. Consider the following interchange between William and his 'Watson', Adso:²⁰

'What I did not understand was the relation among signs... I behaved stubbornly, pursuing a semblance of order, when I should have known well that there is no order in the universe.'

'But in imagining an erroneous order you still found something...' 'What you say is very fine Adso, and I thank you. The order that our mind imagines is like a net, or like a ladder, built to attain something. But afterward you must throw the ladder away, because you discover that, even if it was useful, it was meaningless... The only truths that are useful are instruments to be thrown away' (Eco, 1983, p. 492).

William could equally well be describing the changed relationships between investigatory methods – 'detection' – and the problem under investigation that hold after poststructuralism. Once we have 'found something' with the ladders and nets – the 'erroneous order' – we have imagined, they can be thrown away since, in deconstruction, the method precedes the problem and is 'meaningless' once it has served its purpose of foregrounding the effects of our uses of language

¹⁹ Harwood acknowledges that her 'undetective' strategy borrows from, and extends, my earlier formulations (Gough, 1994b; 1996b; 1998c) of the interrelationships between fictional genres and educational inquiry.

²⁰ Elsewhere (Gough, 1994a), I have used excerpts from this passage to frame a comparison of the ways in which the concept of order is manifested in phenomenological and poststructuralist curriculum inquiry.

in constituting that problem. But whereas structuralist ladders and nets lead us towards closure and a semblance of 'order in the universe', poststructuralist ladders and nets tend to be temporary markers of ongoing processes of reconfiguration, leading not to closure but to new openings. *The Name of the Rose* is itself such an 'erroneous order', which Eco emphasises by the use of metafictional narrative strategies – strategies which expose its status as text and as fiction – to destabilise the projected world of the novel itself, thus drawing attention to the very processes by which it is constructed both as a world to be explored and the means of its own exploration.

Thus, after poststructuralism, I suspect that it is no longer defensible to consider undertaking educational research in ways that are analogous to the methods of Sherlock Holmes, Miss Marple, Philip Marlowe, V. I. Warshawski, Dirk Gently, Kate Fansler, or even William of Baskerville. We might find more inspiration for our practice by 'watching the *un*detectives', such as the authors of SF whose work probes the mysteries of the word-worlds they inscribe. This is the proposition to which I turn in more detail in Chapter 3.

Chapter 3

Diffractive fictions: manifesting cyborgs in curriculum inquiry

Were the cyborg only a product of discourse, it could perhaps be relegated to science fiction, of interest to SF aficionados but not of vital concern to the culture. Were it only a technological practice, it could be confined to such technical fields as bionics, medical prostheses, and virtual reality. Manifesting itself as both technological object and discursive formation, it partakes of the power of the imagination as well as the actuality of technology (Katherine Hayles, 1993, pp. 152-3).

Nearly two decades have elapsed since Donna Haraway (1985) first published her much-anthologised and oft-quoted 'manifesto' for cyborgs, in which she drew on SF stories and developments in a variety of technical fields to theorise the cyborg as a new myth of feminist political identity. Since then, cyborgs have continued to evolve as both metaphoric and material constructions of what humans might be becoming in the *fin de millennium*. Hayles chooses precisely the right word when she refers to the conjunction of technology and discourse in the cultural production of cyborgs as a 'vital' concern, because cyborgs are indeed animated given life – by our concerns about the life we ascribe to (and inscribe in) them. Concerns about the meanings, qualities, ambiguities and possibilities of life at the interface of human and machine are not new, as Mary Shelley (1992/1818) demonstrated when she created Frankenstein's monster, an early version of the cyborg-as-discursive-formation whose longevity and fertility attests to the 'power of the imagination' in theorising a posthuman condition. The materialisation of the cyborg-as-technological-object brings a new sense of immediacy and urgency to these same concerns. However, although the implications of cyborgs and cyborg embodiment for such disciplines as science, engineering, medicine, cultural and media studies, anthropology, and politics are the subject of considerable scholarly inquiry and debate, much less attention has been given to their significance for educational theory and practice.

This chapter has two main themes. First I sketch a rationale for using cyborgs as 'narrative experiments' within a postmodernist framing of curriculum inquiry

as a textual practice. Then I draw on my experiences of using such narrative experiments in graduate curriculum studies programs to consider ways in which curriculum scholars might respond constructively to the 'vital' cultural concerns that cyborgs represent.

Diffractive storytelling: cyborgs as narrative experiments in a postmodernist *currere*

My rationale for believing that curriculum inquiry should be hospitable to cyborgs is an extension of my response to narrative theory's invitation to think of all discourse as taking the form of a story (see Chapter 1). Narrative theory has already exerted considerable influence in the curriculum field. Understanding curriculum work as a storytelling practice has been a key theme in the reconceptualisation of curriculum studies during the last three decades, encapsulated by Madeleine Grumet's (1981) formulation of curriculum as 'the collective story we tell our children about our past, our present, and our future' (p. 115). Influential examples of research in this vein include '*currere*' – the name William Pinar (1975a) coined for his distinctive autobiographical method of curriculum inquiry (see also the Introduction to this thesis) - and 'narrative inquiry', a related method of investigating teachers' 'storied lives' exemplified by the work of Michael Connelly and Jean Clandinin (1990; see also Clandinin and Connelly, 1995; 2000).¹ Currere and narrative inquiry seek to understand and question the ways in which curriculum is constituted in the subjectivities of teachers and other curriculum workers by encouraging personal (and sometimes collaborative) reflection on stories generated through such procedures as autobiographical writing and journal-keeping. Both methods have conceptual and ideological antecedents in existential philosophy and phenomenology. However, these methodological grounds for using autobiography and narrative in curriculum inquiry have been destabilised – irreversibly, I believe – by postmodernist scepticism about the assumption of a singular, fixed, and essential self. As I argue elsewhere (Gough, 1994a), phenomenology seems especially vulnerable to poststructuralist criticism.

See Robert Graham (1991; 1992), Pinar (1994), Pinar and Reynolds (1992b) and Pinar et al. (1995) for intellectual histories, genealogies and justifications of *currere* and its successor projects in North America.

I can no longer justify *currere* and narrative inquiry by reference to their existential and phenomenological 'foundations', but autobiography continues to provide postmodernist literary and cultural critics with a generative discourse through which to theorise human agency, constructions of 'the self' and problems of self-representation (see, for example, Leigh Gilmore, 1994), and I am still curious to explore possible ways of optimising the power of narrative strategies to improve our understandings of curriculum and ourselves as curriculum workers. In part, this is because I see no reason to dispute Alasdair MacIntyre's (1984) insistence on the centrality of narrative to ethical thought: 'I can only answer the question "What am I to do?" if I can answer the prior question "Of what story or stories do I find myself a part?"... Mythology, in its original sense, is at the heart of things' (p. 216). A poststructuralist reading of MacIntyre's advice leads me to address the question, 'What am I to do?' by exploring his 'prior question' rephrased as follows: Of what stories do I find my nonessential, fragmented, decentred *selves* becoming parts?

Thus, I have been experimenting – a better description might be *playing*² – with what I call a 'postmodernist *currere*' by using postmodernist texts and textual practices to *diffract* (see Chapter 1) the storylines produced by autobiographical writing and personal narrative. I still encourage my graduate students in curriculum to use *currere* and narrative analysis, but my revised pedagogical strategy (in very broad terms) is to invite a mutual interreferencing and deconstruction of personal *and* cultural texts – to read stories of personal experience within and against examples of postmodernist forms of storytelling, including metafiction, comics and graphic novels (including *manga* and *animé*), computer and video games, and cyberpunk SF, and then to rewrite these stories (and/or write new stories) in ways that self-consciously display their intertextuality. I have chosen to work with these particular textual forms for two interrelated sets of reasons.

First, my interest in postmodernist textual practices follows, at least in part, from my wider-ranging explorations of the ways in which different modes of

² I use 'play' in a Derridean sense that likens the play of power across discursive fields to 'play' in a machine, a relative freedom of movement within limits; see, for example, John McGowan (1991, pp. 103-5).

storytelling construct and question the world.³ These inquiries lead me to suggest that conventional ('non-fictional') textual practices rarely encompass the narrative complexities needed to represent and problematise our experiences of curriculum work – or, indeed, of social and/or phenomenal worlds writ large. These inquiries also suggest that much educational experience, and much of what we think of as the 'subject matters' of school curricula, can be represented more appropriately – and questioned more critically – by fictional modes of storytelling. I thus argue that critical readings of fictional texts and creative uses of fictional storytelling should be major components of our narrative repertoires in curriculum work.

A second set of reasons for my interest in postmodernist texts and textual practices – and this applies especially to popular forms such as graphic novels and cyberpunk SF – is that they are clearly congenial, in a stylistic sense, to many young learners. As adults, our fractured postmodernist identities are not constituted by the same types of stories as those of the young people that we teach. As Hayles (1990) writes: 'the people... who know the most about how postmodernism *feels* (as distinct from how to envision or analyze it) are all under the age of sixteen' (p. 282). Ted Mooney (1982) puts it more bluntly: 'here we are getting older, and there they are getting different' (p. 80). If we are to establish mutually rewarding pedagogical relationships with the kinds of young people who, as some cultural critics assert, 'have no sense of history', 'live in a world of simulacra', and 'see the human form as provisional' (Hayles, 1990, p. 282), then we should attend closely to the media through which – and the standpoints from which – we might be able to achieve shared meanings.

This reasoning leads me to a position from which I can generate questions for curriculum inquiry by taking seriously J.G. Ballard's (1985/1974) assertion that 'the most prudent and effective method of dealing with the world around us is to assume that it is a complete fiction':

We live in a world ruled by fictions of every kind – mass-merchandizing, advertising, politics conducted as a branch of advertising, the instant translation of science and technology into popular imagery, the increasing blurring and intermingling of identities within the realm of consumer goods,

³ I recognise, however, that there are elements of retrospective rationalisation in this reasoning, since my own autobiographical writing reveals the long-standing influence of SF in my life and work (see Gough, 1991a).

the pre-empting of any free or original imaginative response to experience by the television screen. We live inside an enormous novel (p. 8).

Living 'inside an enormous novel' is just one figurative representation of living 'in a world ruled by fictions of every kind'. Although I agree that many of us live inside enormous novels (the plural is important), our subjectivities – and certainly those of many young people – also reside (at least partially) in enormous videos, movies, computer games, and body languages. To deconstruct the world-as-fiction we need to understand how other types of fictions – literary, graphic, electronic, performative – intertextually construct and question the world. That is, an appreciation of the distinctive ways in which different kinds of fiction both constitute and interrogate the world may help us to build pedagogical bridges across the multiplicity of intra- and interpersonal 'subjectivity gaps' with which we are faced in curriculum work.

For example, in Chapter 2 I drew upon Brian McHale's (1992) characterisations of modernist and postmodernist fictions to demonstrate intertextual continuities between crime stories and many types of educational research texts. McHale's distinctions are summarised in Table 3.

	Modernist fiction	Postmodernist fiction
Characteristic genre	Detective story	SF
Dominant interest	Epistemological	Ontological dominant
Narrative drivers	a quest for 'one true story' – an individual consciousness searches the <i>universe</i> (a unified, objective and ultimately knowable world)	thought experiments about selves and worlds that operate in multiple modalities – in an ontologically plural <i>multi</i> verse of experience
Exemplary questions	 what is there to know about the world? who knows, and how reliably? how is knowledge transmitted, to whom, and how reliably? 	 what is a world? how is a world constituted? are there alternative worlds, and if so, how are they constituted? how do different worlds, and different kinds of world, differ, and what happens when one passes from one world to another?

 TABLE 3:
 Distinctions between modernist and postmodernist fictions (AFTER MCHALE 1992)

All of the questions in Table 3 – epistemological and ontological – are of the kind that young people ask, explicitly or implicitly, about their worlds. But many of the textual tools that my generation of educators model and encourage learners to use

are, in effect, borrowed from detective fiction – from stories that rarely grapple with the ontologically-oriented questions that preoccupy authors of postmodernist fictions and that tend not to literalise the modes of inquiry through which fragmented, nonessentialised, multiple subjectivities explore postmodernist worlds.

In the postmodernist poetics of, for example, cyberpunk SF, cyborgs are, among other things, 'realized metaphors of the violation of ontological boundaries'⁴. In this respect, cyborgs follow angels, aliens, animals (if they are angelic enough), monsters, mutants and (some) comic book superheroes in directing attention towards the plurality of worlds and worldviews in postmodernist texts and contexts. In his 'postmodern angelology' McHale notes that in the course of their long migration from ancient scripture to postmodernist texts, angels have undergone many transformations while retaining a persistent core of meanings:

Indeed, it might be more helpful to speak not of 'angels' as such but of an enduring angel-function which is fulfilled in similar ways by different beings at different times. For instance, the message-bearing function of angels in Christianized epic was anticipated by the function of messenger-gods (Hermes, Mercury) in classical epic... In our own time, it might be argued, the angel-function has been largely 'science-fictionized,' ceded to aliens from outer space (pp. 202-3).

And not only to aliens. If the alien of Steven Spielberg's (1982) movie, *E.T.: The Extraterrestrial* serves an angel-function, so too does the eponymous orca of Simon Wincer's (1993) *Free Willy* and its sequels. There are many correspondences between these creatures – E.T. phones home whereas Willy sings to his relatives; both are rescued from life-threatening situations in comparable ways (although Willy needs a special trailer rather than fitting into a bicycle basket like E.T.); both call into question the ontological boundaries between human and Other. Tony Kushner's series of plays, *Angels in America*, also acknowledges the 'science-fictionizing' of the angel-function. For example, in the final scene of Part 1, *Millennium Approaches*, the character Prior (who is living/dying with AIDS) greets the materialised angel (hitherto represented only as an offstage voice) in an awe struck whisper, 'God almighty... *Very* Steven Spielberg!' (Kushner, 1993, p. 118).

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Patti Lather (1994) demonstrates the generativity of the 'multiply-coded transfunctional concept of angels' (p. 56) in framing and shaping research on the lives of women with HIV/AIDS (see also Lather & Smithies, 1997), but it seems to me that cyborgs could better serve most – if not all – of the angel-functions that might advance social inquiry. In order that they might breach ontological boundaries, angels, aliens, and angelic animals like Willy the whale, are constructed according to the conceit that they exist independently of human will and imagination, whereas cyborgs - in most instances - are explicitly human inventions. By situating the origins of angels, aliens, and angelic animals elsewhere – in supernatural or non-terrestrial worlds, or in 'nature' – each creature is imagined as having qualities that are in principle ineffable, unknowable, and beyond human emulation. But cyborgs are not only 'realized metaphors of the violation of ontological boundaries'; they also realise and embody the human capability to transform and transcend such boundaries with our own imaginative and material resources – without the intervention of Others or otherness. Echoing Haraway's (1991b) conclusion to her manifesto – 'I would rather be a cyborg than a goddess' (p. 181) – I would rather be a cyborg than an angel, but I also recognise that by registering such a preference I am obscuring the nature of the choices before us. I could not be an angel if I tried; but although I doubt that I – or any other early twenty-first century Western academic – could totally refuse a cyborg identity, I am confident that I can make many choices about the kind of cyborg I want to be.

An angel-function – a textual strategy that assists us in our attempts to transgress and transform ontological boundaries – clearly has a place in curriculum inquiry conceived as a postmodernist textual practice. Even if they were no more than a variant on this function, cyborgs would be significant narrative experiments in the discursive formulation of subjectivity and would thus be important elements of a postmodernist *currere*. But cyborgs are also something more than narrative experiments, and in some of their manifestations they are a good deal more tangible – and certainly more numerous – than angels. Cyborgs are now so ubiquitous, both imaginatively and materially, that they cannot be omitted from any intellectually honest version of the curriculum – the 'collective

The quoted words are McHale's (1992, p. 202) but here he is referring to angels.

story' we tell children. Including cyborgs in such a story does not guarantee that it will be read as a deconstructed text – the angel-function is not self-activating – but their presence at least ensures that textual resources for such a reading are at hand.

I find cyberpunk SF – critics initially coined the term to describe William Gibson's (1984) first novel, *Neuromancer* – particularly useful for raising ontologically oriented questions in curriculum inquiry. Cyberpunk SF can be read as a vigorous imaginative response to the ontological questions generated by cultural postmodernism.⁵ As Jenny Wolmark (1994) writes:

Cyberpunk narratives focus explicitly on the destabilising impact of new technology on traditional social and cultural spaces: in so doing they provide a peculiarly appropriate response to the complex conditions of postmodernity, particularly the collapse of traditional cultural and critical hierarchies, and the erosion of the distinction between experience and knowledge which has provoked the decentring and fragmentation of the subject (p. 110).

These are also key issues for curriculum inquiry as teachers, policy-makers, parents and children struggle to respond to the 'destabilising' effects of new technology on schooling's 'traditional social and cultural spaces', including the increasingly significant role of media culture (globalised and digitised networks of broadcasting, publishing and computing) in socialisation and identity formation. Schooling can no longer claim a privileged position in the 'traditional cultural and critical hierarchies' of knowledge production and reproduction as new information and entertainment technologies provide readily available evidence of the increasing gap between the ways the world is represented in the global datasphere and in school curricula (even as the academy struggles with the crisis of representation that dissolves meaningful distinctions between 'experience and knowledge' (see also Bill Green & Chris Bigum, 1993).

As significant narrative experiments in ontology and subjectivity, cyborg fictions are useful textual resources for diffracting the stories we generate and encounter in curriculum inquiry. My experience of using *currere* with graduate students suggests to me that such diffraction is desirable because reflection – a self-referential narrative strategy – is less likely to destabilise a conventional

⁵ The significance of cyborg and cyberpunk SF is also indicated by the variety and quality of the literary and cultural criticism it has generated; see, for example, David Brande (1994), Scott Bukatman (1993), Samuel Delany (1988), Chris Hables Gray (2001), Susan Hawthorne and Renate Klein (1999), Katherine Hayles (1999), Larry McCaffery (1991), George Slusser and Tom Shippey (1992) and Margaret Wertheim (1999).

autobiography's narrative trajectory. Much autobiographical writing follows an implicit genre modelled by the works of Augustine, Rousseau, Henry Adams and contemporary public figures whose autobiographies are given prominence by the mass media. This genre is modernist in constructing and reproducing an essentialised view of the self and, as Leigh Gilmore (1994) observes, it 'has naturalized the self-representation of (mainly) white, presumably heterosexual, elite men', and in conventional studies of autobiography 'the terms that are likely to shift within postmodernism – particularly history and subjectivity – are taken as stable elements in the story of one's life' (p. 5). Texts that affirm this stability, or that can be construed as affirming it, form the 'tradition' of autobiography.

Currere, as practised by Pinar (1975a; 1994) and Grumet (1988; 1991; 1999/1980), can be understood as an attempt to break with this modernist tradition of autobiography, and both writers demonstrate strategies for exposing and criticising the ways in which personal narratives can reproduce a politics of identity that maintains social hierarchies of class, gender, sexuality and race. They also demonstrate the ways in which fiction can illuminate autobiographical writing but, because they tend to choose modernist rather than postmodernist texts for this purpose, what is 'seen' in this light might be a reflection of modernist fiction's stable subjects and histories rather than a diffraction of their respective autobiographical storylines. For example, in 'Death in a tenured position', Pinar (1984) describes the difficulties and discouragements he and his colleagues experienced in working to reconceptualise curriculum studies during the 1970s and the threats to that work he saw emerging in the 1980s. Pinar depicts the reconceptualist position as being analogous to that of the character who becomes the requisite corpse in a detective novel by Amanda Cross (1981), also titled Death in a Tenured Position. The analogy allows Pinar (1984) to warn of imminent dangers to the reconceptualist movement by using words like 'murder' and 'suicide' – terms that might otherwise be regarded as exaggerating (rather considerably) the hazards of curriculum theorising.⁶ It is an exemplary exercise in using fiction reflectively in phenomenological self-inquiry, but it also exemplifies Haraway's (1994) point that reflection involves 'displacing the same elsewhere'

⁶ It is not, however, the first time that the curriculum field has been characterised as a corpse. Some years previously Joseph Schwab (1969b) introduced his first papers on the 'the practical' by declaring that 'the field of curriculum is moribund' (p. 1).

(p. 63). That is, the usefulness (and credibility) of Pinar's story depends on recognising that it is 'mirrored', in at least some non-trivial ways, by the story Cross tells – that elements of each storyline are sufficiently isomorphic for them to be reflected in (or displaced into) the other. What Pinar (1984) hopes to be able to 'see' with the aid of such reflections is couched in terms of finding stable elements of his life story that might otherwise remain hidden, including 'the self that exists outside the social and especially bureaucratic definitions of it... [the] self lost to social definition and role' (p. 76).

None of this is intended to be a criticism of Pinar's autobiographical method. Rather, I am suggesting that scrutinising a personal story in the light of modernist fiction reveals something *different from* (not necessarily 'better than') the new stories that might emerge from reading autobiography through the diffracting lenses of postmodernist fiction or SF. For example, after reading several of William Gibson's (1988) cyberpunk short stories,⁷ one of my students wrote a series of extended journal entries in the form of stories about a time-travelling Future Dog. Dog steps in and out of time, providing narrative links between the student's previous journal entries (including excerpts from the writing of some his ninth grade students), historical material (such as versions of – and commentaries on – Chief Seattle's speeches on Native American relationships with the land), and contemporary events (including daily press reports and reflections on current reading and class activities). Towards the end of his Future Dog stories the student wrote:

Unlike Dog, we cannot just step into a future – we can only dream it.

'The lives of all of us are marked by the tension between dream and drift, between pursuing the plums and letting the ripe fruit fall. The triumph of generativity over a sense of stagnation is, of course, a combination of dream and drift, a life so empowered by a vivid guiding vision of the possibilities that there is time and space throughout the life cycle for creative and recreative drift' (Pamela Daniels, 1981, p. 301).

Reading SF text and dreaming about it while creating connections using Future Dog is to dream and drift with generativity in mind. The process becomes part of the living that adds to and restructures the 'vivid guiding vision of possibilities' through which choices are faced.

A key story for this student was 'Johnny Mnemonic', recently reissued (Gibson, 1995) to tie in with the release of the movie of the same name (for which Gibson also wrote the screenplay).

Much SF inspires hope for the 'triumph of generativity over a sense of stagnation'. If I now found myself in a situation similar to that which Pinar (1984) describes, I would be more likely to read my experience against, say, Marge Piercy's (1992) *Body of Glass*⁸ (a near-future fiction which explores tensions between metaphors of cyborgs as, on the one hand, products of cybernetic and corporate control processes and, on the other, embodiments of resistance to those processes) rather than Cross's detective novel. In part, this reflects my personal reading preferences, but it also registers my confidence in the generativity of diffractive storytelling. I find the dream of life as a cyborg a more 'vivid guiding vision' than the prospect of death – or stagnation – in a tenured position.

Cyborgs in a curriculum of possibility

I use cyborgs as a heuristic in curriculum inquiry – as foci for beginning to explore the threads of meaning that intersect in specific popular and theoretical conceptions of cyborgs. These inquiries have for the most part been initiated in graduate courses in curriculum study (in Australia, Canada and South Africa). I usually begin by inviting students to consider the name 'cyborg' as a code that gives pattern and substance to particular ways of constituting, reconstituting, materialising and deploying subject positions in social worlds saturated by informatic and biogenetic technologies. That is, cyborgs are produced at certain intersections between technologies and the stories of which our subjectivities are parts. Thus, cyborgs (or their traces) can be imagined, recognised or named in a wide variety of culturally interconnected sites and discourses – a reconnaissance of which also serves to make visible the operations, relations, and conditions through which they are so identified. To begin this reconnaissance, I draw attention to three broad and overlapping categories of cyborgs, as follows:

• Theoretical constructions of cyborgs are foci for speculation and debate in contemporary philosophy, one of the most prominent examples being Haraway's (1985) 'cyborg manifesto'. Haraway's cyborgs are constructed to serve the rhetorical purposes of a materialist feminist politics. They combine qualities of machines and organisms, or of animals and humans; they are both subject and object, without gender or species, and free of conventional

⁸ *He, She and It* in the US and Canada.

dialectics or narratives of power. Other theorists of cyborg identity include Gilles Deleuze and Félix Guattari (1987), who elaborate such concepts as 'the machinic phylum' and 'the body without organs', and Jean Baudrillard who, as Scott Bukatman (1993) remarks, 'is a cyborg writer' advancing his own philosophy 'as a computer game' (p. 181) – or, in Baudrillard's (1987) own words, as 'an exercise in simulation' (p. 36).

- Another important category of cyborgs is the wide range of creatures populating SF stories in literature and other media that combine and/or blur distinctions between organisms, machines and animals. Movies and television provide some of the most familiar examples *Max Headroom*, the replicants of Ridley Scott's *Blade Runner*, the cyborg warriors of the *Mad Max*, *RoboCop* and *Terminator* movies, and so on. Many intriguing variations on cyborg themes have arisen in comics and graphic novels that have radically revised the 'superhero' genre such as *Animal Man* (Grant Morrison et al., 1991), *Black Orchid* (Neil Gaiman & Dave McKean, 1991) and *Watchmen* (Alan Moore & Dave Gibbons, 1987).
- A third and ever-expanding category comprises people who are already cyborgs in some material or subjective way. As Hayles (1993) reminds us:

Cyborgs actually do exist; about 10 percent of the current U.S. population are estimated to be cyborgs in the technical sense, including people with electronic pacemakers, artificial joints, drug implant systems, implanted corneal lenses, and artificial skin. Occupations make a much higher percentage into metaphoric cyborgs, including the computer keyboarder joined in a cybernetic circuit with the screen, the neurosurgeon guided by fiber-optic microscopy during an operation, and the teen player in the local video-game arcade (p.153).

It is important that this initial reconnaissance should proliferate images and examples of cyborgs – and interrelationships across the above categories – rather than reify existing preconceptions. One persistent difficulty that arises from manifesting cyborgs in curriculum inquiry is the tendency for some popular and stereotypical images of cyborgs (including most of the Arnold Schwarzenegger lookalikes and their characteristically violent behaviours) to be appropriated as ideological legitimators by both conservative humanists and naïve technophiles. The pedagogical strategy I try to use in response to this difficulty is to emphasise the *narrative* construction of cyborgs. That is, in dealing with cyborgs it is all too easy to be distracted by their 'hardware', and we need to remind ourselves constantly that they are constituted not only by technologies but also by the 'machineries' of texts.

For example, many students with whom I have worked have initially resisted any kind of engagement with cyborg cinema by dismissing it as 'too violent', an unhealthy rehearsal of what Haraway (1991c) calls 'a masculinist orgy of war' (p. 154). In one class, I found that many students who expressed such views had also enjoyed (in some cases enormously) Ridley Scott's movie *Thelma and Louise*. I invited these students to 'read' *Thelma and Louise* in the light of Scott's earlier films, *Alien* and *Blade Runner*, Haraway's cyborg manifesto, and the narrative strategies of Baudrillard's (1988) *America*. These intertextual readings produced several alternative interpretations of *Thelma and Louise*, including one that reads the movie as a 'paraspatial' simulation of feminist political action. In particular, the film's enigmatic ending (in which Thelma and Louise drive over the Grand Canyon's edge and their car, rather than immediately falling, appears to fly straight out from the canyon's edge and disappear), was seen as evidence that it could be read as a cinematic equivalent of Baudrillard's (1987) strategy of evocative, 'hyperspatial' simulation:

I am no longer in a state to 'reflect' on something, I can only push hypotheses to their limits, snatch them from their critical zones of reference, take them beyond a point of no return. I also take theory into the hyper-space of simulation – in which it loses all objective validity, but perhaps it gains in coherence, that is, in a real affinity with the system that surrounds us (pp. 36-7).

In other words, through the characters of Thelma and Louise, Scott takes elements of liberal and cultural feminist theory into a 'hyper-space of simulation' in which they 'push hypotheses to their limits', and 'take them beyond a point of no return'. Towards the end of the movie, Scott's dominant visual images – a speeding car, the desert – increasingly converge with Baudrillard's evocations of '*astral* America', which in turn resonate with the often joyful audience response as Thelma and Louise reach their 'vanishing point':

Disaffection finds its pure form in the barrenness of speed... Here in the transversality of the desert and the irony of geology, the transpolitical finds its

generic, mental space. The inhumanity of our ulterior, asocial, superficial world immediately finds its aesthetic form here, its ecstatic form. For the desert is simply that; an ecstatic critique of culture, an ecstatic form of disappearance (Baudrillard, 1988, p. 5).

The development – and subsequent discussion and critique – of this reading of *Thelma and Louise* did not make any of my students more tolerant of gratuitously violent cinematic cyborgs, but these activities did appear to dispose many of them to be less hasty in prejudging movies by reference to broad generic categories (such as assuming that any movie labelled 'sci-fi' will almost inevitably involve gender stereotyping, sexism, misogyny, violence, or 'boys playing with their hitech toys').

Another important aspect of an initial reconnaissance of the cultural terrain occupied by cyborgs is to elaborate some of the ways of recognising 'real' cyborgs – people who exhibit or flaunt technological dependencies (or addictions) in mediating their transactions with their milieux, together with those who literally *embody* the narrative experiments of cyborg subjectivity by inscribing and 'editing' their own flesh. The following well-known contemporary examples have been generative on a number of occasions, with students offering many of their own additions to the names below or suggesting modifications to the criteria for delimiting the concept *cyborg* that these names imply:

Stephen Hawking

Stephen Hawking is one of the most visible cyborgs constructed by modern medicine. There have been other examples of medical cyborgs whose conditions and circumstances might be better known than their names, such as 'the boy in the bubble' and 'the baby with the baboon heart' (Paul Simon, 1986). As the cyborg theorist and performance artist Stelarc (1997) asserts, 'when we attach or implant prosthetic devices to prolong a person's life, we also create the potential to propel post-evolutionary development – *patched-up people are post-evolutionary experiments'* (p. 242, emphasis in original).

• Ronald Reagan

During his presidency, Reagan was not only a medical cyborg but also (like most prominent politicians) a media cyborg. Indeed, in the latter years of his presidency, he seemed to be rapidly approaching the 'real world' equivalent of what my lexicon of cyberspeak calls a 'puppet' – 'the dummy head with microphone ears and video eyes that represents the actor in any real otherworld [virtual reality]' (Rudy Rucker, R.U. Sirius & Queen Mu, 1993, p. 269). Reagan's status as a real cyborg and virtual puppet is portrayed (persuasively and imaginatively) in J.G. Ballard's (1990) short story, 'The Secret History of World War 3'.

• Michael Jackson

As both artist and subject, Michael Jackson has reassigned himself to the realm of machines and machine-made objects in his series of bioengineered self-mutations. Jackson exemplifies Stelarc's (1997) proposition that it is now more meaningful to consider the body as an object rather than a subject, 'but *not an object of desire – an object for designing*' (p. 243, emphasis in original). Whether or not the influence is conscious, Andy Warhol's serial portraiture – produced in fulfilment of his own desire 'to be a machine' – can be seen as a prefiguration of Jackson's serial body-sculpture.

Madonna

Madonna has embodied images of mechanism in periodic reinventions of her virtual persona, initially (and ironically) as a self-labelled 'boy toy' and 'Material girl'. Later, in her 'Blond Ambition' tour of 1990 – the most enduring emblems of which were the (i)conical breasts fashioned for her by designer Jean Paul Gaultier – Madonna was both a machine for producing, and a screen on which she projected, a calculated (remotely controlled?) transsexual artifice that 'toyed' with 'collective fantasies about the body's forms and functions... its points of augmentation and supplementation, its reading of bodily zones as sites of prosthetic transcription' (Elizabeth Grosz, 1993, p. 204). More recently, subtler connotations of Madonna's self-engineering are evident in the relative reclusiveness she contrived around the production of herself as Madonna-with-child.

Although these examples are intended to characterise how I 'see' cyborgs,⁹ I try to make it clear to students that I am not much interested in defining them. To

⁹ Or, more accurately, how I 'saw' them in the mid-1990s when I wrote the first version of this chapter (see Gough, 1995)

paraphrase Clermont Gauthier's (1992) orientation to action research, I want to know how cyborgs work, and what they do, but not what they are. I also encourage students to consider their own technological dependencies and mediations using personal accounts, such as the following passage by Zoë Sofia (1993), as a way of illustrating how we might learn to acknowledge the lived contradictions of a cyborg identity:

though I may be suspicious about high tech's potential to transgress and subvert its (usually military) origins, and begrudge admitting its pleasures, I am nevertheless writing this on an IBM-style computer whose components come from around the world. Within arm's reach is the fancy new mountain bike – also a multinational and very high-tech production – purchased with the publisher's advance for this writing. More than computer writing – an activity readily associated with the image of a cybernetic organism, where information flows around a human-machine circuit – riding a bicycle is an ultimate cyborg experience for me. Perhaps this is because this machine demands more of my 'animal' physicality and converts it so efficiently into locomotion, whereas the computer demands only minimum movement and gives me repetitive strain injury. But then again, there is bicycle writing. This page almost pays for one of the toeclips; the next chapter might buy the front wheel and forks; the bibliography pays for the gel-filled seat that conforms to the rider's contours: thus the bike is fleshed out through the computergenerated textual body (pp. 10-11).

One of the purposes of focusing on 'real' cyborgs, including the extent to which we are ourselves cyborgs, is to explore the curriculum implications of cyborg subjectivities and corporealities. Haraway (1991c) presents the cyborg within a material social context in which our 'disturbingly lively' late twentieth-century machines 'have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines' (p. 152). The cyborgs populating SF dramatise the deeply ambiguous status of categories like man, woman, human, artefact, member of a race, individual entity or body. Authors of cyborg fiction are thus as much theorists of the postmodern condition as are academics like Haraway or artists like Stelarc in that each explores conceptions of bodily boundaries, body imagery, and social order, and their implications for the ways in which we experience and interact with the world. Another way of saying this is that social reality is mediated by a multitude of mechanical, biochemical and cybernetic technologies, and that SF is the textual medium through which these *technological* mediations are themselves

interrogated. One of the key propositions that I take from Haraway's manifesto is that our social reality (as cyborgs) may erroneously *seem* to be 'science fictional' from perspectives that assume an essentialised subjectivity – a unified, universalised, 'human' self.

A critical question for curriculum inquiry that is raised by an acceptance of our 'real' cyborg condition is: what are the ethical and material possibilities for cyborgs in (to paraphrase and expand Grumet's formulation) the collective and selective stories we tell our children and ourselves about our pasts, presents, and alternative futures? As Istvan Csicsery-Ronay (1991b) argues, 'the gap between the [cyborg] concept and the material [cyborg] body no longer exists. The gap is between the materialization of the concept and its possibilities of future development' (p. 399). Whether or not cyborgs materialise from our narrative experiments, or remain immanent in them, the kinds of cyborgs we and our children are now – and are possibly becoming – will be shaped by the stories we mutually construct. Furthermore, the generation and materialisation of these possibilities is as much a function of textual silences, denials, and refusals, as it is of whatever may explicitly be privileged by a text. Even if we ignore cyborgs, I doubt that they will go away.

If a curriculum is to produce hopeful rather than fearful possibilities for the complex hybridisation of humans with what has previously been regarded as Other, then we need not only to manifest cyborgs in curriculum inquiry but also to proliferate them. One of the ways in which I have sought to do this is to deliberately introduce cyborgs into what might seem to be inhospitable discursive fields. For example, in the narrative experiment I have described elsewhere as 'Neuromancing the stones' (Gough, 1993e), I used cyberpunk SF texts to problematise the concept of 'direct experience' in discourses of outdoor environmental education (see also Chapter 5 of this thesis). This strategy makes specific intertextual constructions of experience more visible (and open to critique) and also generates further questions for interrogating assumptions about the ways in which teachers and learners 'read' – and interpellate themselves as 'readers' of – learning experiences in outdoor settings.

Teachers who accept their own and their students' cyborg identities will find that many existing areas of the school curriculum provide opportunities to include cyborg positions. For example, stories of human-tool and human-machine relationships over time are already represented in most history curricula, as is evident in the naming of many historical epochs (the Bronze Age, the industrial revolution) by reference to such relationships. Conventionally, these stories are narrated from the standpoint of a detached observer who is implicitly and essentially human, a standpoint which diminishes learners' opportunities for understanding the extent to which the subject-matters of history are jointly produced by humans, tools, and machines. In this sense, Bruno Latour's (1987; 1988; 1991; 1992; 1996; 1999) 'actor network theory', which assumes that nonhuman 'things' as well as humans must be regarded as actors in any sociotechnological assemblage or network, can be understood as a cyborg position in the production of historical knowledge.

The profound significance of cybernetic technologies in the co-evolution of networked humans and machines is especially evident in the recent history of scientific knowledge production and, thus, has particular relevance for science education. As I have argued elsewhere (Gough, 1993b; 1998a), most school science laboratories, with their fume-cupboards, gooseneck faucets, and gas taps, are stereotypical gestures towards the now almost obsolete sites in which scientists once pursued their labours. The activities that take place in such classrooms – indeed, the activities that *can* take place in them – bear little or no resemblance to contemporary scientific practice. For many years, the physical sciences especially have been characterised by the types of highly industrialised and technologised 'Big Science' which require very different facilities from those on which school laboratories are modelled. More recently, virtually all of the sciences – mathematical, physical, biological, cosmological, etc. – have moved away from studying the simple systems that have been the object of mainstream science since Newton's day towards studies of complex systems. Whether they are furnished with optical or electron microscopes, Bunsen burners or multimillion dollar particle accelerators, most laboratories are equipped for studying the *material* structures of simple systems. But in the study of complex systems – protein folding in cell nuclei, task switching in ant colonies, the nonlinear dynamics of the earth's atmosphere, and far-from-equilibrium chemical reactions – the emphasis is on modelling their *informational* structure through computer simulations (see, for example, John Casti, 1997). The scientific 'facts' that result from such simulations are testimonies to the networked actions of

scientists and computers. Both the scientist and the computer are actors in a hypertextual storytelling practice. Like cyborgs, the computer simulations that now comprise the leading edges of scientific inquiry can quite literally be understood as narrative experiments. To teach science as a form of cyborg storytelling means, in part, seeing 'scientific fact' and what might once have been dismissed as 'science fiction' as mutually constitutive – recognizing that facts are not only important elements of the stories we fashion from them but also that they are given meaning by the storytelling practices which produce them.

As narrative experiments, cyborgs are transitional, but not transitory. Csicsery-Ronay (1991) observes that, 'historically, the cyborg has stood for the radical anxiety of human consciousness about its own embodiment at the moment that embodiment appears almost fully contingent' (p. 395). For me, manifesting and proliferating cyborgs in curriculum inquiry is one way of taking some responsibility for that anxiety and responding to it in ways that might have some possibility of transforming anxiety into hope.

Chapter 4

Textual authority in Bram Stoker's *Dracula;* or, what's really at stake in action research?

In the three preceding chapters I have been concerned with establishing the generativity of various fictional modes and genres for informing the ways in which we represent and perform educational inquiry. My purpose in this chapter is to demonstrate how reading two particular works of fiction by reference to their intertextual relationships with specific educational practices might enhance our understanding of those practices and provide us with intellectual resources for their improvement.

Here I focus on the interrelated activities of 'action research' and 'reflection' (or 'reflective practice'), which have attained near-hegemonic status in the discourses of curriculum inquiry, initial teacher education, and teacher professional development. I do not dispute the very substantial arguments for privileging action research in education (see, for example, Carr, 1995; Carr & Kemmis, 1986) and reflection in all forms of professional practice (see, for example, Donald Schön, 1983). Thus, I do not want this chapter to be read as a denigration of action research and reflective practice in educational inquiry but, rather, as an attempt to speak to their limits.

Dracula as action researcher

In 'Dracula as action researcher' Jean-Claude Couture (1994) offers a 'deconstructive re-reading of (his) involvement in action research' (p. 127) which he writes, in large part, as a parody of the Dracula legend. Couture tells an autobiographical story of his 'resistance to being positioned as an educational practitioner who attempts to build institutional intelligibility and improvement in a university action research project' (p. 127). As a graduate instructor in a teacher education program that emphasised 'reflective practice', Couture recalls the work he undertook with an undergraduate student teacher to prepare a report to the faculty on improvements that could be made to the program. Some of the 'challenging questions' Couture (1994) and his co-researcher explored through their conversations included:

How authentic is 'reflective practice'? What are the ethical issues raised by course instructors asking students to reflect on their practice in schools? Does the university, with its potential power to 'pass or fail' student teachers, have a legitimate right to ask students to become partners with course instructors in reflective practice? (p. 127)

However, Couture (1994) also reports his growing unease with his involvement in this project: 'as we spent more time together I sensed that my technical questions about improving the program threatened to erase what was [sic] emerging as much more vital questions for us as co-researchers. Furthermore, action research helped to expose my complicity as a researcher working for the interests of the university' (p. 127).

To express his understanding of the push towards reflective practice as a 'process of probing into the silence that belongs to the Other', Couture (1994) 'playfully' retitles the action research project, 'Dracula in search of teacher identity' (p. 128). He elaborates his decision to represent 'the student teacher as a nomadic wanderer and the university as Dracula' as follows:

The student/nomad represents the alterity or difference that feeds the university. It is through the appropriation of difference, that reflective practice, autobiography, and other trends in teacher research manage to carefully incorporate alterity. The university, for its part, acts as the apparition that invites its clients (victims) to join the project of reflective – in search of the transcendental signifier of (salvation) teacher identity.

In this re-reading of teacher identity I admit to my complicity. As a graduate student I am a colonizer of student-teachers' souls – just as Renfeld collected souls for 'the master' in Coppola's Dracula. From these souls Renfeld, extracted life. I too extract life from the loathsome ones – the undergraduates...

The secret of Dracula's power is the gradual anesthetization of the victim. Dracula draws blood to nourish himself in the somnambulant state of the Other's sleep. Are these the moments of the invested gaze in reading student journals? Is mine the gaze of the *Dracul?* As a teacher I am uncomfortable reading and 'marking' student journals. Am I a predator as I scan through 'memories of lived experiences' and 'personal anecdotes'? (pp. 128-9)

In support of this reading,¹ Couture (1994) quotes specific passages from his and his co-researcher's journals and their conversations – passages chosen to exemplify his contention that the 'university acts much as does the *Dracul* – to invite, to beguile, and to finally consume for its own purposes' (p. 131). He continues:

Essential to the seductive power of the *Dracul* is the covenant, the bond between prey and predator. The university invites the student teacher to 'share' and 'reflect' on their stories and experiences. As Dracula, the university inscribes upon the student-teacher Ahab's notion of the covenant: 'I do not order ye: ye will it'...

Drawn back to Coppola's film, I am reminded of Dracula's smirking face as he is carted around Europe by his hired dupes (read 'grad students'). For me, Coppola's image was what was needed to reveal my complicity as an action researcher. The camera closes in on Dracula... I see the guile in his smile – I look into the eyes of the *Dracul* as it looks back at mine; I see the danger in continuing to go on, yet realize – 'how can I resist?' (pp. 131-2)

Couture's interpretation is persuasive – and his word play is a pleasure to read – but he does not exhaust the methodological implications of either his revelations or his parody. I will argue here that theoretical resources for answering Couture's final question – 'how can I resist?' – can indeed be generated from juxtaposing action research with a particular tale drawn from the genre of Gothic horror fiction, but that Couture's essay falls short of providing them. This might be because Couture has paid insufficient heed to his own imperative that 'we must be aware of how text constitutes our reality', how text 'writes out a response'² for us. Couture has allowed one specific text to constitute *his* reality, to write out *his* response, in a way that fails to draw attention to the textual strategies that could be deployed to ameliorate his predicament.

As the above quotations from Couture's essay indicate, the key referent for his reading of the Dracula legend is not Bram Stoker's novel (originally published in 1897) but Frances Ford Coppola's 1992 movie, *Bram Stoker's Dracula*. In its depiction of characters, settings, and sequences of events, the movie appears to follow Stoker's story quite closely. However, despite its title, the movie almost entirely ignores one of the most distinctive attributes of Bram Stoker's *Dracula*, namely, the importance of *writing* – of *textual production* – in the vampire's

¹ I prefer not to reiterate Couture's use of the term 're-reading' since this opens the way to infinite regression (my reading of Couture's re-reading becomes a re-re-reading, and so on).

eventual defeat. Stoker's narrative is presented not only as a series of excerpts from journals, diaries and letters but also, and more importantly, these texts are themselves the means by which the novel's human characters obtain the power and knowledge necessary to thwart the vampire. As a cinematic *auteur*, Coppola has 'rewritten' *Bram Stoker's Dracula* in a way that diminishes the significance of the written word in the story Stoker wrote. In a similar way Couture, by rewriting his story of action research as a parody of Coppola's movie, has overlooked the textual strategies that were crucial to Dracula's defeat and, thus, has overlooked analogous textual strategies that might be crucial to resisting the university's beguilements.

Erasing Dracula

In Bram Stoker's *Dracula*, Jonathan Harker writes: 'As I must do something or go mad, I write this diary'. Although Coppola's movie gestures towards the written texts from which Stoker's novel is assembled (principally through the use of voice-over recitations by Jonathan and Mina Harker of passages from their respective journals and letters), Stoker's tale privileges the act of writing to such an extent that many characters come to see the production of a manuscript as necessary for their own survival. For example, Jim Collins (1989) points out that Jonathan Harker's journal 'begins as a simple travel diary complete with notes to himself about obtaining recipes for chicken paprika. But once Harker realizes that the supernatural does indeed exist within the world, the act of writing becomes invested with far greater significance' (p. 87). After one particularly horrifying encounter with Dracula, Jonathan writes:

Up to now I never quite knew what Shakespeare meant when he had Hamlet say: – 'My tablets! quick, my tablets! Tis meet that I put it down,' etc., for now, feeling as though my own brain were unhinged or if that shock had come that must end its undoing, I turn to my diary for repose (Stoker, 1965/1897, p. 45).

As the story unfolds, acts of writing are increasingly seen to be essential for the self-preservation of particular individuals, but they eventually assume even greater significance. Late in the novel, when the different writings are collated into one manuscript, they acquire a special power. As Collins (1989) explains:

² Couture (1994, p. 131) acknowledges John Willinsky as the source of these assertions.

'Just as Dracula turns all those he bites into his minions, Gothic discourse becomes a kind of all-devouring monster that subsumes all other forms of writing to form one master discourse' (p. 87). In addition to writing, acts of reading this 'master discourse' are also valorised as forms of resistance to the vampire's supernatural powers, as the following passage from Mina Harker's journal illustrates:

Now, up to this very hour, all the records we have are complete and in order. The Professor took away one copy to study after dinner, and before our meeting, which is fixed for nine o'clock. The rest of us have already read everything; so when we meet in the study we shall all be informed as to facts, and can arrange our plan of battle with the terrible and mysterious enemy (Stoker, 1965/1897, p. 242).

Reading the manuscript enables Professor Van Helsing and company to determine Dracula's 'true nature'. To quote Collins (1989) again:

To read is to become masterful; to enjoy a privileged perspective; to recognize the limitations of other types of discourse, emphasized by the inclusion of newspaper accounts, ship's logs, etc., - all of which fail miserably in trying to account for the strange occurrences. The end result, then, is a text which not only legitimates its creation, but also its consumption (p. 88).

Dracula's own fear of the manuscript is clear testimony to its power as a privileged 'language of truth'. Harker and his companions realise this when they return to their lodgings to find evidence of the Count's visit:

'He had been there, and though it could only have been for a few seconds, he made rare hay of the place. All the manuscript had been burned, and the blue flames were flickering amongst the white ashes; the cylinders of your phonograph too were thrown on the fire, and the wax had helped the flames.' Here I interrupted. 'Thank God there is the other copy in the safe' (Stoker, 1965/1897, p. 291).

Once collated, the various journals, diaries and letters become the principal means of destroying the monster. As Collins (1989) concludes:

The writings slowly but surely 'circumscribe' the monster by pulling him within the confines of their discourse. The eventual stake-driving and beheading are anti-climactic, since Dracula's fate is already sealed when the group discourse is formulated; in it, he is narrated into and out of existence (p. 88). Thus, in Bram Stoker's *Dracula* – and in sharp contradistinction to Coppola's cinematic retelling of it – the pen is mightier than a stake through the heart. I am *not* suggesting that Stoker's version of the Dracula legend is any more 'correct' than Coppola's but, rather, I am deliberately choosing to emphasise some differences between them that might be pertinent to their uses in reading, interpreting, and interrogating stories of educational inquiry.

Inscribing action research

Like many other educational researchers who have taken a textual turn, I share Couture's interest in, and commitment to, deploying the vocabularies and repertoires of deconstruction to expose the ways in which power and knowledge are constituted by and within our narratives and discourses. However, although Couture (1994) describes his paper as a 'deconstructive re-reading' (p. 127) of his involvement in action research, choosing Coppola's movie as the principal model for rewriting his story might have limited the possibilities for deconstruction that the Dracula legend makes available. As we would expect of a popular movie maker, Coppola's artistry (and craftiness) is directed towards persuading us to accept (albeit temporarily) the illusion that Dracula is 'real' – to accept at some level that Dracula's defeat is accomplished by stake-driving and beheading and to suppress, for the moment, the knowledge that he is indeed narrated out of existence. Thus, it is no surprise to find that Coppola's movie does not flaunt its own textuality in as obvious ways as does Stoker's novel. My critical point is that textual elements comparable to those diminished in Coppola's retelling of Stoker's story might also be overlooked in the story Couture narrates in 'Dracula as action researcher'.

Reading Bram Stoker's *Dracula* as a dramatisation of the ways in which the discourse of Gothic genre fiction interpellates readers (convinces them to answer its 'call') privileges the poststructuralist position that there is no extra-discursive reality – no 'outside' of the text.³ Few such dramatisations are available for the

This is not the place for an extended discussion of poststructuralist thought, but I should emphasise that my support for this position is principally strategic. For inquiry purposes, it is strategically useful to accept that there is no 'outside' of the text because it multiplies the possibilities for analysis, criticism and intervention. As Ernesto Laclau and Chantal Mouffe (1985) write: 'The main consequence of a break with the discursive/extra-discursive dichotomy is the abandonment of the thought/reality opposition, and hence a major enlargement of the field of those categories which can account for social relations' (p. 110).

discourses of educational research, including the discourse of 'reflective, participatory action research' within which Couture's project was framed. Yet the worlds of educational inquiry are even more obviously textual constructions than those represented in Gothic fiction. Couture (1994) explicitly acknowledges the importance of attending to issues of textual authority in action research when he asserts that the 'text of teacher reflection as already inscribed upon... the student teacher by the university' is the text that 'writes out a response' for him and his co-researcher (p. 131). However, Couture also reinscribes a discursive/extradiscursive dichotomy by positioning 'the university' as an agent analogous to Coppola's Count – as an actor 'outside' of the texts that he, his co-researcher and other students/colleagues are producing. This is not to say that Couture's suspicions about the power of the discourse of 'reflective practice' to 'consume' student-teachers are misplaced but, rather, that he might be underestimating the possibilities for resistance that could emerge from bringing 'the monster' – the university – within the circumscription of their group discourse. 'The university' is a name for an abstraction in *another* group's discourse – a text 'written' by academics and administrators who authorise the fiction that the university is an extra-textual monster. If the university is assumed to be a non-discursive 'reality' then, like a vampire, it will not – cannot – be 'reflected' in the mirror of student teachers' texts. But by rigorously pursuing reflexivity in the construction and critique of their texts, it might be possible for student teachers to position the university *inter*textually rather than extra-textually. Then, like Stoker's Dracula, the university-as-text could be erased – though it should be enough for Couture and his student-teachers to reposition it in their respective stories, to refuse to cede textual authority to an intertext that they have positioned authoritatively.

Couture's essay, and the conversations and journal entries he quotes, can be understood as ways in which he and his student co-researchers have chosen to order and interpret their experiences and represent them textually. If they had made different choices, it is possible that Couture might have drawn different conclusions about the nature and extent of their relative freedom from – and/or constraint by – the 'predatory' university. In the reflective processes that action research encourages (such as autobiographical writing and other forms of personal narrative) educational experience is, in Robert Graham's (1992) words, 'reordered into a useable past and present whose purpose is contained in the existential aim of promoting a sense of personal responsibility for our actions' (p. 30). There are many ways in which any given educational experience might be able to be reordered into a text that is 'useable' for such a purpose, and in my own practice I deliberately use – and encourage others to use – narrative strategies (in conversation and in journal writing) that subvert the tendency to tell just 'one true story' from just one subject position. In working to decentre, destabilise and disperse a single privileged narrative voice I have found two strategies to be particularly effective:

- keeping more than one journal; this strategy is usefully exemplified by Anna Wulf, a central character in Doris Lessing's (1962) novel *The Golden Notebook,* who keeps four colour-coded notebooks representing four different subject positions from which she writes: the black notebook addresses her problems as a writer; the red her political life; the yellow her relationships and emotions; the blue a diary of everyday events.⁴
- writing conversations between different subject positions; for example, Phyllis Dalley (1992a; 1992b) presents significant parts of her study of bilingualism as a dialogue between her (first person singular) voice as narrator of her bilingual self's lived experiences and her (second person singular) voice as a 'narrative critic' searching for wider social meanings in her personal story.

For example, one of my graduate students, Jacqui Stanley (1995), used both of these strategies in a study of the ways in which language practices in the primary school classroom contribute to the construction of gender and her attempts to determine how she could change her own practice so as to promote gender reform. Like Couture, Stanley was concerned with understanding the ways in which she was complicit in the processes she was investigating, with particular reference to how power and authority are exercised in schools and classrooms to form and

⁴ Whenever I have referred to *The Golden Notebook* in the course of my teaching, I have found that many graduate students are already familiar with it, and that it is often recalled as being among their favourite novels; it is invariably a pleasurable revelation for these students to realise that *The Golden Notebook* can be interpreted as modelling deconstructive writing strategies (and, for much of its length, poststructuralist understandings of multiple subjectivities; following this realisation, a number of students have then engaged in vigorous debate about the extent to which the unified subject is reinscribed in the book's final two sections).

constrain social relationships. By using narrative strategies that allowed her to write from several different subject positions, Stanley found new ways of inscribing her *selves* within the different discourses of power and authority circulating in her school and classroom milieux. Of particular relevance to Couture's circumstances are Stanley's journal entries and subsequent multivocal stories (dialogues between her 'narrator' and 'narrative critic' selves) concerning an incident in which the school principal entered her classroom and intervened in one of her lessons. Although the visit was friendly and informal, Stanley was (at least initially) disturbed and unsettled by the incident because it amplified the different ways in which she and the principal exercised power and authority in the classroom. By writing from multiple standpoints, Stanley was able to recognise that her discomfort with the principal's actions arose (at least in part) from her reluctance to make her own power and authority visible in the classroom, possibly because she - or, rather, one of her subject positions - was caught up in a 'good girl' model of non-authoritarian, student-centred, feminist pedagogy. Stanley was able to recognise not only that there might have been more to the principal's behaviour than taking a patriarchal power regime for granted, but also that there are subject positions available to her other than becoming 'powerless' within a stereotypically female teacher-as-nurturer/carer role. Most importantly, Stanley 'rewrote' the effects of the principal's textual authority – the *meaning* of the principal's actions for her own senses of agency, subjectivity and responsibility.

Although Couture (1994, p. 130) writes of being struck by the ways in which he and his student co-researcher's subject positions shifted in the course of their conversations, there is no evidence to suggest that they explored the alternative constructions of the university-as-text that these multiple subject positions might have made available to them. In other words, the power of the university to constitute an actor's reality – to 'write out a response' for her or him – is not stable; it too is a relational construct that shifts with the shifting subject positions of the actors who inscribe, and are inscribed by, its textual authority. The effects of the authoritative discourse of the university – like the effects of the authoritative discourse of schooling, as personified by Stanley's principal – are texts that are open to revision. But it is easy to be wise after the event, and my purpose here is not so much to quibble with Couture's analysis as to continue the conversation about poststructuralism and action research that he initiated. In closing, I will note that this chapter joins the conversation commenced previously in this thesis concerning the functions of reading fiction in educational inquiry. In this instance, I have argued that Bram Stoker's *Dracula* invites us to understand the extent to which power relations are quite literally *inscribed* in educational action research – to understand how 'mastery' and privilege can be achieved through reading and writing. This suggests that we have a moral obligation to attend to questions of textual authority in our work because, like Dracula, the subjects and subject-matters of educational inquiry can be 'narrated into and out of existence' by the texts we read and produce (including the essays we read and write in scholarly journals, books and theses). Fortunately, we face few enemies as terrible and mysterious as Stoker's monster. Nevertheless, when we exercise our powers to inscribe and to erase, we should be mindful that there might be much more at stake than terminating vampires.

Chapter 5

Playing at catastrophe: environmental education after poststructuralism

Everywhere survival has become a burning issue, perhaps by some obscure weariness of life or a collective desire for catastrophe (though we should not take all this too seriously: it is also a playing at catastrophe). Certainly, this whole panoply of survival issues – dieting, ecology, saving the sequoias, seals or the human race – tends to prove that we are very much alive (just as all imaginary fairy-tales tend to prove that the real world is very real) (Jean Baudrillard, 1988, p. 42).

This brief excerpt from Baudrillard's (1988) *America* serves to introduce a number of the themes I explore in this chapter. As noted in Chapter 1, my initial response to the narrative turn in educational inquiry was to explore some of the ways in which the discourses of environmental education and science education are configured as stories, and my particular concern here is with what it means to do ecopolitically committed curriculum work in the light of poststructuralist questioning of narrative authority in the sciences and other disciplines. I will argue that creatively 'playing' with intertextual continuities between the crisis of representation in academia and representations of what is popularly known as the world's 'ecological crisis', might help us to (re)construct forms of curriculum theorising that go beyond 'playing at catastrophe'. These 'crises' are, of course, already connected in material ways, insofar as the ecological crisis is one symptom of our sense of the limits of Enlightenment rationality out of which the crisis of confidence in Western conceptual systems – also known as postmodernism – was born(e).

In his provocative reflections on travelling in the USA¹, Baudrillard (1988) asserts that many popular representations of ecological catastrophe should not be taken 'too seriously' (p. 42). Baudrillard provides no direct evidence for this assertion but, to my mind, its defensibility becomes apparent when we question its silences and participate in the intertextual 'conversations' towards which it

¹ J. G. Ballard (1991) describes *America* as 'probably the most sharply clever piece of writing since Swift' (p. 329).

gestures. For example, Baudrillard writes that 'everywhere [which in this context must be read as *everywhere in America*] survival has become a burning issue'. But as I reflect on the material consequences of building a global political and economic system in which it often seems that 'everywhere' is equated with North America and Europe, I am led to conclude that *elsewhere* – such as in the many rural areas of the non-Western world that are home to at least a thousand million people living and dying in abject poverty² – survival is not an 'issue'. The people who dwell in such circumstances have no choices, there is no 'play' in the operations, relations and conditions that determine if they live or die. Thus, although 'playing at [ecological] catastrophe' might 'prove' that 'we' – the 'we' of Western worlds and worldviews – 'are very much alive', it does not hold similar assurances for the people and habitats of the non-Western world that *we* have systematically destroyed: 'the ease with which *we* now live, …makes survivors of us all' (Baudrillard, 1988, p. 42, my emphasis).

Playing with Baudrillard's text draws me towards apprehending a yawning gap between some unarticulated sense of ecological catastrophe experienced by others, elsewhere, and the popular discourses of ecological crisis that are mobilised 'in our hyper-protected society... where life is excessively easy' (Baudrillard, 1988, pp. 42-3). This apprehension helps me to focus my efforts as a curriculum theorist on the hypothetical determinants of ecological catastrophe that I might have some capacity to change. I cannot speak for the disenfranchised people of Asia, Africa and South America, and I have little power to remove the structural impediments to them speaking for themselves. But like many – and perhaps most – academic educators, I have been complicit in telling the 'imaginary fairy-tales' to which Baudrillard refers, tales that 'prove' that the 'real world' is coterminous with the preferred 'realities' that our privileged positions have permitted us to construct. Thus, one of the challenges we face in generating ideas for an educative response to ecological crisis is, as Patti Lather puts it, 'to decolonize the space of academic discourse that is accessed by our privilege' (quoted in Pinar & Reynolds, 1992a, p. 254). Poststructuralism destabilises

² The figure of at least a thousand million below the poverty line is from *New Internationalist* magazine, issue 310, March 1999, drawing on data from the annual Human Development Reports produced by the United Nations Development Program (UNDP). According to the UNDP's 1998 Report, nearly 60% of the 4,400 million people in the non-industrialised world

privileged discourse by insisting that we read our own and others' stories intertextually. Intertextuality suggests that we cannot claim that any text is 'original' or 'authentic', including the texts which (whether constructed by others or ourselves) we take to represent 'reality' most faithfully. As Roland Barthes (1979) writes: 'Every text, being itself the intertext of another text, belongs to the intertextual' (p. 77).

What follows, then, is an attempt to perform what Steve Woolgar (1988) calls 'a reflexive exploration of our own practices of representation' (p. 98). My strategy is one that, in William Spanos's (1987) words, 'uses form to disrupt received forms' (p. 271) in the sense that I selectively deploy intertextual readings of the privileged stories of global ecological crisis that circulate in contemporary Western educational discourse in order to disrupt their privileged status.

Environmental education, narrative theory and educational practice

Teachers, policy makers, curriculum developers, textbook writers and the like tell stories to learners; scientists, journalists, and the authors of literary fiction also tell stories to their respective audiences. My inquiries lead me to suggest that many of the values and purposes attributed to environmental, experiential, and science education are ill-served by the dominant narrative conventions of teacher-talk and textbooks in these fields. I have thus been curious to explore alternative textual practices, such as those modelled by various forms of literary fiction and popular media.

For most of its relatively short history (as a mainstream component of formal and non-formal education), environmental education has tended to privilege modernist scientific discourses which claim to have access to the way things 'really' are.³ Writers within these discourses typically assume that it is meaningful to distinguish between 'fact' or 'reality' on the one hand and 'fiction' or 'illusion' on the other. The narratives of environmental education typically include strategically positioned representations of the material world ('reality'), such as interpretations of the environmental conditions that give it educational legitimacy. For example, the need for education about the greenhouse effect usually is

lack basic sanitation and more than 30% have no access to clean water. http://www.newint.org/issue310/ <15 October 2002>

justified by reference to empirical-analytic research on trends in the atmospheric composition of greenhouse gases, on causal explanations for these trends, and extrapolations of their environmental and social effects. Much greenhouse education assumes that people need to understand environmental circumstances 'objectively' before they can be expected to respond appropriately to greenhouse issues. Note that I am *not* suggesting that, where there is uncertainty or debate about the causes of – or appropriate responses to – an environmental issue, environmental educators typically present just 'one side of the story'. Rather, I am suggesting that environmental educators tend to be sympathetic to the *pursuit* of 'one true story' about environmental issues and, characteristically, subscribe to the view that some kind of final resolution of any given environmental issue is possible – at least in principle.

In the conventional narrative strategies of environmental education 'facts' are equated with 'truth' (and fiction with lies), and 'scientific facts', especially, are privileged representations of a 'reality' that in principle is independent of human subjectivity and agency. But, as I argued in Chapter 1, fact and fiction are much more closely related than these narrative strategies imply. To recapitulate briefly: a fiction is something fashioned by a human agent and a fact is 'that which actually happened'.⁴ Both terms refer to human experience, but 'fiction' is an active form whereas 'fact' descends from the neuter past participle of the Latin *facere*, do, which disguises its human generation. In Donna Haraway's (1989b) words: 'to treat a science as narrative is not to be dismissive... But neither is it to be mystified and worshipful in the face of a past participle' (p. 5). Scientific facts are testimonies to the experiences of scientists and the opposition of fact and fiction in modern science is a fiction – a story fashioned to rationalise the strategies used by scientists to produce facts.

There can be little doubt that particular fictions of modern science have convinced us of the existence – and sometimes the alarming extent – of many environmental problems. One influential example is Rachel Carson's (1962) *Silent Spring*, which synthesised the testimonies of numerous ecologists, physiologists, biochemists and geneticists to their experiences of monitoring the environmental effects of insecticides (see also Chapter 10 of this thesis). But a

³ For a critical account of this history see, for example, Annette Gough (1997).

case can also be made for asserting that these same problems have resulted from modern science's construction of stories in which the storyteller is 'detached' from the earth, in which subject and object, 'culture' and 'nature', are categorically distinct, and in which the relationship of the earth to humans is instrumental. This narrative detachment of human culture from the earth that sustains it is manifested in educational theory by stories that construct the 'cultivated' subject – the 'educated' person – as an individual consciousness 'dislocated' (positioned otherwise) from nature. As Tony Fry and Anne-Marie Willis (1989) write:

The cultivator, as artist or critic, like the scientist, has so often regarded nature as low, as threat, as transcended origin and therefore in need of conquest and domination. The cultivated subject is seen to be the mind grown above nature and in command of it, totally separate from the baseness of body.

This discourse has self-evidently failed. Humanity has damaged its own ecosystem, its collective and interdependent body, through the alienation of self from a nature that is external, other. An ecology of survival extols neither a rationalist command of nature nor a romantic return to it – nature never went away – but a major reassessment of social and economic actions according to their effects on wellbeing within the biological and social ecology. If humanity is to survive, we must recognise that there is no 'outside' from which to speak or act; we must gain a new normative matrix for the conception and production of the world. Survival is the one universal value that transcends the proclamation of difference (pp. 230-1).

Before pursuing aspects of the constructive agenda Fry and Willis suggest, there are two points with which I must take issue. First, I am deeply suspicious of any approach to problem resolution that is predicated on 'universal' or transcendental values. Second, even if 'survival' *is* a 'universal value', the possibility that it might transcend 'the proclamation of difference' is unlikely to affect the survival prospects of most of the world's endangered organisms and habitats. The 'proclamation of difference' to which Fry and Willis refer is a relatively recent and predominantly Western invention. For example, the cultures represented among the world's one billion rural poor, whose survival is unequivocally threatened, have not necessarily positioned themselves outside 'a nature that is external, other'. The precarious existence of people whom we patronisingly locate in 'developing' countries is less a consequence of *their* 'alienation' from nature than of *our* alienation from otherness. When it comes to survival, we cannot speak

⁴ The Concise Oxford Dictionary

of a unitary 'humanity' (to reprise Baudrillard, 'the ease with which *we* now live, ...makes survivors of *us* all', not *them*), since it is not so much that 'humanity has damaged its own ecosystem' but that *some* humans have damaged *some others*' ecosystems.

These reservations notwithstanding, Fry and Willis provide a serviceable framework within which to consider alternatives to the 'failed' discourse of 'the mind grown above nature'. One alternative that they identify - and peremptorily dismiss – is the discourse of a 'romantic return' to nature. But this discourse is mobilised far too frequently in education and popular media to be dismissed lightly. For example, much outdoor education valorises the 'direct experience' of nature by reference to metaphors drawn from the language of romantic love. Another variation on this discourse promotes a vicarious 'return' to nature by privileging (and glamorising) the ecologies, cosmologies and mythologies of the world's remaining indigenous peoples.⁵ I suspect that most outdoor and environmental educators consider these practices to be either relatively harmless or unquestionably virtuous, but there might be good reasons to be sceptical of both. Thus, in the first of the following sections of this chapter, I will show that romanticising the human desire for 'feel good' contacts with the natural world can involve indefensible representations of human relationships with one another. I will then argue that, in regard to indigenous peoples' lifestyles and worldviews, we need to distinguish more carefully between the naïve appropriation of another culture's belief systems and the understandings that might be generated by comparative readings of their mythologies and ours.

Fry and Willis's preferred alternative to a 'rationalist command of nature' is to 'gain a new normative matrix for the conception and production of the world', although they offer no material suggestions as to how this matrix might be 'gained'. Sources of such suggestions presently include the work of ecophilosophers using the conceptual and ethical frames provided by 'deep ecology', bioregionalism, and ecofeminisms. In the penultimate section of this chapter, I discuss some pedagogical implications of attempts to generate a

⁵ Examples of such glamorising include 'ecopolitically correct' portrayals of Native Americans in movies such as *Free Willy*. Although popular cinema tends to glamorise most of its subjects, it is not difficult to discriminate between movies that romanticise indigenous people's relationships with nature to greater or lesser degrees (such as, respectively, *Dances with Wolves* and *The Piano*, both of which feature central characters who have 'gone native').

postmodernist environmental ethic using such contextualist narrative forms as 'storied residence' and 'bioregional narrative'. In the final section, I sketch an approach to framing 'the conception and production of the world' that I have tentatively termed 'multistoried residence' – a narrative frame for environmental education that expands the concept of 'storied residence' in ways that might be more generative of curricular and pedagogical possibilities.

'Direct experience' and reading the world as text

My purpose in this section is to pose some questions about the educational merits of texts that exhort a 'romantic return' to nature. As Peter Stoicheff (1991) writes, 'the world is a text that is read, and our interpretation of our world is a function of our reading of texts' (p. 95), and here I offer a critical reading of one text that is explicitly designed to supplement learning experiences in natural settings, paying particular attention to intertextual readings of both this text and the world-as-text. The significance of intertextuality in this context can be illustrated by considering two readings of nature by, respectively, William Shakespeare and SF author William Gibson:

And this our life...finds tongues in trees, books in the running brooks, sermons in stones...(William Shakespeare, *As You Like It* c.1599, Act II, Scene 1, ll. 15-17)

The sky above the port was the color of television, tuned to a dead channel (William Gibson, 1984, p. 4).

Despite the many differences between the languages of the Elizabethan theatre and late-twentieth century science fiction, these quotations are similar in at least one respect. In each case, meaning is ascribed to experience by coding aspects of the 'natural' world (trees, brooks, stones, sky) in metaphors drawn from the textual and technological worlds that humans have made, including language itself ('tongues'), ritual forms of speech ('sermons'), and print and electronic media ('books', 'television'). Both passages exemplify the ways in which particular choices of words mediate and construct experience: we do not only *read* 'sermons in stones', we also *write* them there. The particular signs that Shakespeare and Gibson inscribe on nature are chosen from different repertoires, and each writer follows historically specific cultural patterns of constituting meaningful experience in them. For example, by metaphorically construing nature as a text in which to read God's purposes, Shakespeare continues a narrative tradition stretching back at least as far as the Christian Middle Ages, whereas Gibson's television sky is positioned in relation to a long line of mechanistic metaphors for nature that remain a lasting lexical legacy of Newtonian physics (note too, that the TV sky is a 'dead channel': no message, no God).

Both Shakespeare and Gibson encode their readings of the world in signs that reflect their readings of other texts (such as sermons and television). Such examples of the mutual interreferencing of the world-as-text and other texts invite us to be critical of making assumptions about the value – and indeed the *possibility* – of the kind of 'return' to nature that is implied by valorising the 'direct' (unmediated) experience of it. For example, in a rationale for including experiences of solitude in The Institute for Earth Education's programs, Steve Van Matre (1990) writes of providing opportunities for participants to 'sharpen their *nonverbal* skills... to be out there in touch with nature, one on one, in direct contact with the elements of life - light, air, water and soil - unchanneled, unfiltered, unmolded by man [sic]' (pp. 69-70, emphasis in original). But it is naïve to assume that solitude in any way precludes the mediation of experience by the semiotic systems and symbolic codes with which we have learned to invest experience with meaning. The mere absence of opportunities to interact with other people or with verbal and visual media (through conversation, reading, watching television, etc.) does not necessarily compel or encourage us to relinquish the meanings we have already constructed – we can leave textbooks and televisions behind, but not intertextuality. Even if we are alone in a remote wilderness, we will still *make* sense of our sensations by encoding scenery in the 'signery' we carry with us. As William Chaloupka and McGreggor Cawley, (1993) write: 'Carrying our communicating, disciplined selves out to a wilderness escape, we find functions and roles, even there. We find assignments, too; we are there to relax, to recuperate, to report back that nature still exists, that it still teaches lessons' (p. 15).

Recognising that experience is mediated intertextually is significant for curriculum and pedagogy. As teachers, we exercise some influence on the intertextual milieux that support the production of meanings by learners. We do this by privileging some texts in our interactions with learners and ignoring or diminishing others. Consider, for example, the frequency with which North American environmental educators refer to the types of texts that the editors of *The Earth Speaks* call 'the writings of naturalists and natives, poets and philosophers' (Steve Van Matre, 1983c, p. v). These include the oft-quoted impressions and aphorisms of people like Wendell Berry, Aldo Leopold, John Muir, Sigurd Olson, Gary Snyder, Henry David Thoreau, and speeches spuriously attributed to Chief Seattle (see Gough, 1991b). I do not dispute the beauty, poetry, wisdom or virtue that can be attributed to many of these writings, but we also need to consider critically how various other kinds of texts might *work* (and 'play') when they are drawn into the meaning systems of environmental education.

For example, we can ask if some intertextual readings of the world are better or worse than others in predisposing us to act in environmentally responsible ways. Are our transactions with the earth likely to be more or less sustainable if we read stones as sermons or the sky as television? Does reading 'sermons in stones' inspire reverence for nature by positioning them as evidence of the hand of God? Does Gibson's visualisation of the sky as 'the color of television, tuned to a dead channel' implicitly devalue nature by positing technology as the ground upon which nature is to be understood? Answers to such questions are by no means obvious. On the one hand, religious convictions provide many people with a deep sense of obligation for their stewardship of the earth, whereas others find it difficult to apprehend nature in terms of supernatural agency. On the other hand, it can be argued that reading nature as if it were continuous with technology explicitly connects it to the realm of human design and, thus, human responsibility.⁶

But one does not need religious convictions to read (and write) 'sermons in stones'. In his editorial contributions to *The Earth Speaks*, Van Matre gives the earth a secular voice – a voice calling for a 'romantic return' to nature. Given that his editorialising is intended to influence the reader's interpretations of the works anthologised in *The Earth Speaks*, and given also that the book is explicitly designed to support outdoor environmental education, a critical examination of its intertextual provenance is warranted. The unambiguously romantic view of

human relationships with the earth that Van Matre expresses in this text cannot necessarily be assumed to work in benign or constructive ways.

Prior to the modern era, humans sustained a sense of interdependence with the earth through metaphors of kinship. For example, a recurring theme in the stories told by Australian Aborigines such as Bill Neidjie (1990) is that 'earth [is] just like mother and father and brother of you' (p. 3). Similarly, Native American storytellers such as Paula Gunn Allen (1989) often focus on honouring propriety in one's relationships with all of 'the supernaturals, spirit people, animal people of all varieties, the thunders, snows, rains, rivers, lakes, hills, mountains, fire, water, rock, and plants [which] are perceived to be members of one's community' (pp. 10-11). Val Plumwood (1990) argues that in Western agricultural societies this broad sense of kinship was reduced to a more narrowly patriarchal concept of 'Mother Nature' – an all-giving, forgiving, ever-providing presence in the background. Then, as Carolyn Merchant (1980) documents, nature was again transformed metaphorically by people like Francis Bacon, the 'father of modern science':

Bacon developed the power of language as political instrument in reducing female nature to a resource for economic production. Female imagery became a tool in adapting scientific knowledge and method to a new form of human power over nature. The 'controversy over women' and the inquisition of witches – both present in Bacon's social milieu – permeated his description of nature and his metaphorical style and were instrumental in his transformation of the earth as a nurturing mother and womb of life into a source of secrets to be extracted for economic advance (p. 165).

Metaphors matter, and as Sue Curry Jansen (1990) observes, 'people do not treat a "mother"...the same way they treat a "bride", "mistress", or "common harlot", the descriptive terms Bacon uses to name nature' (p. 239). Jansen also points out that the men of the Royal Society who were Bacon's intellectual heirs eventually 'killed' nature, via such ambiguous metaphors as Robert Boyle's 'great pregnant automaton' and Newton's unambiguously lifeless 'world machine' (p. 239). These readings of history make it clear that the feminisation of nature by men in Western society cannot be assumed to be benevolent. I thus find it very difficult to

⁶ See, for example, Baudrillard (1981), for whom 'everything belongs to design'; the 'designed' universe 'is what properly constitutes the environment (pp. 200-1).

read the following passage from one of Van Matre's (1983a) contributions to *The Earth Speaks* without wincing:

Have you listened to the earth?

Yes, the earth speaks, but only to those who can hear with their hearts. It speaks in a thousand, thousand small ways, but like our lovers and families and friends, it often sends its messages without words. For you see, the earth speaks in the language of love. Its voice is in the shape of a new leaf, the feel of a water-worn stone, the color of evening sky, the smell of summer rain, the sound of the night wind. The earth's whispers are everywhere, but only those who have slept with it can respond readily to its call (p. 3).

...falling in love with the earth is one of life's great adventures. It is an affair of the heart like no other; a rapturous experience that remains endlessly repeatable throughout life. This is no fleeting romance, it's an uncommon affair...(p. 4).

About 75 items of prose and poetry are collected in *The Earth Speaks*⁷ – and all but four of the contributors are male. In his Introduction, Van Matre (1983c) writes of choosing these particular passages 'because each in some way speaks for the earth' (p. vi). On this evidence, his standpoint towards the earth is much like Bacon's, albeit with overtones of the new-age 'sensitive man'.⁸ Though not explicitly gendered, the earth is implicitly positioned by Van Matre as a loving sexual partner who 'speaks' through chiefly male interpreters – and whom the implied reader will thus assume to be passive and female.⁹ His stance is thus privileged, patronising and patriarchal.

I do not doubt Van Matre's good intentions or his commitment to living harmoniously with the earth. Nor am I criticising the other contributors to *The Earth Speaks* whose celebrations of the earth and the sense of wonder it inspires have an important place in education. Rather, I am pointing out ways that Van Matre's words *can* and *might* be read that are deeply contradictory to his own

⁷ This does not include Van Matre's Introduction and his three mini-essays introducing each section of the anthology.

⁸ In an interview dealing with her 'cyborg manifesto', Haraway (in Penley & Ross, 1991) made a remark that I cannot resist quoting as a counterpoint to Van Matre's romantic claim that 'only those who have slept with [the earth] can respond readily to its call'. Haraway said: 'I would rather go to bed with a cyborg than a sensitive man... Sensitive men worry me' (p. 18). If the earth really could speak, it might well agree.

⁹ Elsewhere in *The Earth Speaks*, Van Matre (1983b) uses images for the earth which traditionally have passive and/or female connotations or attributes, including 'vessel' and 'ship of life' (p. 61). Though other readings are possible, it seems likely that younger readers, especially, will interpret such terms as 'lovers', 'affair' and 'romance' in terms of conventional (i.e., heterosexual) relationships. I should also emphasise here that the contributors to *The Earth Speaks* are not responsible for Van Matre's interpretations of their texts; indeed, I read them as speaking for themselves rather than 'for the earth'.

values and purposes. We cannot risk ignoring the dangers of cultivating an anthropomorphic image of the earth as an object of romantic love and affection, especially when that image is implicitly given the form of women, who have historically been oppressed, exploited, and ignored. As teachers and curriculum workers, we need to be aware of these possibilities, with their potential pedagogical pitfalls and opportunities, provided by the 'play' of indeterminate meanings across the discursive space we share with learners.

When we go 'out there in touch with nature', and invite learners to reflect on their experience, we are in effect inviting them to provide us with an intertextual reading of the world-as-text. That is, the ways in which they encode their interpretations of experience will reflect their prior readings of other texts. This raises important curricular questions for outdoor and environmental educators. What sorts of readings should we encourage or discourage? Which texts should we deliberately place in the intertextual milieux within which learners read the world-as-text? Shakespeare? The Bible? *Neuromancer? The Earth Speaks?* Something else?¹⁰ My purpose in this section has been to demonstrate that answers to such questions should not be taken for granted. In particular, we should be suspicious of texts that exhort a 'romantic return' to nature by positioning the earth as a spurned lover with whom we are trying to renew an intimate relationship. In the following section, I argue that we should also be suspicious of texts that exhort another kind of 'romantic return' to nature by invoking stories of indigenous peoples' transactions with the earth.

Profusions of 'nature': readings from elsewhere

The representational problem I will explore here is captured precisely by Haraway (1991a):

Historically specific human relations with 'nature' must somehow – linguistically, scientifically, ethically, politically, technologically, and epistemologically – be imagined as genuinely social and actively relational. And yet, the partners in this lively social relation remain inhomogeneous. Curiously, as for people before us in Western discourses, efforts to come to linguistic terms with the nonrepresentability, historical contingency,

¹⁰ For example, I have argued elsewhere (Gough, 1993e) that there might be good reasons to foreground cyberpunk science fiction within the intertextual networks we construct in environmental education. My reasons for arguing this case will become apparent in the final section of this chapter.

In Western cultures, the specific historically and geographically located effects of modern scientific discourses hamper the prospects of imagining a 'lively social relation' with nature. David Ray Griffin (1988) calls these effects the 'disenchantment of nature... the denial to nature of all subjectivity, all experience, all feeling' (p. 2). Nature is thus 'bereft of all qualities with which the human spirit [can] feel a sense of kinship and of anything from which it [can] derive norms' (p. 3).

Griffin argues that 'the postmodern approach to disenchantment involves a reenchantment of science itself' (p. 1). However, the problem of 'reenchanting' nature has more often been addressed, especially in popular media, by appropriating the myths of 'not modern' cultures, as in books such as Peter Knudtson and David Suzuki's (1992) Wisdom of the Elders and David Maybury-Lewis's (1991) Millennium: Tribal Wisdom of the Modern World.¹¹ These texts do little more than labour an obvious point, namely, that communities whose day-today survival depends upon sustaining the processes by which they are themselves sustained exemplify what we might call 'ecologically sustainable discourses and practices' in their everyday language and social relations. Each text assumes rather than demonstrates that the 'wisdom' of indigenous cultures can be applied to Western society's struggle to resolve the environmental problems it has created. But by valorising the ecological wisdoms (the plural is important) of tribal cultures as if they were superior forms of instrumental knowledge about sustaining life on earth, the authors of these books appear to overlook the significance of the narrative structures and strategies through which indigenous peoples conceive and produce meaning in their worlds.

In sharp contrast to the essentialising and universalising discourses of modern science, the stories of (say) Australian Aborigines and Native Americans assimilate language to the complexities of their locally contextualised transactions with the world, rather than reducing these complexities to a 'disenchanted' language of objectifying grammar and mechanistic metaphors. This contextualised language bridges subject and object worlds. For example, Tom Jay

¹¹ Maybury-Lewis's book was based on a television series with the same title.

(1986) describes how the salmon stories of Northwest Coast Native Americans incorporate moral understandings of self, community, earth and the interrelationships among them:

To the original peoples of the Pacific Northwest, salmon were not merely food. To them, salmon were people who lived in houses far away under the sea. Each year they undertook to visit the human people because the Indian peoples always treated them as honored guests. When the salmon people traveled, they donned their salmon disguises and these they left behind perhaps in the way we leave flowers or food when visiting friends. To the Indians the salmon were a resource in the deep sense, great generous beings whose gifts gave life... The Indians understood that salmon's gift involved them in an ethical system that resounded in every corner of their locale. The aboriginal landscape was a democracy of spirits where everyone listened, careful not to offend the *resource* they were a working part of (p. 112, emphasis in original).

This understanding of salmon recalls Aldo Leopold's (1970) maxim that 'a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise' (p. 262). It is not difficult to understand that the moral imperatives that accompany the narrative construction of salmon as a 'gift' are more likely to preserve the integrity of this particular biotic community than Western stories which refer to salmon in terms of 'carrying capacity' and 'sustainable yield'. Indeed, in the objectivist languages of modern science, which deliberately separate matters of fact from matters of value, salmon stories are silent on important dimensions of our transactions with salmon, such as the values with which we invest those transactions. Whether or not we use the gift metaphor, the stories of our understandings of salmon will remain partial and distorted unless we signify the values that make those understandings desirable and possible. Thus, Native American salmon stories are fictions that in their own way are as epistemologically potent as those fictions of Western science coded as 'scientific fact'. Recalling Haraway's (1989b) characterisation of biology as 'the fiction appropriate to objects called organisms' (p. 4; see also Chapter 1), we could say that a Western biologist transforms the performance of salmon into the kind of truth attested by disciplined experience in Western biological science, that is, into a fact, the jointly accomplished deed or feat of the scientist and the salmon. This might, for example, be a propositional truth claim about some aspect of the salmon's migratory or reproductive behaviour or its nutritional properties as

human foodstuff. In a similar way, Native Americans transform the performance of salmon into a truth claim – in this case a *moral* truth – attested by disciplined experience in their tribal discourses and practices, that is, into the fact of salmon-as-gift, the jointly accomplished deed or feat of Native American people and salmon.

To assert that Native American salmon stories are examples of 'the wisdom of the elders', or 'tribal wisdom', is to conspire in the disenchantment of nature, since these constructions seem to distort Native American worldviews by implying that they, like us, have stripped nature of the qualities with which humans can feel a sense of kinship and from which they can derive norms. I cannot speak for Native Americans, but I interpret their salmon stories as narrative embodiments of what Tom Jay (1986) calls 'the wisdom of the *locale*' (p. 112, emphasis in original) rather than (or not only) of 'the elders' or the tribe.

Although I am deeply suspicious of attempts to import ecological wisdom from the narratives of other peoples, I am confident that comparative readings of our own and others' stories is a sound pedagogical strategy for seeking such wisdom closer to home. For example, Helen Watson and David Wade Chambers (1989) describe the responses of two Australian girls to a landscape photograph showing two beached canoes in the foreground, behind which a large placid body of water stretches back towards distant mountains. Both girls are asked to 'describe what you see here'. Ruth, a native speaker of English, replies: 'Canoes are lying on a beach'. Binmila, a native speaker of the language of the Yolngu people of northeast Arnhemland, says: '*Rangi-ngura nyeka lipalipa*'. A close English translation of Binmila's words is 'Beach-on staying canoe' (p. 14). Both statements are 'true' but each girl has fashioned a different interpretation of reality from the other.

In Ruth's sentence, 'canoes' is the subject and 'are lying on a beach' is the predicate. For English speakers, subjects are often objects that are characterised as being separate in space. In Binmila's sentence, the types of elements she observes are indicated by *rangi* and *lipalipa* (beach-type and canoe-type elements respectively), whereas *-ngura* is one of many suffixes which, when joined to another term, names the relation between elements in a scene. The subject of the sentence is the suffixed term *rangi-ngura*, a spatial relation ('beach-on') between elements of the world. Thus, 'beach-on-ness' is the subject of Binmila's sentence.

The term *nyeka* implies 'sitting at or staying at a place' and tells us something about the nature of the *-ngura* (the 'on-ness' or 'at-ness').

Without reading too much into this example, it seems clear that Yolngu speakers represent the world using different types of categories from English speakers. Each language foregrounds different aspects of 'reality'. In English, we start with separate things in nature that often may have a separate focus as subjects of sentences. References to spatial location and relatedness are confined to the predicate. In Yolngu, the subject of each sentence both names the thing and points to its relatedness. That is, when constructing sentences, the Yolngu people focus on particular relationships.

My interpretation of the educational significance of this example is most emphatically *not* that Yolngu sentences are predicated on the view that the world is a related whole and, therefore, that such linguistic practices demonstrate the superiority of the Yolngu people's ecological 'wisdom'. The Yolngu practice of naming something in terms of its relatedness to other things is not unknown in our own language, it is merely suppressed. Consider, for example, the way that Steve Malcolm (1991) approaches the topic of 'naming living things' in a secondary school biology textbook:

When a certain type of organism is widely known, there may be a particular 'common' name which everyone uses for it. However, this isn't always the case, especially if that type of organism lives in a number of different areas. For example, the plant which Victorians call a 'mountain ash' is sometimes called a 'swamp gum' in Tasmania. In North America, the name 'mountain ash' is used for a very different type of plant to [sic] the Victorian 'mountain ash'. Thus, common (or 'popular') names can be very confusing.

This is why it is necessary for biologists to use scientific names. There is a worldwide system of scientific naming which ensures that each type of organism has a unique name (p. 21).

Naming an organism 'mountain ash' in Victoria and 'swamp gum' in Tasmania signifies something different – and no less worthwhile – from naming it *Eucalyptus regnans* in both places. The common names clearly link the organism with its environment, a specified relationship that is absent from the Linnaean name. Privileging 'scientific names' reinforces the conceptual discontinuity of organisms and environments, which contradicts the holistic claims of much environmental education. Rather than insist that students learn and use only Linnaean names for organisms, I would prefer them to investigate the underlying

assumptions – and debate the potential effects – of using Linnaean and/or local names in specific situations. Under what circumstances might the bureaucratic and technocratic system of 'scientific' names be appropriate? Whose interests does this system serve? What are the effects of inviting (or suppressing) the 'free play' of a multiplicity of local names for what science codes as the 'same' organism? As these questions suggest, comparing Linnaean and local names as sign systems is analogous to comparing the totalising discourses of modernism with the multiple, nonessentialising, contextualised discourses encouraged by postmodernist perspectives.¹² The purpose of addressing such comparisons in education – and, similarly, of comparing indigenous peoples' mythologies with our own - is not to determine that one is 'better' than the other but, rather, to generate cultural resources appropriate to our own circumstances. To borrow Haraway's words, we cannot 'come to linguistic terms' with the 'stunning profusions' of nature simply by appropriating the stories of others. But, by adding other people's stories to our own, and reading them intertextually – within and against each other – we might at least be able to multiply the possibilities of finding ecopolitically sustainable narratives among the 'stunning profusions' of *nature-as-text* we thus generate.

Storied residence

Following Jay's (1986) assertion that '*Psychology without ecology is lonely* and vice versa' (p. 112, emphasis in original) I suggest that constructing a lively social relationship with nature invites us to reimagine psychology and ecology in ways that are mutually hospitable. Modern science might have been responsible for the death of nature, but modern psychology (including educational psychology) has helped to cultivate 'the mind grown above nature' by reinforcing individualism and by grounding our biographies in what Jim Cheney (1989) calls 'a linear, essentialised narrative self' (p. 126). The standpoint epistemologies (situated knowledges) adopted by many feminist scholars suggest alternative conceptions of self and subjectivity. For example, Biddy Martin and Chandra Talpade Mohanty (1986) stress the relational nature of identity and are sceptical about 'the assumption of a singular, fixed, and essential self'; they elaborate

¹² Elsewhere (Gough, 1990b) I have explores another dimension of the ecopolitics of naming, namely, the pedagogical strategy of *unnaming*.

interrelationships with others 'through spatial relations and historical knowledges', and argue that their significance 'lies in [their] contextualisation... and the consequent avoidance of any purely psychological explanation' (p. 196). Tariq Banuri (1990) makes a similar point about many traditional non-Western cultures in which land, village, home, trees, forests, animals, artefacts, and other people, are not only seen in terms of individual gratification but also in a relational context: 'a home is not just a place where you are living at the moment, but also an integral part of your history as well as of your future' (p. 80). In a similar vein, Ziauddin Sardar (1993), a postcolonialist critic of Westernisation, argues that an emphasis on individualism has generated

a sense of personal identity independent of relationships, autonomous from cultural, social and communal concerns, and based on such impersonal elements as... fashions and professional occupations. Goals and preferences of (Westernized) individuals were presented as metaphysical entities – the only realities that actually mattered – while the desires and aspirations of communities were brushed aside as irrelevant to modernization (p. 887).

Cheney (1989) sees significant affinities between the role of 'home' in feminist contextualist discourses and the role of land in tribal discourses (p. 124). Like the relational construction of reality that Banuri attributes to traditional non-Western cultures, the narrative constructions to which Cheney refers locate human subjectivities in a moral space defined by relationships, including relationships with the land. Cheney uses such stories (including Native American salmon stories) to formulate a postmodernist environmental ethic in terms of 'storied residence' or 'bioregional narrative'¹³ – a 'complex system of images or myths of

¹³ Cheney's formulation of 'bioregional narrative' and Jay's valorisation of 'the wisdom of the locale' raise for me the spectre of bioregionalism (see, for example, Kirkpatrick Sale, 1985), one of the many ways in which nature's 'laws' are invoked as a basis for social and economic policy. Although there is no categorical reason for excluding the invocation of nature as a ground for judgment, when arguments taken from natural science are employed to support social and cultural policies and practices, we have to ask why should descriptions of the physical world be prescriptions for social life? As Andrew Ross (1994) writes, 'ideas that draw upon the authority of nature nearly always have their origin in ideas about society' (p. 15). Bioregionalism suggests that local 'laws' of nature should determine the social life of autonomous communities geared to a bounded biophysical economy. But humans, not nature, make laws, and I fear that bioregionalism is a variation of biological determinism or fundamentalism, and that the autonomous communities envisaged by bioregionalists might repeat the repressive histories of other such communities, with their parochialism, hostility to outsiders, and persecution of minorities within them. My generation of environmental educators tends to take a relatively benign view of ecopolitics and associate it with left leaning, socially critical thought and action. But during the century that preceded the rise of contemporary environmentalism in the 1970s, much ecological activism was distinctly right-

the human-land community which *instructs* and does so in a way that is felt to be both obligatory and fostering of individual and community' (p. 131).

Cheney sees 'storied residence' as being 'a necessary part of the deconstructive process', baring the structures of 'the omnipresent... forces of essentialization and totalization':

The fractured identities of postmodernism ... can build health and well-being by means of a bioregional contextualization of self and community. The voices of health will be as various and multiple as the landscapes which give rise to them – landscapes which function as metaphors of self and community and figure into those mythical narratives which give voice to the emergence of self and community. The notion of socially constructed selves gives way to the idea of bioregionally constructed selves and communities (p. 134).

I have no quarrel with Cheney's postmodernist reconceptualisation of identity as a relational construct, but his conception of 'landscape', and of the ways in which it might 'figure into' our 'storied residence', seems insufficiently problematised. For example, although he dismisses the idea of discovering a 'real' self (as distinct from self as a social construct), he does not make the parallel case for cultivating a suspicion of 'real' landscapes. Yet it appears to me that an educational imperative in generating bioregional narratives through social negotiation is to develop pedagogical strategies for learning to 'read' landscapes deconstructively. In this sense, deconstruction is as much 'a necessary part' of the production of 'storied residence' as the reverse dependency that Cheney explicates.

Landscapes do not present themselves as unproblematic 'realities' but as cultural constructions. To take my own bioregion as an example, the last century has seen the cultivation of a myth that equates Australia's cultural identity with its unique landscape. There is more than a little irony in such a highly urbanised nation cultivating this myth, and there are at least two critical questions we can ask about its meaning. First, why do urban white Australians seek to identify their nation with landscapes (and plants and animals) that are remote from their everyday experiences? As Fry and Willis (1989) write, 'landscape as a myth of nation has an alarming emptiness about it because it is based upon the notion that

wing, with many fascist groups and organisations exhorting the merits of nature conservation, small-scale living, energy efficiency, regulation of industry, and so on. For example, in the period between the World War I and II, reactionary back-to-nature movements in Germany, Britain and North America deployed very similar arguments from 'natural' science to support nutritional purity and racial purity.

identity will arise out of something that is "fact", is "out there" and only needs to be discovered' (p. 227). A second question concerns the extent to which the landscape mystique distracts urban Australians from matters deserving more urgent attention. Is an imaginative obsession with landscape any more than a kind of escapism – an excuse for ignoring or retreating from urban and suburban discontents? John Fiske, Bob Hodge and Graeme Turner (1987) observe that:

The limitations of white urban society, symbolically as well as geographically on the fringe of the nation, underlie the awe at the vastness and emptiness of Australia's centre. The more crowded and confining our cities appear, the greater the significance of the empty interior. The more static and settled they appear, the less they are able to bear meanings of development and freedom... It is a common dream of many working couples to celebrate their retirement, their release from work, by a caravan trip around the continent. In exploring the nation, we are exploring ourselves... it is in travelling the land that the Australian is most 'Australian' (pp. 129-30).

In such ways, the meaning of the Australian landscape is invested with the modern Western myth of progress. The landscape is one more cultural space to be colonised. Ironically, although the above passage is from a book purporting to deconstruct 'myths of Oz', it also demonstrates that our everyday language still bears the cultural imprint of the first settlers' perceptions of the continent's 'emptiness'. The British colonists ignored the 500,000 original inhabitants and their 40,000-year history of developing a spiritually and aesthetically rich culture supported by an efficient and sustainable hunter-gatherer economy (see, for example, Tony Dingle, 1988). Australian Aborigines had none of the material culture that the British associated with civilisation and so the land was designated as empty (terra nullius) and culturally worthless in the myths that created the nation. Initially the landmass only had instrumental value, such as providing habitats for the kinds of sheep whose wool best served Britain's textiles mills (indeed, sheep and cattle grazing became known in Australia as 'the pastoral industry', perhaps implying that it was seen as some sort of cure for the continent's empty soul). The 'real' Australia envisaged in much contemporary landscape art and popular media is still a space in which figures move through sparsely populated panoramas; it is rarely visualised as an urban space dominated by human populations, technologies, and media.

Cheney (1989) admits that 'landscapes can be hard, or diminished and distorted, and the health in them and, consequently, in us comes at a price and only with much labor' (p. 134). What seems not to be sufficiently recognised among environmental educators is that this work necessarily involves *cultural* critique and reconstruction, as well as the material work of restoring damaged habitats, conserving non-renewable resources, protecting wildlife, and so on. In particular, in connecting Cheney's 'storied residence' to curriculum theorising and practice, we need to be alert to the range and multiplicity of culturally constructed sites – in addition to landscapes – in which teachers' and learners' subjectivities 'reside'.

Towards multistoried residence

Cheney's refinement of the notion of 'storied residence'¹⁴ is a substantial contribution to the reconceptualisation of environmental ethics in contextual and postmodernist terms and clearly exemplifies Alasdair MacIntyre's (1984) insistence on the centrality of narrative to ethical thought (see Chapter 3). But Cheney might have limited the educational potential of 'storied residence' by suggesting that it arises chiefly from landscapes and bioregions. As Baudrillard (1981) writes, 'From this moment on, our true environment is the universe of communication' (p. 200), and I seriously doubt that landscape (in the sense in which Cheney uses the term) is particularly salient in the 'storied residence' of most young people whose experiences are constituted by the conditions of urban and late industrial lifestyles. Consider, for example, Kathy Acker's (1984) grimly humorous portrayal of the slums of New York City:

A racially mixed group of people live in these slums. Welfare and lowermiddle class Puerto Ricans, mainly families, a few white students... In the nicer parts of the slums: Ukrainian and Polish families... Avenues of junkies, pimps, and hookers form the northern border; the southern border drifts off into even poorer sections, sections too burnt-out to be anything but war zones...

A three-room apartment; a fourteen by nine room, two seven by nine rooms, and one more fourteen by nine room which contains toilet, bathtub, and stove. Usually no hot water or heat, costs two hundred dollars a month. Many of the people who live in these neighbourhoods are too poor to pay their rents.

¹⁴ Cheney (1989, p. 125) cites an unpublished conference paper by Holmes Rolston III as the source of the term 'storied residence'.

One of the landlords burned down his building so he could collect the insurance money. Two families and one pimp were sleeping in this building when it burned down. The landlord sold the charred lot to McDonald's, a multinational fast food concern. This is how poor people become transformed into hamburger meat (p. 56).

Acker deftly satirises some of the conventional wisdoms linking urban lifestyles with global environmental issues, and at the same time provides some useful points of departure for imagining ways in which the 'storied residence' of city dwellers might be articulated with a wider, ecopolitical 'universe of communication'. Most of us (including many of the young people we teach) are familiar with the ways in which native South Americans, and the tropical rainforests they inhabit, are being 'transformed into hamburger meat' by multinational corporations, their plight having been well publicised in the mass media and by pop stars like Sting (whose inclusion of an Amazonian chieftain in his 1991 world tour entourage received saturation media coverage). But the sting in Acker's tale is the reminder that the transformation of both tropical rainforests and New York slum dwellers into hamburger meat can be traced to identical forms of economic production and the inequitable power arrangements that support them.

My point here is that Cheney's vision of building health and well-being by means of 'a bioregional contextualization of self and community' has little hope of realisation among people for whom landscapes do not – and in many circumstance cannot – 'function as metaphors of self and community'. What is 'landscape' to the young people whose horizons are constituted by popular music, television programs and advertising, electronic games and the internet? How can we justify the privileging of landscapes as metaphors of self and community when we are dealing with people who live in a world of simulacra? My other quibble with Cheney's formulation of 'storied residence' is that most of us do not 'reside' in *one* site, either materially or mythically. A bioregional narrative might be one ecologically sustainable thread of our *multistoried* residence with the earth, but not the only one.¹⁵ Thus, my final purpose in this chapter is to consider some ways

¹⁵ Cheney implies that a multiplicity of storylines might be possible in his notion of 'storied residence' when he writes that '*Mind*scapes are as multiple as the *land*scapes which ground them' (p. 126, emphasis in original), but these multiple storylines all seem to be 'grounded' in landscape whereas I wish to problematise both the dependence on landscape and the necessity for 'ground'.

in which we might identify and explore other narrative threads in our own and our students' 'multistoried residence' and theorise them for educational practice.

My strategy here, as I foreshadowed it in Chapter 3, is to enact J.G. Ballard's (1985/1973) – and, by implication, Baudrillard's – 'method of dealing with the world around us', that is, 'to assume that it is a complete fiction' (p. 8). To deconstruct the world-as-text we need to understand how other kinds of texts – including those we conventionally call 'fictions' – construct *and interrogate* the world. As I demonstrated in Chapters 2 and 3, different modes and genres of fiction question the world in different ways and apprehending some of these differences might lead us towards accessible and productive pedagogical pathways in environmental education.

For example, Haraway uses the production of cyborgs – as artefacts and constructs in many modes, genres and materials – to address issues of radical social transformation and global ecopolitics in feminist terms. Haraway (1989b) recognizes that the cyborg has the material and imaginative power to structure and interrogate our experience in particular ways: 'Like any important technology, a cyborg is simultaneously a myth and a tool, a representation and... a motor of social and imaginative reality' (p. 138). In regard to some of the issues canvassed in earlier sections of this chapter, it is worth noting that part of Haraway's project in deploying the cyborg is to criticise some versions of ecofeminism that exhort a romantic return to nature, 'particularly those that would put us back in touch with the goddess, with some spirit of the earth, or with the planet conceived as "Gaia"" (Donna Landry & Gerald MacLean, 1993, p. 214).

It seems to me that exploring ecopolitical issues with young people in urban environments could more productively begin from the plethora of popular manifestations of our 'multistoried' *technoculturally* constructed cyborg selves than from the more tenuous evidence of the ways in which we might be 'bioregionally constructed'. The educational problem we face might be formulated thus: how are human transactions with the earth mediated when 'the actors are cyborg... and the geography is elsewhere' (Haraway, 1991a, p. 21), and how do we make these mediations – and their manifestations as technocultural myths and metaphors – available as pedagogical resources?

This educational problem can be illustrated by a personal anecdote. When I emigrated from England in 1951 my family, like many others, travelled to

Australia by sea. The journey took twenty-eight days and it was not difficult for a seven-year-old child to make connections and correspondences between the experience of being on the ship as it moved across the world and its course as plotted on a map or globe. Time zone changes were imperceptible. By comparison, when I travelled by plane to Canada with my family in 1989, my daughter (then also seven years old) had a very different sense of the distance traversed (we left Melbourne, Australia, at 6.30 a.m. and arrived in Victoria, British Columbia, at 11.45 a.m. on the same day). The experience of travelling between continents is now disconnected from perceptions of the 'real' world and its 'normal' space-time relationships. We enter an enormously complex machine in one place and exit from it in another. We see very little of the world we are traversing and have little sense of the scale of the distances we travel. There is no correspondence between our bodily sense of time and the notional time that elapses between entry and exit. There is no correspondence between the local time zones through which we travel, the kinds of meals we are served, and our own biorhythms. We have little or no control over our circumstances. Late twentieth century 'travel' (or body displacement) in the machines provided by the international aerospace industry is like being inside an enormous computer game. Maps and globes are inadequate for rehearsing the experience of travelling the world by air and the distortions of space-time relationships it entails. Such distortions can, however, be represented in virtual reality (and, crudely, in computer games). The child who has played a lot of Nintendo[®] games – where characters frequently jump into an opening in one screen world and suddenly emerge into another – might be better prepared for the experience of international air travel than the child who can point out 'where they are going' on a map or globe.

The point of this reflection is not simply to elaborate the obvious roles of information technology in education. Rather, my point is that we need to consider carefully the implications of technocultural constructions of 'multistoried' identity for curriculum and teaching *as textual practices*. For example, many outdoor and environmental educators appear to demonise technology, as though it were a necessary corollary of valorising 'nature'. But simplistic talk about being 'dehumanised' by our technologies betrays an essentialist view of both nature and humanity (about what it is 'natural' for humans to be). A more constructive

approach is suggested by accepting a cyborg identity as one of our multiple subjectivities.

The complex hybridisation of humans with what has previously been regarded as 'other' creates a discursive field within which the 'play' of significations allows for constructive possibilities in our interrelationships with the earth. For example, if there is no clear boundary between who makes and who is made, between us and our technologies, then a possible consequence is that our senses of interconnectedness with our tools will be heightened – and we might thus use them with more care, compassion and responsibility. As Haraway (1991b) writes, 'a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints' (p. 154). I suggest that the role of education in relation to these possibilities is to support learners as they 'play out' the meanings and implications of their transactions with the earth as animals or as cyborgs or as any other subjectivity in their multistoried lives. In particular, we need to provide learners with a cultural space in which we refuse to privilege any 'one true story', so that they can rehearse the consequences of living these stories - and of living with others' stories - in sustainable (or at least noncatastrophic) ways.

Thus, as I have argued elsewhere (Gough, 1993e), there might be good reasons to foreground cyberpunk SF within the intertextual networks we construct in environmental education. Cyberpunk SF focuses on the counter-culture of a plausible near-future world – a densely populated urban sprawl in which information is the main industry, the most significant commodity, and the strongest currency. Cyberpunks are streetwise kids who steal and deal in the processes and products of cybernetics, biotechnology and the global communications web. Some of them, like the central human character in William Gibson's, (1984) *Neuromancer*, are what we now call 'hackers', but their information piracy is effected by high-speed navigation in cyberspace (virtual reality). Access to cyberspace is via cranial implants, which provide a more direct interface between mind and machine than today's screens, keyboards, joysticks, control consoles and data gloves. Cyberpunks routinely use high technologies prosthetically and/or as fashion accessories, modifying and hybridising their bodies with implanted and grafted software and hardware. One facet of the cyberpunk style is exemplified in the opening passages of Gibson's (1988/1981) short story, 'Johnny Mnemonic', in which the title character introduces himself as follows:

I put the shotgun in an Adidas bag and padded it out with four pairs of tennis socks, not my style at all, but that was what I was aiming for: If they think you're crude, go technical; if they think you're technical, go crude. I'm a very technical boy. So I decided to get as crude as possible. These days, though, you have to be pretty technical before you can even aspire to crudeness (p. 14).

Anyone who works or lives with teenage children (and/or watched a lot of MTV) will recognise the narrator's attitude. Among today's youth, too, 'you have to be pretty technical before you can even aspire to crudeness', as is evident from the technological sophistication and discrimination teenagers display when choosing exactly the right pair of state-of-the-art, hi-tech, hi-top basketball boots to wear with their ripped jeans.

The plausibility of cyberpunks as an emerging tribe within youth culture is reason enough to give them serious consideration. However, it might be even more significant for educational practice that cyberpunk SF explores, illuminates and dramatises the powerful contemporary myth of the cyborg in the ongoing story of human evolution, and that it does so with particular reference to young people. This makes cyberpunk SF a fertile site for exploring and generating questions about young people's transactions with environments. Istvan Csicsery-Ronay (1991a) argues that SF is not only a type of storytelling but also is 'a mode of awareness about the world, a complex, hesitating orientation toward the future' (p. 308). This orientation is particularly appropriate for exploring and adapting to the conditions of postmodernity, which include what Katherine Hayles (1990) calls the 'convoluted ambiguity' that accompanies 'the realization that what has always been thought of as the essential, unvarying components of human experience are not natural facts of life but social constructions' (p. 265). Environmental education is one among many educational discourses and practices that has long maintained the illusion of a distinct boundary between 'facts of life' and 'social constructions'. However, I suspect that such distinctions are becoming increasingly implausible to the cyberteens and cybertots whose 'mode of awareness about the world' already embraces the ambiguous kinships of

organisms and machines. I am referring not only to computer and video gamers and hackers but also to the young people who ensure the continuing popularity of movies featuring mutants and cyborgs – the *RoboCop* and *Terminator* series and, more recently, *X-Men* and *Spiderman* and so on. These movies can be interpreted as speculative reconceptualisations of what it means to be human in a world of increasingly intrusive technological mediations. Mutant/cyborg cinema asks questions about the reproduction of certain cultural meanings in high-technology worlds and remind us that our 'human' experiences of 'nature' and 'the environment' are mediated by a multitude of mechanical, biochemical and cybernetic technologies. SF is the *textual* medium through which these *technological* mediations are themselves interrogated.

I began this chapter with an implicit question: how can we do ecopolitically committed curriculum work in the light of poststructuralist questioning of narrative authority? My short answer, which all of the above embellishes, is to work towards substituting 'rhetoric' for 'logic' in 'ec*dogic*al understanding'.¹⁶ Where ecology and education intersect, the key questions for curriculum inquiry seem to me to be 'eco-rhetorical'. Two examples of such eco-rhetorical questions should suffice as an inconclusive but (I hope) generative conclusion to this chapter: how does the language of environmental education capture, construct, and constrain nature? And how, in deconstructing textual representations of nature (nature-as-text), do we optimise the generative possibilities provided by the 'wildness' of language itself?

¹⁶ This formulation is informed by my reading of Jane Bennett and William Chaloupka (1993).

Chapter 6

About the weather: technocultural constructions of self and nature

All over the world Strangers Talk only about the weather (Tom Waits & Kathleen Brennan, 1988, 'Strange weather')

Aside from general elections, weather forecasting is the only time most of us see a national map (Andrew Ross, 1991, *Strange Weather*, 1991, p. 242).

Why might both a popular singer/songwriter (Tom Waits) and a cultural studies scholar (Andrew Ross) find weather strange?

I chose to begin this chapter with the above quotations not only because they come from very different texts with the same title but also because they gesture towards the many different ways in which weather is implicated in the everyday transactions through which we produce meanings of self, others, and nature. Between them, these two quotations point to four common sites of weather discourse: conversational ice-breaking, popular song, mass media weather forecasts, and academic texts. Weather appears frequently as an explicit component of commonplace cultural narratives such as these – exemplified here by the way it works in exchanges of meaning between strangers as a kind of 'safe text^{'1} – and also, as Ross's generalisation suggests, it implicitly frames others. That is, weather maps are daily reminders of the physical shape and dimensions of whichever nation-state we are inhabiting at the time, within which we tacitly register our own specific geopolitical locations and national identities. For example, US weather maps typically show state boundaries and significant topographical features – such as mountain ranges, major lakes and rivers – but Canada and Central America are shown as graphically empty, if depicted at all; Canadian weather mappers tend to be more generous in acknowledging that other nations share the North American continent and its weather systems.

¹ At the risk of over-extending a metaphor, I cannot resist noting that weather has long functioned like a condom in casual textual intercourse.

In this chapter I respond to the questions I posed at the end of Chapter 6 by subjecting some contemporary popular discourses of weather broadcasting to ecorhetorical scrutiny. I do this from a poststructuralist perspective which recognises that the discursive networks to which we have access in our everyday lives are significant in producing our identities as actors in the world and regulating the social and cultural practices through which we interact with nature.

'Strange weather' (the song) and *Strange Weather* (the book) respectively mark rather different eras in Western weather-consciousness. Waits and Brennan remind us of times when it was not unusual for weather to be produced in intimate conversation – including the temporary, tentative, and quite possibly illusory intimacy in which strangers, 'all over the world... talk only about the weather'. Many popular songs deploy weather metaphors and tropes to naturalise personal feelings and emotions. Examples include the radiant affection expressed by such standards as 'You are my sunshine' and the more tentative dawning of warmth and enlightenment in George Harrison's 'Here comes the sun'. Weather effects also provide key images in representing Gene Kelly's euphoria ('Singing in the rain'), Buddy Holly's melancholy ('Raining in my heart)', Elvis Presley's desperation (searching in the cold 'Kentucky rain'), and Jimi Hendrix's regret (listening as 'The wind cries Mary').

Such constructions of weather are still with us, but they now compete with weather produced on a much grander scale using satellite-based optical technologies, digital data processing, and computer graphics. As Jody Berland (1996) points out, the images broadcast by MeteoMedia (the Montreal-based, trans-Canadian, cable weather station), position us not as intimates of the earth but as 'post-panoptic' observers – we look down on the earth's simulation rather than up at the 'real' sky.² Songs that evoke highly personal, individualised, and localised weather sensitivity might now be too esoteric and technoculturally unsophisticated for the national and transnational consumer of weather channels

² Images of the earth photographed from space can be read in many ways. James Lovelock (1987/1979) describes Gaia theory as being inspired, in part, by 'the awe with which astronauts with their own eyes and we by indirect vision have seen the Earth revealed in all its shining beauty against the deep darkness of space' (p. ix). These images have also reinforced the appeal of the 'spaceship earth' metaphor and other conceptions of global community, ecological interdependency, and biospheric fragility. Such readings appear to me to be at best romantic and at worst hubristic, arrogantly taking the benefits of a god's eye view for granted while ignoring the costs of obtaining it.

and websites – representations of weather that much more obviously naturalise our social rather than our personal lives. Indeed, one of the station identification slogans on the US Weather Channel (a 24-hour cable service broadcast since 1982) asserts that 'You need us for everything you do'. Like the corporation that controls Detroit in Irvin Kershner's (1990) movie, *Robocop 2* – Omni Consumer Products: 'the only choice' – the Weather Channel constructs images of omnipresent weather effects that justify the production of new forms of advanced weather-consciousness, such as the weather-information needs that are assumed to be generated by an increasingly mobile general population.

But, apart from frequent flyers, who *are* the consumers who 'need' a 24-hour televisual weather service for 'everything' they do? Andrew Ross (1991) infers the identity of the Weather Channel's prime audience from an analysis of its program and advertising content and from the 'almost inexhaustible' series of maps with which it positions its audience as weather citizens:

fishing maps, business travel maps, picnic maps, indoor [and outdoor] relative humidity maps,...tanning maps, allergy maps,... the ominously named 'aches and pains index,' influenza maps, precipitation maps, radar maps, storm history maps, windy travel maps,... each charting in detail the geographical distribution of daily weather effects on our bodies, and each sponsored in turn by the manufacturer of an appropriate product (p. 242).

But Ross (1991) also notes that

among the many Weather Channel maps, there are no maps of acid rain damage, deforestation, oil spill concentrations, toxic dump locations, or downwind nuclear zones. In the absence of these politically complex health and safety hazards, the responsible weather citizen's rights are only threatened with natural and not social erosion. So too, the channel's multiple address to individual, (his) family, and nation is pluralist in principle but speaks primarily to the citizen identity of a white male property-owner. Ideal Weather Channel 'citizens' are assumed to be comfortably off, white-collar, with cars, boats, vacation options, families, and gardens and homes that require extensive upkeep (p. 241).

The popularity of cable weather services sometimes is attributed to increasing public interest in environmental issues but, as Ross's analysis suggests, it might also represent a very partial and distorted response to people's curiosity about such issues in the guise of a comprehensive one.³ However, the Weather Channel is not alone in this regard. 'Earthweek: Diary of a planet', was a syndicated weather/environment feature that appeared regularly in such daily newspapers as the Toronto Star, the Vancouver Sun, the San Francisco Chronicle and Melbourne's The Age during the 1990s. 'Earthweek' made similarly partial and distorted selections from what it appeared to be sampling, albeit on a much smaller scale than the Weather Channel (a little less than half a page of tabloid newsprint per week compared to round-the-clock broadcasting).⁴ For example, the 'Earthweek' column for the week ending 6 September 1996⁵ as usual provided a schematic map of the world with symbols indicating the (very) approximate location of the events that this particular 'Diary of a planet' reported. These included the highest and lowest temperatures recorded on earth during the week (48°C in Kuwait City and -67°C at the South Pole respectively), together with symbols indicating sites of extreme weather conditions, natural disasters, severe environmental management problems, and what might best be called nature study trivia (with an emphasis on the bizarre). The headlines for the one- or twoparagraph explanations of these symbols were as follows:

- Thousands flee hurricane⁶
- Three quakes rock Algeria
- Wildfire claims buffaloes
- Poachers slay elephants
- Sydney storms
- Suicide walrus mystery
- Psychic pets revelation

Other events that 'Earthweek' typically reported included floods, volcanoes, and launchings/landings of space exploration vehicles (the number of items devoted to space exploration and/or bizarre nature trivia tended to be inversely proportional

³ Ross (1991) makes the rather strange assertion that the 'success of the Weather Channel' lies at least partly in 'expanding the definition of weather to include all of the ways, forms and contexts through which our body responds to and is constructed by discourse about the environment' (p. 242). This conclusion is patently indefensible in the light of his own analysis of the Weather Channel's occlusion of ecopolitical issues.

⁴ 'Earthweek' also had a website at http://www.slip.net/~earthenv/ <10 October 1996> with links to sources of further information about weather and other environmental news.

As printed in the Education supplement of *The Age*, Melbourne, 10 September 1996, p. 12.

⁶ Under this headline are brief details of the effects of the two hurricanes and two tropical storms that the world map shows as being in the vicinity of the USA; hurricane Orson, shown in the vicinity of Japan, is not mentioned.

to the availability of news of extreme weather, natural disasters, and other severe environmental problems). Although most newspapers published this feature in weekend editions – often quite literally positioned between the news and weather sections – Melbourne's The Age relocated 'Earthweek' at the beginning of 1995 from its Saturday edition to its weekly Education supplement. This move reinforced my impression that 'Earthweek' represented a convergence of environmental journalism with the exploitation of natural disasters and catastrophic weather as relatively juvenile forms of entertainment, epitomised by movies such as Jan de Bont's (1996) Twister and the Time magazine cover story of 20 May 1996 that coincided with its release in North America. The 'Earthweek' headline, 'Suicide walrus mystery' and the Time cover story's title, 'On the trail of twisters: what scientists are learning about the mysteries of tornadoes', also exemplified the tendency in much science and environmental journalism – especially when directed towards children – to position nature as 'mysterious' (with 'secrets' to be 'discovered'). This might be read as an implicit trivialisation of the issues on which such journalism is focused.

'Earthweek' and Twister can also be understood as products of a weather merchandising industry that helps to sustain a global consumer market for the continuous, satellite-based weather forecasts that constitute the core program content of televisual services like MeteoMedia and the Weather Channel. But, as Berland (1996) argues, although the scope and expense of satellite surveillance services far outweigh their usefulness in routine weather forecasting, the popularity of weather broadcasting helps to legitimate and subsidise huge expenditures on space and communications technologies with mainly military origins and purposes that would otherwise have to be funded entirely by government and defence industries. The socially beneficial applications of weather forecasts might appear to be obvious in countries like Canada and the USA, where hurricanes, snowstorms, and other extreme weather conditions may affect everyday life and commerce. But in highly urbanised countries like Australia, where the vast majority of the population is concentrated in regions that are largely unaffected by catastrophic weather effects, there are very few significant practical benefits that warrant our apparent compulsion to consume the products and by-products of increasingly sophisticated weather forecasting technologies. Nevertheless, popular representations of weather clearly function in

ways that regulate and naturalise our day-to-day lives, as I will now demonstrate by examining in some detail two Australian newspaper reports dealing with the subject of weather forecasting.

Four seasons in one day

Even when you're feeling warm The temperature could drop away Like four seasons in one day... It doesn't pay to make predictions... (Neil Finn & Tim Finn, 1991a)⁷

On Tuesday 16 July 1996, *The Age*, Melbourne's daily broadsheet, reported technological advances in 'numerically modelling the earth's atmosphere' that would take weather forecasting 'from the lap of the gods to the laptop':

Bright outlook on the future of forecasting

The unpredictable may soon be predictable. Come rain or shine Melbourne's legendary four seasons in one day will be forecastable seven days ahead with twice the present level of accuracy thanks to the world's most sophisticated weather technology developed in Australia.

Requiring no more than a personal computer to run, the forecasting system is up to 10 times faster than existing methods.

The Bureau of Meteorology in Melbourne... can now resolve weather details down to grid areas that are 75 kilometres by 75 kilometres across; the best system in the United States, being used for the Atlanta Olympics, is detailed to 2.2 kilometres. The new Australian system resolves detail down to 500 metres and further development will sharpen this to 100 metres in time for the 2000 Sydney Olympics (Peter Spinks, 1996).

Even within this brief excerpt we can discern several ways in which contemporary weather forecasting technologies exemplify the 'postmodern condition' described by a number of cultural theorists. For example, as mathematical modelling of the earth's atmosphere becomes more sophisticated, we increasingly seem to be responding to what we might call (after Jean Baudrillard, 1983) *simulations* of weather rather than to weather itself. Furthermore, our desire for continued acceleration of these simulations (the new forecasting system 'is up to 10 times faster than existing methods') exemplifies Paul Virilio's (1986) concept of 'speed fetishism'. More significantly, perhaps, the above article's emphasis on the

⁷ All of the songs by Neil and Tim Finn from which I quote here are performed by Crowded House on the album, *Woodface* (EMI/Capitol Records).

desirability of increasing the resolution of detail in atmospheric observations also marks weather forecasting as a technology of subjectification in Michel Foucault's (1977/1975) terms. Foucault argues that postmodern societies are characterised by increasing levels of self-imposed discipline, scrutiny and surveillance and, moreover, that we actively deploy our material and intellectual resources in pursuing their achievement. The popularity of mobile telephones is an obvious example of this tendency, but weather forecasting also deploys disciplinary power/knowledge (Spinks's article elsewhere stresses the complexity of the mathematics on which the new system is based) to refine ever more effective technologies of scrutiny, surveillance, and normalising judgment. Although the object that ostensibly draws the weather forecaster's gaze is the planetary 'body', the references to the Atlanta and Sydney Olympic Games also suggest that, in Ross's (1991) words, 'it is the weather-sensitive [human] body rather than the weather itself that is the visible object of all this new knowledge' (p. 243). This becomes even more apparent in another news item that appeared in The Age on Tuesday 17 September 1996:

September springs a nine-year high with 28 degrees

The hottest September day in nine years had everybody talking yesterday. Even experts at the Bureau of Meteorology were excited.

A senior forecaster... said computer models forecasting 19 degrees and a cloudy day for Melbourne were proven wrong. Yesterday reached a sunny 28.1 degrees at 2.30pm (Tim Winkler, 1996).

I admit that I was motivated to quote from this item in part by the sheer pleasure I take from the earth's unpredictability – from its resistance to the Bureau of Meteorology's disciplinary power/knowledge. But this item also illustrates how the plethora of statistics that typically accompany weather stories create self- and socially-regulatory fields. Placed above this item's headline is a shaded box with a thermometer graphic symbol and, under the title 'Mercury rising', a number of dot points such as:

- Yesterday was the hottest day ever in the first half of September (up to and including 16 September).
- It was the hottest September day since the day after the 1987 [Australian Football League] grand final.

Ross's (1991) analysis of similar kinds of statistical presentation on the Weather Channel is pertinent here:

Discourse that situates the current weather in relation to a history of weather statistics functions as a way of normalizing our physical life, regulating its mean or average behavior in relation to an archive of temperature records. Abnormalities like record highs or record lows are part of the regulatory field of differences that locate our current degree of deviation from a norm of environmental behavior for which we are then made to feel responsible in some way. Statistics about the mean, norm or average belie the fact that there is no such thing as 'normal' weather, let alone a 'normal' climate; these average figures play the role of normalization for us (p. 243).⁸

Precisely how we are 'made to feel responsible' for 'normal' weather and climate becomes apparent in two further paragraphs of Winkler's report:

Meanwhile Mr Chris Ryan from the bureau said the ultraviolet index would be an average reading of four today. Speaking after the launch of the first UV radiation forecasts, he said the ultraviolet level, on a scale of one to about 16, would be measured each day and included in forecasts.

Occasional patches of ozone thinness would boost the reading by one or two points, but the biggest factors affecting it would be clouds and latitude, he said.

Thus, from 17 September 1996, Australian weather consumers have yet another statistic to add to those that already quantify their sense of responsible weather citizenship. Ozone thinness may be a relatively minor variable in determining the UV index but it is nevertheless mentioned first and we are reminded that its effect is to boost the reading. Our knowledge of our own contributions to ozone depletion adds another layer of weather responsibility and, whenever the UV index exceeds the 'normal' range, a new level of concern. It is by no means certain that these concerns will be deployed in self-formation and social interaction in ways that conform to the expectations of institutionalised authority. Individuals may take up this particular discourse of responsible weather citizenship in various ways and to various degrees, determined at least in part by

In a review of *The Day Niagara Falls Ran Dry! Canadian Weather Facts and Trivia* (David Phillips 1996), Scott Mair (1996) exemplifies the tendency to use weather statistics 'as a way of normalizing our physical life' when he describes one chapter, 'Weather Across Canada', as 'a coast-to-coast-to-coast look at how we compare with each other in the sunshine, rain, frost, fog, humidity and cloud categories'. He further exaggerates this tendency by concluding that 'St. John's may be Canada's weather champion – Canada's foggiest, snowiest, wettest, windiest and cloudiest place' (p. 21).

their sense of their own and other people's agency in relation to what they assume to be 'natural'.

It's only natural

Ice will melt, water will boil You and I can shake off this mortal coil It's bigger than us You don't have to worry about it... It's only natural...

(Neil Finn & Tim Finn, 1991b)

The changing ways in which weather is represented in popular media are symptomatic of changing and contested relationships between nature and culture. Like Donna Haraway, (1989a), 'I am not interested in policing the boundaries between nature and culture – quite the opposite, I am edified by the traffic' (p. 307), but the unity and stability of the meanings we attribute to nature are crucial components of the everyday discourses that produce our ecopolitical identities and regulate our social and cultural practices.

In modern industrial societies, nature has often been defined as Other to culture. Shane Phelan (1993), observes that 'the opposition to "culture" provides the bedrock meaning of "nature" in the West, but this opposition has become fraught with tension' (p. 44). A significant corollary of this definition is that the opposition to nature 'provides the bedrock meaning' of the 'cultivated' subject – that is, the educated person – in western society. The destabilisation of this particular meaning of nature has been a favourite rhetorical strategy of many green cultural critics. For example, as noted in Chapter 5, Tony Fry and Anne-Marie Willis (1989) assert that mainly negative consequences – such as the 'alienation of self' from nature – follow from the construction of nature as 'external, other' (pp. 230-1). By way of contrast, Bill McKibben (1990), in a eulogy for what he calls 'the end of nature' araws attention to the self-constitutive force of differentiating ourselves from nature's externality and otherness:

When I say that we have ended nature, I don't mean, obviously, that natural processes have ceased – there is still sunshine and still wind, still growth, still decay. *But we have ended the thing that has, at least in modern times, defined nature for us – its separation from human society* (p. 60; emphasis in original).

We have killed off nature – that world entirely independent of us which was here before we arrived and which encircled and supported our human society. In the place of the old nature rears up a new 'nature' of our making. It is like the old nature in that it makes its points through what we think of as natural processes (rain, wind, heat), but it offers none of the consolations – the retreat from the human world, the sense of permanence and even of eternity (p. 88).

Thus, McKibben (1990) regrets the loss of a particular *meaning* of nature – of the 'comforting sense... of the permanence of our natural world' (p. 7), reassuringly impervious to human action and will – but he is not so much grieving the death of nature as mourning the loss of the ontological security blanket with which nature once enveloped us. McKibben alerts us to the possibility that 'killing off' nature as a foundational reality that exists outside of human agency is one more way of bringing the foundational self into question. By collapsing the boundary that once separated us from nature, we have made it more difficult to recognise and identify ourselves as autonomous, unitary, centred subjects.⁹ It might still be possible, in Richard Rorty's (1989) terms, to say that a world is 'out there' that is 'not our creation' and that 'most things in space and time are the effects of causes which do not include human mental states' (p. 5) but it is becoming increasingly difficult to identify 'natural' phenomena in our everyday lives that do not bear the mark of human agency (a particularly obvious example being the well-publicised effects of greenhouse and ozone-depleting gases on the earth's atmosphere). I must emphasise that I do not share McKibben's regret but, rather, see the dissolution of the human-nature boundary in similarly positive terms to the dissolution of the human-machine boundary (see also Gough, 1993e; 1995).

Fredric Jameson, 1991) argues that the tendency for culture itself to be 'naturalised' produces a further tension in the relations of nature and culture:

Postmodernism is what you have when the modernisation process is complete and nature is gone for good. It is a more fully human world than the older one, but one in which 'culture' has become a veritable 'second nature' (pp. ix-x).

McKenzie Wark (1994a) goes a step further than Jameson by equating postmodernism with the qualitative changes in the social relations of culture

⁹ These (or similar) terms often are invoked in characterising the so-called 'crisis of the self' precipitated by new information technologies (see, for example, Raymond Barglow, 1994) and biotechnologies (see, for example, Haraway, 1991c), but less attention seems to have been given to the possible significance of global environmental change in problematising the boundaries of the postmodern subject.

enabled by 'third nature', for which he has more recently coined the term 'virtual geography' (Wark, 1994b):

Second nature, which appears to us as the geography of cities and roads and harbours and wool stores is progressively overlayed with a third nature of information flows, creating an information landscape which almost entirely covers the old territories (McKenzie Wark, 1994a, p. 120).

The destabilisation of nature by virtual geography is especially apparent in the ways many of us now experience weather. Although we might still attend to the ways in which we engage physically with the weather, we also have naturalised the technologies through which weather is presented to us as an abstraction. To interpret or forecast the weather we are more likely to look at a television screen than at the sky.¹⁰ Our cultural activities – industrial pollution, urbanisation, agribusiness – have literally and materially constructed the greenhouse effect and eroded the ozone layer but our knowledge of these and many other complexities of climate change also is constructed by the global network of weather stations, satellites, supercomputers, meteorologists and broadcasters that produce the images, models and simulations that are the material representations of that knowledge. In this sense, as Berland (1994) writes, 'the weather can no longer be considered "natural"... but (like gender and other previously "natural" concepts) must be understood as [a] socially constructed artifact' (p. 106).

Weather with you: implications for environmental education

Everywhere you go You always take the weather with you (Neil Finn & Tim Finn, 1991c)

For those of us who dwell in highly urbanised and technologised societies, much of what now counts as 'nature' consists of the measurement and projection of human culture's interactions with the biosphere in and on a virtual ecology of global information flows. Under these circumstances, I find it helpful to think of environmental education as a struggle to come to pedagogic terms with the 'narrative complexity' (Gough, 1993a) generated by the categorical ambiguities

¹⁰ An allusion to this interplay between 'second' and 'third' nature can be read in the first sentence of William Gibson (1984) prototypical cyberpunk SF novel, *Neuromancer*, which I

and entanglements that now attend such concepts as self, culture, nature, and artefact. To date, little of what is performed in the name of environmental education has engaged (or sought to engage) this struggle but, rather, tends to reflect and to naturalise models of social interaction which assume that 'rational' behaviour follows from human actors pursuing their more or less enlightened selfinterests in maximising utilities and amenities or satisfying preferences. Environmental education typically depicts the forms of knowledge it privileges (whether this be abstract science or experiential fieldwork) as being instrumental in enabling humans to pursue such 'rational' choices but ignores the ways in which human agency is *produced* by and within the complex circuits and relays that connect – and contingently reinforce – knowledges and subjectivities in the technocultural milieu of postmodern societies. Yet the extent to which knowledges are authorised, and the manner in which they are (or are not) mobilised in the form of dispositions to act (or not), might be very sensitive to different cultural traditions, values and identities. For example, Brian Wynne (1994) argues the need for caution in predicting the effects of providing people with scientific knowledge of global environmental change:

The assumption is that increasing public awareness of global warming scientific scenarios will increase their readiness to make sacrifices to achieve remedial goals. Yet an equally plausible suggestion is that the more that people are convinced that global warming poses a global threat, the more paralysed they may become as the scenarios take on the mythic role of a new 'end of the world' cultural narrative. Which way this turns out may depend on the tacit senses of agency which people have of themselves in society. The more global this context the less this may become. Thus the cultural and social models shaping and buried within our sciences, natural and social, need to be explicated and critically debated (p. 186).

Comparable arguments can be mounted in relation to efforts by socially critical environmental educators to increase public awareness of, say, the extent to which scientific models of global warming reflect the interests of developed countries and obscure the political domination, economic exploitation and social inequities underlying much global environmental change. Again, we cannot assume that such knowledges will mobilise people 'to make sacrifices to achieve remedial goals'. To do so would be to ignore the possibility of what Wynne (1994) calls

also quoted in a slightly different context in Chapter 5: 'The sky above the port was the color

'the intrinsically alienating effects of knowledge which constructs people in environmental processes as if they are merely reproducing and extending consumer-based capitalism' (p. 187), to which we could add imperialism, colonialism, and so on.

Such considerations lead me to suggest that in environmental education we need to attend much more closely to the micro-political and intertextual production of subjective life, though not, I must emphasise, as a further exercise in the kind of scrutiny and surveillance that we already practice to excess in education and educational research. Rather, we should attempt to participate more fully, self-critically, and reflexively in the cultural narratives and processes within which identity, agency, and knowledges are discursively produced. Put bluntly, environmental education should be less concerned with 'nature' than its cultural invention and inscription. In terms of the specific aspect of nature-culture relations that I have addressed in this chapter, we need to recognise that 'our' weather is not only that which some of our senses might tell us is 'real', but also is the weather produced, simulated, and performed for our pleasure in various broadcast media. Questions about *whose* weather we take with us (everywhere we go), and for what purposes and with what effects, are by no means simple – but they are, I believe, well worth asking.

of television, tuned to a dead channel' (p. 3).

Chapter 7

Globalisation and curriculum inquiry: deconstructing transnational imaginaries

During the period in which I undertook the research represented in this thesis (roughly 1993-2002), questions about the significance and implications of globalisation for curriculum work emerged as somewhat unanticipated foci of my inquiries. I say '*somewhat* unanticipated' because, as Chapters 5 and 6 rather obviously demonstrate, my research interests in environmental education drew my attention to global environmental issues and their textualisation in both global information networks and more localised curriculum materials. As I pursued these interests, I became more aware of the rapidly increasing public and professional attention being given to trends in economic and cultural globalisation and their effects on various aspects of education, including curriculum policies and programs. Thus, I began to focus my curiosity about globalisation on its conceptual and methodological implications for curriculum inquiry.

As I have indicated in previous chapters, I approach curriculum inquiry from a position informed by narrative theorising and poststructuralism. One corollary of this disposition is that I rarely feel obliged to begin an essay with stipulative definitions. That is, I do not see globalisation as a subject and/or object to be constrained by definition, but as a focus for speculation – for generating meanings. I want to understand what curriculum workers (teachers, administrators, academics, researchers) *do*, and do *not* do, with the meanings that we exchange under the sign of globalisation, and I want to work towards a defensible position on the meanings we *should* attempt to select, generate and reproduce through our curriculum practices.

Miriam Henry and Sandra Taylor (1997) identify two aspects of globalisation – 'the facts concerning transnational processes and communication' and 'an increasing awareness of this reality' (p. 47) – and in this chapter I will focus chiefly on the second. There is, of course, no unitary 'reality' of globalisation, and I suggest that whatever 'awareness' might be 'increasing' is a somewhat inchoate apprehension of complex, multiple, proliferating and immanent *realities*, overlaid (and further complicated) by our own reflexive 'awareness' of the need to be – and to be *seen* to be – aware that globalisation is, indeed, worthy of our attention. My own attention is drawn to those traces of globalisation that Rob Wilson and Wimal Dissanayake (1996) describe as a 'transnational imaginary', namely:

the *as-yet-unfigured* horizon of contemporary cultural production by which national spaces/identities of political allegiance and economic regulation are being undone and imagined communities of modernity are being reshaped at the macropolitical (global) and micropolitical (cultural) levels of everyday existence (p. 6, emphasis in original).

Curriculum work is one form of 'contemporary cultural production' through which this transnational imaginary is expressed. As it coheres around the concept of 'globalisation', the appearance of this imaginary in the Australian literature of educational inquiry has been limited, for the most part, to discussions and debates about the economic management, marketing and organisation of education and training (see, for example, Kenway, Bigum & Fitzclarence, 1993; Kenway et al., 1994; Lingard, Knight & Porter, 1993; Lingard & Porter, 1997), and broad questions of national schooling policy (see, for example, Henry & Taylor 1997). For these scholars, economic restructuring – driven by the need for Australia to respond to international economic and technological trends – is the master discourse informing policy decisions at all levels of education. Although I do not dispute their judgments, we cannot assume that the institutional force of globalisation within particular national and state policy discourses necessarily carries similar weight in other discursive communities. Transnational economic exchanges predate the spread of global capital, and imagining that they now constitute some kind of irresistible force transforming all aspects of contemporary life might exaggerate the reach and extent of global economic integration. For example, a little under a decade ago, Richard Barnet and John Cavanagh (1994) estimated that about 80 percent of the world's population live outside global consumer networks (p. 383). More importantly, specific local expressions of globalisation,¹ such as the inclusion of schooling in the Australian federal (Labor) government's microeconomic reform agenda during the late 1980s, should not

I follow Philip McMichael (1996) in using the term 'local expressions' as shorthand for 'the process by which local communities negotiate their social contexts, which includes global relations as embedded in institutions that condition local communities' (p. 27).

necessarily be taken as inevitable consequences of global economic processes that will routinely be found in other local discourses.

Furthermore, local expressions of the transnational imaginary of globalisation are not restricted to the economic arenas of social life, such as those concerned with the production, exchange and consumption of goods and services, and related issues of industry and employment. Global relations are also expressed in and through mass media and converging information technologies, and the social institutions and movements through which we monitor and regulate our concerns about many quality of life issues including health (such as the global traffic in drugs and disease) and environmental issues (such as global climate change). Globalisation is expressed in our apprehension of new and increasingly complex patterns of interconnectedness – cultural processes that destabilise relationships between social organisation and the spaces and places in which technologies, materials, media and meanings are produced, exchanged and consumed.

Economic globalisation clearly has consequences for system-wide curriculum policies (such as state curriculum frameworks in Australia), but evidence of the ways in which it might be informing and (dis)organising curriculum practices at local (e.g. school) levels is chiefly anecdotal. For example, Henry and Taylor (1997) observe that the pressures of microeconomic reform have already encouraged education systems and some schools 'to wheel and deal where they can in the attempt to become more competitive and cost-effective':

Schools buy in pre-packaged American software, and there are increasing pressures for schools to seek corporate sponsorship for all manner of things – from school bands through to computer laboratories. Increasing numbers of schools ply the Asian market for fee paying students. This commercial logic is essentially anarchic, with unpredictable effects on curriculum and schooling practices (p. 56).

Despite these uncertainties, globalisation has so far had very little overt influence on curriculum theorising – on the concepts and methods of academic curriculum inquiry. For example, there is no mention of globalisation in either of the two major synoptic texts published in the curriculum field during the past decade (Philip Jackson, 1992; Pinar et al. 1995). This relative silence in the literature of curriculum theorising is evident even in works that are explicitly postmodernist in their approach. Thus, for example, despite passing references to the work of Fredric Jameson (1991), neither William Doll's (1993) *A Post-Modern Perspective on Curriculum*, nor Patrick Slattery's (1995) *Curriculum Development in the Postmodern Era*, acknowledge the global market forces of late capitalism as a possible influence on curriculum theory and practice.

Precisely how school curricula will change in response to pressures for restructuring driven by economic globalisation remains a very open question, especially as these forces combine with, and are complicated by, the increasing (and interconnected) effects of global media culture on what young people learn (in and out of schools). Although we can make some informed guesses about how globalisation will manifest itself in changing school curricula (and in whose interests), there are many gaps in our current knowledge of the dynamics of a transnational imaginary in curriculum work and in the theoretical resources that might assist us in identifying problems and opportunities as they emerge. In beginning to map these gaps, my methodological (dis)position is to understand curriculum as a deconstructed (or deconstructing) text (Gough, 1994a), an orientation to inquiry succinctly characterised by the literary critic Barbara Johnson's response to an invitation to define deconstruction:

One thing I could say is that the training most people get from the beginning, in school and through all the cultural pressures on us, is to answer the question: 'What's the bottom line?' What deconstruction does is to teach you to ask: 'What does the construction of the bottom line leave out? What does it repress? What does it disregard? What does it consider unimportant? What does it put in the margins?' So that it's a double process. You have to have some sense of what someone's conception of what the bottom line would be, is, in order to organize the 'noise' that is being disregarded (as quoted by Imré Salusinsky, 1987, p. 81).

For Johnson, deconstruction is less an academic argument about signs and meanings than a vocabulary and a set of practices oriented towards uncovering what she calls 'noise' – that which is disregarded or marginalised by our dominant cultural myths and narratives. In the remainder of this chapter I examine two sources of 'noise' that might complicate any attempts to locate the transnational imaginary of globalisation in the microdynamics of curriculum work, namely, (i) the sedimented history of global perspectives in school curricula and (ii) popular expectations that globalising technologies such as the internet will transform schools and their curricula. I have chosen these two facets of globalisation in curriculum discourse precisely because they are so different. Although the new global media networks (re)present themselves to us as leading edges of contemporary cultural transformations, existing global perspectives in school curricula occupy the 'trailing edges' of these changes.

Before globalisation: global perspectives in the curriculum

Global issues and concerns have long functioned as topics or themes in specific learning areas such as history and geography, and efforts to give more emphasis to global perspectives in school curricula are well-documented. For example, during the latter years of the 1980s, global themes became an explicit focus of a number of curriculum development initiatives in such relatively new curriculum areas as development education (Living in a Global Environment, by John Fien, 1989), peace studies (Educating for Global Responsibility, by Betty Reardon, 1988), world studies (Global Teacher, Global Learner, by Graham Pike and David Selby, 1987, and Making Global Connections, by David Hicks and Miriam Steiner, 1989) and the World Wide Fund for Nature's (WWF) Global Environmental Education Programme (John Huckle, 1988).² Recognition of the global dimensions and significance of issues such as peace, environment, and industrialisation in developing nations, also led some international organisations (such as the United Nations and its various satellites and subsidiaries, including UNESCO) to attempt to influence school curricula through a variety of transnational curriculum development and/or teacher professional development projects. For example, the UNESCO-UNEP³ International Environmental Education Programme, which commenced in 1974 and remained active until 1996, was an intergovernmental program that sponsored many projects supporting educational action in response to concerns about the quality of the global environment. However, the 'global' character of such projects was determined, at least in part, by the differential power relations that accompanied intergovernmental cooperation (or the appearance thereof), and critics of the IEEP argue that from its inception it cultivated a neo-colonialist discourse in

² It is difficult to cite just one source for this multi-volume program. Huckle's (1988) book is the teachers' guide to ten book-length units that make up one of four curriculum modules in the program.

³ UNEP: United Nations Environment Programme.

environmental education by systematically privileging Western (and especially US) interests and perspectives (see, for example, Annette Gough, 1999).

Many of these curriculum development initiatives valorised variations on the familiar slogan, 'Think global. Act local', though few recognised the irony of recycling a phrase that owed much of its popularity to economists who anticipated or desired deregulation of global markets.⁴ But although global themes in the curriculum are undoubtedly one consequence of the success of transnational social movements, there is very little evidence that they express a transnational imaginary that has contributed to any significant changes in the key meanings that are mobilised in curriculum deliberations and debates. For example, it is obvious that environmental education has been understood in schools as an incremental addition or alternative to conventional curriculum *content*, but there is little or no evidence of it challenging the 'container' metaphor of curriculum. Yet this is precisely what might be expected if 'think global' had become a powerful imperative in thinking about school curriculum change, since it can be argued that all notions of 'containment' are destabilised and subverted by recognising the complexity and multiplicity of the global environment's interconnections (thus, for example, we can no longer simply 'throw rubbish away', because in global environmental terms there is no 'away').

However, the point I wish to develop here is concerned with the ways in which global perspectives in national and state curriculum specifications function as a kind of 'noise' in any transformations of school curricula that might (or should) be taking place in response to economic globalisation and to broader cultural expressions of a transnational imaginary. For example, in 1995 the state of Victoria's Board of Studies published its *Curriculum and Standards Framework* (CSF) as a basis for curriculum planning in years P-10 and for reporting on student achievement. The eight-volume CSF (its contents are organised into the eight key learning areas 'agreed to nationally' by the former

⁴ For example, Theodore Levitt (1983), used this slogan to encapsulate his advice that 'the globalization of markets is at hand' (p. 92) in an article for the *Harvard Business Review*. Sue Greig, Graham Pike and David Selby (1987) are typical of the authors of environmental education texts who render this slogan as 'think globally, act locally' (p. 20) without citing or otherwise acknowledging any source. Of course, the imperative to think globally has a long history. For example, in 1967 Marshall McLuhan noted that with the advent of an electronic information environment, 'all the territorial aims and objectives of business and politics [tend] to become illusory' (McLuhan & Fiore, 1967, p. 5).

Australian Education Council) included in its outcome statements references to many of the same global issues and concerns that have previously functioned as topics or themes in subjects such as history and geography. Moreover, the CSF can itself be understood as a product of a centralising tendency in educational restructuring that has been animated by economic globalisation.⁵ However, although the CSF is undoubtedly influencing the rhetoric of systemic curriculum policies and priorities, any references to globalisation that are expressed in (or implied by) its outcome statements comprise only a relatively small sample of the possible meanings that actually circulate among teachers, learners and other stakeholders in education.

For example, we have little knowledge of how teachers in the Studies of Society and Environment (SOSE) key learning area deploy concepts of globalisation or other expressions of a transnational imaginary to 'explain economic decisions made by governments',⁶ although a content analysis of syllabus documents and textbooks would undoubtedly provide us with some clues as to which explanations they are likely to privilege. John Fien and Jane Williamson-Fien (1996) provide an overview of 'best practice' in teaching global perspectives in SOSE in which they assert that 'few Australian syllabuses provide students with [a] comprehensive view of the world as an interconnected and interdependent system' (p. 125). However, a consideration of what these authors *omit* from their discussion and recommendations sheds useful light on the new complexities that globalisation introduces to the SOSE curriculum. Fien and Williamson-Fien (1996) argue that 'the role of global education in a country such as Australia is to create public awareness and understanding of the nexus between development and lifestyle issues, and to promote values and lifestyle choices consistent with the core principles of life in a democracy' (p. 129). These authors unabashedly write from a socially critical standpoint on the role of the industrial development paradigm in building nation-states, but they do not seem to recognise

⁵ According to Kenway et al. (1994) two dominant restructuring tendencies have emerged in Australian educational systems' responses to economic globalisation: a centralising tendency concerned with curriculum and professional development, enabled by corporate federalism and the new nationalism, and guided by the principles of vocationalism and scientific rationality; and a decentralising tendency concerned with money, management and industrial relations, and guided by principles of deregulation, devolution, privatisation, commercialisation and commodification (p. 318).

⁶ This is a Level 5 (years 7 and 8) learning outcome in the 'Natural and social systems' strand of the SOSE KLA; see Victoria, Board of Studies (1995, p. 18).

that the terms of the political debates in which they engage are rapidly changing. One set of such changes is usefully summarised by McMichael's (1996) list of five premises underlying his argument that globalisation has displaced the institutional and ideological relations constructed by the development project:

First, development is perhaps the 'master' concept of the social sciences, and has been understood as an evolutionary movement bringing rising standards of living – a logical outcome of human rationality as revealed in the European experience; second, the development project was a political strategy to institute nationally managed economic growth as a replicable pattern across the expanding system of states in the post-World War II world order; third, the paradigm of developmentalism offered a broadly acceptable interpretation of how to organize states and international institutions around the goal of maximizing national welfare via technological advances in industry and agriculture; fourth, this paradigm has collapsed with the puncturing of the illusion of development institutions; and fifth, debt management instituted a new organizing principle of 'globalization' as an alternative institutional framework, with the underlying message that nation-states no longer 'develop;' rather, they position themselves in the global economy (p. 26).

Fien and Williamson-Fien (1996) argue that 'global education is based upon the assumption that the social and structural changes needed to make this a more peaceful, just and ecologically sustainable world' and that these will not occur without 'a fundamental re-education of the Western public' (p. 129). But, as McMichael's analysis suggests, the 'social and structural changes' that might constitute socially just and ecologically sustainable responses to *post*-developmentalist capitalism are not necessarily those that socially critical global educators desire. Fien and Williamson-Fien's (1996) elaboration of their position also raises questions about the susceptibility of the language of opposition to the development paradigm to appropriation by the new rhetoric of globalisation; they write:

if it is true that the rich must live more simply so that the poor may simply live then, in the words of Trainer (1988) 'the key... must be the education of publics in overdeveloped countries regarding these critical themes, so that eventually they will support the necessary restructuring of the global economy and the economies of their own countries'⁷ (p. 129).

 ⁷ Fien and Williamson-Fien (1996) source this quote to F.E. [Ted] Trainer (1988)
 'Development re-think', School of Education, University of New South Wales, mimeo.

I suspect that many readers of Trainer's words could easily accommodate them to the dominant discourses of economic 'restructuring' with which Australia and many other OECD countries have been preoccupied since the mid-1980s; some will undoubtedly recognise that Trainer is likely to be anticipating a very different type of 'restructuring' from that which might be indicated by the OECD's economic agenda. My concern here is that the extant (or remnant) *language* of 'global education', as promulgated by even its most critical practitioners, might be a little too hospitable to the new imperialism of economic globalisation.

These shifts and ambiguities in the meanings of key terms in debates about globalisation underscore the desirability of reading curriculum documents deconstructively, to deliberately foreground that which is disregarded or marginalised by the dominant cultural myths and narratives that these documents typically incorporate. Deconstruction invites us to find or invent ways to destabilise texts and curriculum inquiry as a deconstructive reading practice invites us to make curriculum documents 'behave' in unpredictable and complex ways – to make them yield unexpected conclusions by revealing their absurdities.

Speaking of absurdities, I would like to return briefly to the learning outcome in Victoria's CSF that expects year 7 and 8 students to be able to 'explain economic decisions made by governments'. Every time I have read this outcome statement aloud to audiences of educators they have roared with laughter. Yet I am sure that the authors of this outcome intended it to be taken seriously – a reading that is, indeed, plausible if the statement is understood in the context of the dominant cultural myth (or perhaps I should say a myth of the dominant culture) in which governments are assumed to make rational (and even, perhaps, wise) economic decisions. In this instance, a deconstructive curriculum worker might want to explore the implications of reading this statement in different ways. Treating this outcome as an absurdity is not only less hypocritical than encouraging students to learn the conventional textbook explanations of economic decisions made by governments but also opens up richer and more imaginative possibilities for teaching and learning.

By way of comparison, students in grades 7 and 8 in the state of Vermont, USA, are apparently not expected to find economic decisions made by governments to be explicable, since the one comparable reference in Vermont's *Framework* states that 'understanding how governments affect the flow of resources, goods, and services' is a standard that 'applies to grades 9-12 only' (State Board of Education Vermont, 1996a, p. 6.4). Achievement of this standard is assumed to be evident when students: 'Identify and analyze the meaning, uses, and effects of tariffs, free trade, boycotts, embargoes, currency, taxes, and monetary policies'. My disposition towards reading deconstructively leads me to ask what is being marginalised or disregarded by this standard, a question given added impetus by noting that this is the only entry under the heading of 'governments and resources' within the standards for economics – or what the Framework describes elsewhere as 'essential knowledge' and 'what students should *know*.... the most important and enduring ideas, issues, dilemmas, principles, and concepts from the disciplines' (p. i). Why, for example, is 'free trade' privileged as an important and enduring idea, rather than alternative concepts such as *fair trade*? Again, this standard might seem unexceptional if it is read as part of a dominant cultural narrative in which free trade and fair trade are assumed to be equivalent (since free trade seems fair to the dominant cultural interests it serves).

We could, however, make this standard 'behave' in a less predictable and more complex way if we juxtapose it with other standards elsewhere in the Vermont *Framework* (a strategy that is not necessarily encouraged by the document's design which privileges a traditional disciplinary categorisation of knowledge rather than interdisciplinarity). The 'governments and resources' standard is listed within the History and Social Sciences Standards. However, 'resources' are also mentioned in the Science, Mathematics, and Technology Standards, such as in a section on 'natural resources' (within the Design and Technology theme) and in the following grades 5-8 standard which appears in a section on 'theories, systems, and forces' (within the Universe, Earth, and the Environment theme):

Analyze and explain natural resource management and demonstrate an understanding of the ecological interactions and interdependence between humans and their resource demands on environmental systems (e.g., waste disposal, energy resources, recycling, pollution reduction) (p. 7.6).⁸

⁸ An identical statement appears for grades 9-12 with 'production, consumption' as the parenthetic examples.

What would it mean to develop a curriculum in which both this and the 'governments and resources' standard were mutually interreferenced rather than treated separately? I suggest that if this was done, it would quickly become apparent that 'the meaning, uses, and effects of... free trade' is a much more complex and problematic matter than it may appear at first sight. For example, under the terms of the Uruguay round of the General Agreement on Tariffs and Trade (GATT) in the early 1990s, which was enthusiastically supported by the Clinton administration, many of the USA's environmental laws – on emissions, recycling, waste reduction, toxic substances in packaging – can be challenged as barriers to free trade by nations with no comparable environmental legislation of their own. In other words, GATT's threat to consumer and environmental protections is part of the 'noise' around the concept of free trade that may be disregarded by treating it in conventional ways. Reading the concept of free trade in conjunction with natural resource management issues might help us to uncover that 'noise'.

This approach to reading curriculum documents could be facilitated by making them available in electronic (hypertextual) forms, so that they could literally be dismantled and/or rearranged, as well as being read deconstructively (in the sense of laying their structures bare). Because digitised information is easily edited into different forms, an electronic text is not bound by the linearity of conventional narrative forms. Hypertexts appear to encourage intertextual reading and multivocal writing – an observation that is consistent with claims that electronic writing technologies converge with or embody much poststructuralist literary theory.⁹ These claims should not, of course, be taken at face value, but I argue that, as curriculum documents increasingly are disseminated in electronic form, we need to understand just what is new and different about electronic authorship and readership, and to look more closely at the ways in which the networks of inscriptions that constitute electronic texts circulate within curriculum systems.

⁹ See Ilana Snyder (1996) for a useful summary of these arguments.

Globalising media technologies: an airport fiction¹⁰

Popular understandings of globalisation are replete with apparent contradictions, including a curious tolerance of – or indifference to – extravagant claims about its significance and consequences in various arenas of social life. On the one hand, as Henry and Taylor (1997) observe, 'there is a good deal of hype around the notion of globalisation' (p. 46), while on the other hand, as Malcolm Waters (1995) notes, '"globalization" is far less controversial than 'postmodernism'" (p. 1). I want now to examine a specific form of transnational imaginary that is routinely expressed in expectations about the transformative effects of globalising technologies on schools and their curricula. The critique of expectations requires a different methodology from the critique of historical legacies. As I argue in Chapter 1, our purposes in educational inquiry are sometimes better served by (re)presenting the texts we produce as deliberate fictions rather than as 'factual' narratives that 'reflect' educational phenomena and experiences. In this instance, I want to produce a text that *diffracts* some popular storylines.

I begin by juxtaposing two stories referring to new information technologies that were carried on the front page of *The Age*, Wednesday 27 November 1996 (see Figure 4). One of these stories, appropriately located on the far right (of the page), reports suggestions by Victoria's Minister for Education, Phil Gude, for a novel approach to streamlining the delivery of government schooling:

School hours may be cut

The State Government has begun a review of school education policy that could lead to children spending fewer hours in class and more time learning from home.

The Education Minister, Mr Phil Gude, yesterday flagged the new policy – tentatively called Schools of the Third Millennium – which will build on the Government's contentious Schools of the Future program.

... Mr Gude said the Government had begun examining what the next generation of schools required.

¹⁰ I wrote the first version of this 'airport fiction' for an invited address to the Victorian Association of Environmental Education's *Environmental Education Expo* held at La Trobe University, Bundoora, Victoria, on 1 December 1996. This was refined as part of a paper presented at a *Globalisation and Education* symposium organised by Queensland University of Technology, Brisbane, Queensland, 5 June 1997, which was eventually published in a special issue of the *Journal of Education Policy* on globalisation and education (Gough, 1999a). My fiction was an immediate response to events unfolding during the period in which Victoria was governed by a Liberal/National Party coalition under the premiership of Jeff Kennett. To retain this sense of immediacy – of writing from within the Kennett years (1992-1999) – I have not altered the tenses in this story. It is a 'period piece' and is best read as such.



FIGURE 4: Front page of *The Age*, Wednesday 27 November 1996

He singled out the impact of new technology which, he said, raised the question of whether children should spend as much time at school as they do now.

"When you get the interlinking capabilities between the home and the workplace – called the school – could there be more work done in a domestic arrangement?" he asked. "What impact will that have on the structures and the natures of the physical building of the school?"

As part of the work on the new policy, Mr Gude will call a meeting of architects and builders within the next few months to review the design of schools.

The item also reports that the Minister will soon travel to the US 'where he hopes to pick up ideas for the new policy' and, further, that the Education Department is looking at British examples of secondary schools which 'have a strong technology and business focus and have corporate sponsors'. In this item, which conjures up images of children wired to the World Wide Web through their home computers while the Minister shops for (duty free?) educational policies in the global marketplace, a transnational imaginary is clearly at work.¹¹

I can only admire the Minister's bravery (gall?) in titling a school education policy in a way that invites comparison with Colleen McCullough's (1985) novel, A Creed for the Third Millennium – for this is educational policy as airport fiction, cheerfully flaunting its cliche-ridden commercialism and superficiality, with formulaic phrases like 'new technology' and 'corporate sponsorship' pushing enough buttons to entertain (but not to tax, in any sense) the business class passengers who are the real constituency of Victoria's present government. No doubt the Minister's plan to call a meeting of architects and builders to review the design of schools will keep some of his customers satisfied, but can you imagine the response of architects and builders if the Minister for Planning and Development announced that he would kick-start a review of major infrastructure projects by calling a meeting of school teachers and other educators? Like the 'Schools of the Future' program that preceded it, we can expect a 'Schools of the Third Millennium' policy to use deceptively forward-looking language to dress up the Kennett government's preferred approach to managing public schooling. 'Schools of the Future' are nothing more than self-managing schools – an attempt to recreate in the government system the kind of competitive corporatism that has

¹¹ Six months later, another front page item in *The Age* (3 June 1997) indicated that the Minister had also shopped for educational policies in New Zealand, Singapore and Japan.

long been the norm for private schools. In other words, 'Schools of the Future' reflect the past practices of private education and the economic ideology of the present government. The phrase 'Schools of the Future' is a purely token gesture, using language which appears to herald a new and bold vision of education to disguise what is at heart a deeply conservative approach to public schooling. 'Schools of the Third Millennium' heralds a similarly retrogressive vision, with 'the impact of new technology' being used as yet another excuse to reduce the costs of public education. A deeply conservative approach to social policy also underlies any serious consideration of reducing the length of the school day. Who will supervise the work that the Minister expects to be done 'in a domestic arrangement'? Cutting school hours would seriously disrupt many families' domestic and income-producing activities - with the exception, of course, of another (local) imaginary: the virtually extinct traditional nuclear family in which one parent (usually male) 'works' and the other parent (usually female) undertakes 'home duties', which will henceforth include increased responsibility for children's compulsory schooling.

As I contemplated the Minister's vision of homes of the future, and of what might actually be achieved by students using 'the interlinking capabilities' provided by the new information technologies 'in a domestic arrangement', my attention was drawn to another item at the bottom left of the same page:

Woman wants to download baby

Sandy Indlekofer-O'Sullivan wants to have a baby through the Net.

While sex with the prospective father is fine, romance is not, the Wollongong business-woman declares on her Internet babies page appealing for a cyberspace father.

"I am simply wanting to have a child without being married," she says...

... Yesterday she said she had received about 100 insemination offers from as far apart as Sydney and the Netherlands.

She wants to meet the men first, but if all goes to plan the baby [will] arrive by late 1998.

Ms Indlekofer-O'Sullivan, who also makes a living setting up websites, said the Internet with its 120 million users seemed like a normal way to go about what she freely admits is not a normal process.

I am sure Phil Gude would have applauded Ms Indlekofer-O'Sullivan's marketing skills in placing a double column block advertisement for her website construction service on the front page of *The Age* at absolutely no cost to herself – another win for small business and free enterprise – and, as the Minister's pronouncements

demonstrate, you don't have to make sense to make news. These items have two things in common. First, both items point towards the changes that the new information technologies are making to what we now think of as 'natural' or 'normal'.¹² Secondly, both items perpetuate stereotypical expectations about what might actually be achieved by the convergence and proliferation of new information technologies. But whereas downloading a baby is an absurd exaggeration of what can be accomplished by information technology,¹³ cutting school hours has just enough plausibility to be taken seriously, despite the simplistic reasoning that connects new information technologies with a reduction in school hours. This is not to say that the Minister's suggestion is in itself 'nonsense' (as the Leader of the Opposition, John Brumby, is reported to have said in a follow-up news item on page 2 of The Age, Thursday 27 November 1996). I have no objection to Phil Gude raising questions about the impact of changing media technologies on 'the structures and the natures' of school buildings, but I seriously question his premature foreclosure on the purposes and functions of schooling as a *social institution* by treating it as just another 'workplace', and his attempt to short circuit the types of social, cultural and educational inquiries that these questions warrant by first seeking responses from architects and builders.

Why should *this particular* 'revolution' in media technologies be expected to transform schooling when previous communications revolutions have not? The modern school is, both culturally and materially, an enduring monument to a print dominated culture. But although the domination of print has been eroded by a succession of electrical and electronic media technologies that have resulted in massive social and cultural change, these have resulted in only superficial modifications to the ways schools are built, organised, and operated. Our social relations and cultural values have been irreversibly transformed by the telegraph,

¹² There is a particularly interesting reversal of current expectations in Ms Indlekofer-O'Sullivan's characterisation of her public appeal to 120 million internet users to satisfy her maternal yearnings as 'a normal way to go about what she freely admits is not a normal process'. I would have thought that using the internet as a global do-it-yourself introduction agency was not yet a 'normal' way to go about the entirely normal/natural process of finding a sexual partner for procreational – or, for that matter, recreational – purposes which, advances in teledildonics notwithstanding, still require partners to be in the same locality. I very much doubt that these are the kinds of 'interlinking capabilities' that Phil Gude had in mind.

¹³ Internet delivery hardware does not yet have sufficient bandwidth to download a virtual reality game, let alone a baby.

the telephone, broadcast radio, the cinema, and especially by television. None of these, not even television, has changed the institutions of schooling to anything like the extent that each has changed society at large. In 1960 Marshall McLuhan wrote a short essay titled 'Classroom without walls' which described succinctly and persuasively why and how teaching and learning in schools should change in relation to the pervasive effects of mass televisual media. McLuhan's (1960) critique of print dominated schooling has gained considerably in its forcefulness during the past decades, not only because the effects he described have intensified and accelerated, but also because they have been extended and diversified by the convergence of broadcasting, computing and telecommunications.¹⁴

We are no longer a print dominated culture and have not been for many years. We have been a television dominated culture for more than a generation, but when politicians bemoan the alleged decline in literacy standards, it is still only print literacy they are talking about, rather than the dispositions and skills needed for effective participation in the electronic culture of McLuhan's global village, in which 'entire societies inter-communicate by a sort of "macroscopic gesticulation" (McLuhan & Fiore, 1967, p. 17). Nevertheless, McKenzie Wark (1994c) provides a plausible reason for anticipating that computers might transform schooling in ways that television has not:

We like to think we are a print dominated culture because there is a class issue attached to these two media. Watching too much TV equals 'you're gonna screw your life up kid', equals 'you're not gonna make it into the middle class', equals 'you're a loser!' Learning to read and write equals 'you're going to make it into the middle class' equals 'you might get a job as opposed to you will' equals 'that's good, that's fine, that's okay'. So television is bad, video in the schools is bad. However there's a real kink in the way this is happening which occurs in the way people think about computers. Computers occupy that space that writing used to occupy in the fear and anxiety about the middle class skills equals good equals 'let's get them into the schools right now!' We never even got the last generation of media technology properly into the schools, we are not educating anyone really on how we use our time, but we're going to get this new technology in there because you can attach the idea of the computer to the idea of work, to middle class values (p. 47).

¹⁴ Steven Shaviro (1997) is, I believe, entirely justified in asserting that Marshall McLuhan and Andy Warhol are 'the most significant North American theorists of postmodernism, even if neither of them used the term' (p. vii).

But in Victoria we now have the Phil Gude manoeuvre which goes something like this: yes, computers equals work equals middle class skills equals good equals 'let's get them into schools', *but* that's going to be way too expensive, so let's get computers into homes rather than schools – at parents' expense, of course – and, so long as they are 'interlinked' with what's left of the schools, we can call what kids do at home 'school work'. And if only we really could download babies from the internet, we could close a few more hospitals too.

Sustaining instability

In this chapter I have suggested that both the history of global perspectives in curriculum and the anticipated impacts of new information technologies can be understood as forms of 'noise' disrupting and complicating attempts to locate a transnational imaginary in curriculum work, but in identifying them as such I am not suggesting that they should be 'controlled' or suppressed. These 'noises' are just as much an expression of a transnational imaginary as are the national and state curriculum policy instruments that are intended to better position Australian education in the global marketplace. But we need to know more about how these complicating discourses – whether they be history or hype – interact, shape one another, and shape school curricula.

In drawing towards some sort of closure to this chapter, it might suffice to say that curriculum inquiry advances by perturbations – by being challenged to respond to new problems and research questions. I have focused here on emergent phenomena – on the ways in which the transnational imaginary of cultural globalisation is *simultaneously* represented in curriculum policies and school programs, expressed by teachers and students, circulated in popular media, and deployed in the construction of school knowledges – and I suspect that the concepts and methods that will be most generative in advancing inquiries around this imaginary are more likely to emerge from a state of disequilibrium rather than stability. This essay is, therefore, a small contribution to sustaining instability in the conceptual and methodological landscape of curriculum inquiry.

Chapter 8

Relocating curriculum studies in the global village

This chapter continues the explorations of globalisation and curriculum inquiry I began in Chapter 7, but it was also written for the *Journal of Curriculum Studies* – and expressly for 'A Special Issue to Mark the Millennium'. The brief to which I was invited to write this contribution was simply to provide a forward-looking perspective on curriculum studies in a global environment.

Friday 2 July 1999: an encounter with broadsheet globalism

On Friday 2 July 1999, my daily newspaper of choice, *The Age*, announced that 'a special *Age* series on globalisation' would begin on the following Monday. The editorial content of this announcement did not surprise me, but some of the specific ways in which it was presented struck me as being pertinent to the issues that I was intending to explore here concerning the relationships of internationalisation, globalisation and curriculum work. In particular, the presentation of the announcement focused my attention on questions about the significance of *location* – and of the sense in which we understand people and knowledges to be located somewhere (rather than everywhere or anywhere) – in our work as curriculum scholars.

Apart from identifying itself as an '*Age* series', the announcement lacked almost any reference to the locality in which the series was to be published and in which the vast majority of the newspaper's readers are located, namely, Melbourne, Australia. The series title, 'One world, ready or not?', appears to have been appropriated (without acknowledgment) from elsewhere, namely a book of the same title by the US author William Greider (1997). The logo for the series (see Figure 5) was an appropriation of a different sort. The main graphic element is a globe viewed from a position above the equatorial plane with Australia at bottom centre (Australia's central – albeit subsidiary – position in this image is the only clue to location other than the newspaper's name). Europe, Asia and North America are clearly visible in this northern hemispheric perspective on the world, while the east coast of Africa is just discernible and South America and Antarctica are out of sight (one reading of this image is that the question of being 'ready or not' to belong to 'one world' is most pertinent to nations that are visible from this standpoint). The logo is completed by a narrow ribbon that initially traces a low orbital path across the face of the globe, appearing from behind the earth north-west of the equator in a trajectory angled slightly southwards so that it crosses southern India, and the islands to Australia's north, before disappearing behind the globe in the eastern Pacific region. The ribbon reappears at lower left, beneath what can be seen of southern Africa, but breaks out of orbit at this point, moving further to the left and down, then curling back to the right to traverse a horizontal path above the words 'One world, ready or not?' and going a little beyond them, before curling down again and left towards the title's question mark.

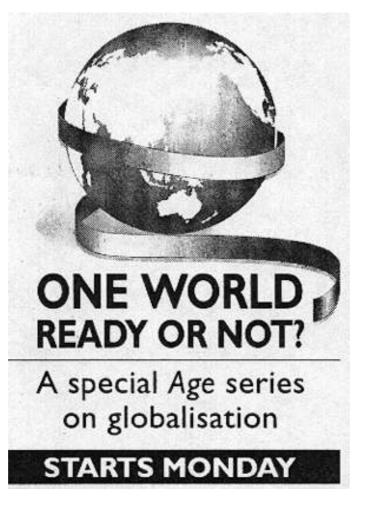


FIGURE 5: Illustration from *The Age* (Melbourne, Friday 2 July 1999, p. 17)

The ribbon's path can, of course, be traced in reverse, and thus is emblematic of the flexible and multidimensional globalism currently projected by many transnational corporations. In other words, this series of newspaper articles is 'branded' by an image that emulates the graphic design of contemporary corporate logos, which can themselves be interpreted as elements of a short visual history of globalisation. As Andrew Ross (1998) points out, the historical progression of corporate logo design has

moved away from the typographic solidity of block capitals, in the age of incorporation and national capitalism, to the celebration of speed and mobility suggested by sans serif lettering at the dawn of postindustrialism, and finally to the widespread use of globes and orbital pathways in the logos of today's age of transnationalism (p. 29).

A second aspect of the announcement that reinforced its dislocation from the site in which it was produced was that it was not written by a member of The Age's editorial staff or a local journalist but was extracted from a book, The Lexus and the Olive Tree, by the foreign affairs correspondent for The New York Times, Thomas L. Friedman (1999a). Although I did not doubt that the subsequent inclusion of articles by journalists from other countries would be appropriate in such a series, I expected an announcement of 'a special Age series on globalisation' to specify the relevance of such a series to Australian readers and to the phenomenal world(s) they inhabit. But Friedman's (1999b) article, subtitled 'America's defining challenge is to prevent globalisation from becoming a monster', makes no attempt to do this even from the standpoint of US triumphalism that appears to mark his book. For example, in The Age's excerpt, he is forthright in asserting that 'sustaining globalisation is America's overarching national interest', and that the US is 'the country that benefits most from global economic integration', but offers no evidence or argument for other countries sharing such benefits or interests.

Friedman's article recycles many familiar but extravagant claims about the significance of globalisation and its consequences in various arenas of social life, which he embellishes with metaphorical exaggerations of the differences between 'the new international system called globalisation' and the 'Cold War system' that it replaces. For example, 'The symbol of the Cold War system was a wall, which divided everyone. The symbol of the globalisation system is the World Wide

Web, which unites everyone'. In both uses of the term, 'everyone' is a monumental overstatement. There are several more of these glib contrasts, such as 'The defining document of the Cold War system was The Treaty. The defining document of the globalisation system is The Deal'. But, curiously, Friedman's efforts to distinguish sharply between the two systems are subverted by the article's main title: 'Our world confronts new rules of engagement'. Surely militaristic terms such as 'confronts' and 'rules of engagement' are relics of the Cold War era? Similarly, Friedman's constant resort to binary oppositions perpetuates the us-versus-them reasoning of Cold War politics and seems an inappropriately modernist register of difference in a postmodernist era of multiple and shifting perspectives and positions. In this sense, Friedman's article seems not only to be out of place but also, as it were, out of time.

Finally, so that readers might better understand the positions from which most of the above thoughts were generated, I should point out that on Friday 2 July 1999 I was not reading *The Age* as a newsprint broadsheet at home in Melbourne, Australia, but was visiting its website via a computer terminal in Durban, South Africa. My use of the plural *positions* here is deliberate, because reading the series announcement on the internet focussed my attention on the ways in which this medium multiplies, and simultaneously destabilises, the standpoints available to us. As McKenzie Wark (1994b) writes:

We live every day in a familiar terrain: the place where we sleep, the place where we work, the place where we hang out when not working or sleeping. From these places we acquire a geography of experience.

We live every day also in another terrain, equally familiar: the terrain created by the television, the telephone, the telecommunications networks crisscrossing the globe. This is our 'virtual geography,' the experience of which doubles, troubles, and generally permeates our experience of the space we experience firsthand (p. vii).

In this instance, I was reminded that I still call Melbourne home and that this was the place where my hard copy of *The Age* would have been delivered to my door several hours previously (this sense of local positioning was not diminished by my temporary absence – if anything it was reinforced by Australia's emphatic presence at bottom centre of the globe in the logo). I was also reminded that the place in which I was then located was literally and figuratively marginalised within the worldview represented in the series announcement (Durban is on the east coast of South Africa and its position was thus barely visible on the logo's globe). But both of these senses of local positioning were destabilised by the very act of accessing the internet – a medium whose potential and implicit audience is international. I *could* have been *anywhere* – and so could *The Age* in its internet form. My experience thus seemed to exemplify the ways in which the 'virtual geography' of global media networks might be reshaping our sense of place, a transition that is captured by Wark's (1994: xiv) aphorisms: 'We no longer have roots, we have aerials... We no longer have origins, we have terminals'.

I must note in passing that my 'roots' and 'origins' also were dislocated in a more trivial way on my flight to South Africa. My preferred airline had joined an alliance with four other international carriers, and I was no longer welcomed on board as a 'Qantas frequent flyer' but as a 'oneworld[™]customer'. To suggest that a transnational alliance of airlines based in five locations (Australia, Britain, Canada, Hong Kong and the USA) can be identified with the whole world (as 'oneworld' implies) is an exaggeration similar to Friedman's assertion, quoted above, that 'the World Wide Web... unites everyone'.

My concern as a curriculum scholar is that such versions, visions and manifestations of globalisation invite us to tolerate a type of relativism in which *location* – in all of its moral, metaphorical, mythic and material senses – is undervalued. Despite accusations to the contrary, many (and perhaps most) of us who have taken what are sometimes called postmodernist and/or poststructuralist 'turns' in our scholarly work are as deeply suspicious of relativism as we are of the universalising and totalising claims that are made in the name of modernist science. I prefer to follow feminist scholars like Donna Haraway (1991c) and Sandra Harding (1993) who use the vocabularies and repertoires of poststructuralism and deconstruction in the service of 'situated knowledges' that deliberately and responsibly privilege our partial perspectives – who we are and where we stand. As Haraway (1991) writes:

Relativism is a way of being nowhere while claiming to be everywhere equally. The 'equality' of positioning is a denial of responsibility and critical enquiry. Relativism is the perfect mirror twin of totalization in the ideologies of objectivity; both deny the stakes in location, embodiment, and partial perspective... Relativism and totalization are both 'god-tricks' promising vision from everywhere and nowhere equally (p. 191). Perhaps globalisation, too, is another 'god-trick', a transcendental ontological and epistemological fantasy of being and knowing 'everywhere and nowhere equally'? Certainly, there is something about the revelatory fervour of globalists like Friedman (1999b), who envision globalisation as 'the real bridge to the future' – which, of course, 'the US will own' (p. 17) – that reminds me of the rhetorical strategies deployed by millenarian cults. This is not to suggest that globalisation is itself a product of millenarianism, but we nevertheless need to be alert to the possibility that its popularisation at the time when one millennium closes and the next begins may add at least a little to its present momentum.

Globalisation, the global village, and other transnational imaginaries

Subsequent instalments of the Age series on globalisation included several articles that were more sceptical, more critical, and more concerned with local expressions and manifestations of globalism than the initial announcement led me to expect. For example, in 'Beware the global tide', Geoffrey Blainey (1999) invited suspicion of both the novelty and 'inevitability' of globalisation by situating Australia's transnational economic exchanges in a longer term history that predates the spread of global capital. In 'We eat what we want, shame about the taste', Rachel Gibson (1999) reported on the domination of Australia's food industry by transnational corporations. Tom Morton (1999) examined how globalisation 'affects you and your family' in an item titled 'The politics of home'. In 'The vacuum at the heart of the new world order', Larry Elliott (1999) argued that 'the poor will miss out until social protection is built into economic integration'. Finally, in 'The globalisation of sex', Dennis Altman (1999) suggested that 'sexuality is likely to be the battleground of the new world order'. In these articles, the subject-matter of globalisation is translated into a language of practical deliberation rather than theoretic speculation and, contrary to Friedman's assertion, the *real* 'bridge to the future' is assumed not to be constructed from abstractions such as globalisation but, rather, from the deliberate choices, decisions and actions we make in more mundane matters, such as those concerned with food, family, social security and sex.

Thus, in addition to being grounded in questions of local and material relevance, these subsequent articles in the *Age* series demonstrated a heightened

public awareness of the future (or futures) that can be generated by issues such as globalisation being swept to attention as part of the more general rush of millennial hopes and fears. As I have argued elsewhere (Gough, 1990a), futures in education and other sites of public debate are frequently little more than 'tacit, token and taken for granted' assumptions and ideas, and I thus welcome any stimulus to making them more explicit and available to critical scrutiny and practical deliberation. Putting a similar point more forcefully, J.G. Ballard (1984/1982) lamented that at some point in the 1960s our 'sense of the future seemed to atrophy and die' (p. 4) and looked to the imminence of the third millennium to reawaken our interest in it.

Ballard might be right because, as historian I.F. Clarke (1979; 1992) points out, the high expectations held for the future at the beginning of the twentieth century were dashed in its first half by two world wars and the economic recession that came between them. After a brief period of technological optimism in the 1950s, the nuclear arms race generated further fearful images of the future, supplemented in the 1960s by the threats of ecological catastrophe rehearsed in books like Rachel Carson's (1962) Silent Spring. However, although fears of environmental and nuclear apocalypse seem to have receded in recent years, the cultural transformations anticipated by Marshall McLuhan's coinage of the term 'global village' in the 1960s have intensified and accelerated as the convergence of broadcasting, computing and telecommunications media has extended and diversified the materials and means through which humans act and interact. Contrary to some recent interpretations of McLuhan's ideas by evangelists of cyberspace - Wark (1999) notes his adoption as 'a patron saint' by Wired, a California cyberculture magazine – the global village is not a utopian world of peace and harmony. Rather, McLuhan imagined broadcast media as breaking down print culture's privileging of abstract thinking and specialisation, impelling us toward a 'retribalised' world of conflicting identities. The Balkan wars, as both bloody tribal conflicts and spectacular media events saturating the world's electronic information networks, may constitute more convincing evidence of McLuhan's global village than the universal collective consciousness that some cybercultists believe to be immanent in the internet.

Whether or not the world's electronic information environment constitutes McLuhan's global village, its materialisation has made the integration of national and regional economies into one global marketplace look like an achievable goal (though not necessarily desirable; McLuhan himself abhorred economic rationalism). In an era of palmtop computers and satellite phones, processing European airline bookings in Bangalore, India, can plausibly be justified as commercial 'best practice' rather than as a bizarre manifestation of what Greider (1997) calls the 'manic logic' of the pan-capitalist finance games played by transnational corporations.

Ideas like McLuhan's global village, together with 'globalisation', 'internationalisation', and related cliches such as 'one world' and 'a shrinking world', are examples of those traces of internationalisation and globalisation that I call transnational imaginaries. As noted in Chapter 7, curriculum inquiry is one form of contemporary cultural production through which transnational imaginaries may be expressed and negotiated. For example, the current guide for authors intending to submit manuscripts to the *Journal of Curriculum Studies* includes the following advice:

All authors are asked to take account of the diverse audience of *Journal of Curriculum Studies*. Clearly explain or avoid the use of terms that might be meaningful only to a local or national audience. However, note also that *Journal of Curriculum Studies* does not aspire to be international in the ways that McDonald's restaurants or Hilton Hotels are 'international'; we much prefer papers that, where appropriate, reflect the particularities of each higher education system.¹

This advice expresses a view of global/local relations that seems to resist 'globalisation' – (understood as economic integration achieved through 'free trade' in a deregulated global marketplace) while affirming 'internationalism' (in the sense of promoting global peace, social justice and well-being through intergovernmental cooperation and transnational social movements, agencies, and communities, such as the international community of curriculum scholars that produces and reads *JCS*). In the next section of this chapter I want to refine and amplify some of the tacit assumptions underlying this advice to authors, by considering some ways in which diverse local knowledge traditions – as might still be represented in at least some local and national curriculum policies and syllabuses, as well as in some 'indigenous' approaches to curriculum studies *per*

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http://faculty.ed.uiuc.edu/westbury/JCS/editors/JCSSTYL.HTM

se – can be sustained and amplified transnationally while resisting the forms of cultural homogenisation for which McDonalds and Hilton Hotels are emblematic.

Globalising local knowledge traditions

The literatures that I find most useful in thinking about globalisation and internationalisation in relation to local knowledge production are, broadly speaking, those that Harding (1998) calls Post-Kuhnian and postcolonial science and technology studies, and in particular the work of David Turnbull (1994; 1997; 2000). From similar postcolonialist and anti-imperialist standpoints, Harding and Turnbull take the view that all knowledges are always situated and constituted initially within specific sets of local conditions and cultural values. However, there are subtle and thought-provoking differences in their respective positions. Put crudely, Harding seems more interested in the universalising tendencies that accompany the 'travel' of knowledges beyond the localities in which they were initially produced, whereas Turnbull is more concerned with how trust is established between heterogeneous knowledges that 'arrive' (or are produced) in the same space. For example, after reviewing the various implications of postcolonialist and feminist science and technology studies for research epistemologies and methodologies, Harding (1998b) argues that the distinction between 'universally valid knowledge' and 'merely local opinion' (e.g. superstitions, folk knowledges) is much less useful than older epistemologies supposed:

If, as the post-Kuhnian, postcolonial and feminist accounts argue, all knowledge systems have integrity with the cultures that produce them and continue to find them useful, then nothing in principle is possible but local opinion – though some local opinions (e.g., the laws of gravity) definitely travel farther and retain usefulness longer than do others. (...) More productive is the project of seeking to understand the devices through which originally local knowledges (as all are) get to circulate and travel far from their origin, and how the most effective balances between these universalising tendencies and the necessary localising tendencies have been and can be nourished and maintained (p. 46).

Elsewhere, Harding (1998a) again uses travel metaphors to capture her sense of the ways in which 'different modern scientific projects have maintained valuable tensions between the local and the global':

the most widely successful [knowledge systems], such as many parts of modern sciences, manage to travel effectively to become useful in other sets of local conditions – parts of nature, interests, discursive resources, ways of organizing the production of knowledge – that are different in significant respects from those that originally produced them. Without claiming a universality for them that we can now see is historically and conceptually misleading, how could we usefully think about valuable tensions between the local and this movability, or ability to travel, that has characterized parts of modern sciences in particular, but also parts of other knowledge systems (e.g., the concept zero and acupuncture)? (p. 182)

Harding's questions can equally well be directed to issues of curriculum dissemination of all kinds, whether this be the use of US computer software in Australian schools or Australian schools teaching the International Baccalaureate of Education to Asian students. However, Turnbull detaches a knowledge tradition's 'ability to travel' from any assumptions about its supposed 'universalising tendencies', preferring instead to find ways in which different knowledge systems can coexist. Turnbull argues that all knowledge traditions are spatial in that they link people, sites and skills. His approach is thus to recognise knowledge systems (including Western science) as sets of local practices so that it becomes possible to 'decentre' them and develop a framework within which different knowledge traditions can equitably be compared rather than absorbed into an imperialist archive. An important aspect of Turnbull's (1997) strategy is to abandon an 'overly representational view of knowledge' in favour of recognising that all knowledge is 'both performative and representational' (p. 553). In other words, Turnbull is less interested in characterising science's 'ability to travel' by reference to the movement of its representations and abstractions (such as 'the laws of gravity' or 'the concept zero' to which Harding refers) and more concerned with the *activity* of knowledge production in particular social spaces. Thus, Turnbull (1997) argues that we can reconceive the social history of knowledge production 'in a variety of intersecting and overlapping ways which move beyond simple contextualisation':

Science may be seen as a history of visualisation or as a history of measurement and rational calculation. However, I would like to argue that a particularly perspicuous cross-cultural history of knowledge production is as a social history of space. That is as a history of the contingent processes of making assemblages and linkages, of creating spaces in which knowledge is possible (p. 553).

Using such diverse examples as the building of Gothic cathedrals in medieval Europe, the Polynesian colonisation of the Pacific islands, the establishment of modern cartography, and rice farming in Indonesia, Turnbull shows how particular knowledge spaces can be constructed from differing social, moral and technical components in a variety of cultural and historical contexts – or, following Deleuze and Guattari (1987), an 'assemblage' of people, skills, local knowledge and equipment linked by various social strategies and technical devices. Turnbull (1997) suggests that from such a 'spatialised' perspective, concepts such as universality, objectivity, rationality, efficacy and accumulation 'cease to be unique and special characteristics of technoscientific knowledge':

rather these traits are effects of collective work of the knowledge producers in a given knowledge space. To move knowledge from the local site and moment of its production and application to other places and times, knowledge producers deploy a variety of social strategies and technical devices for creating the equivalences and connections between otherwise heterogeneous and isolated knowledges. The standardisation and homogenisation required for knowledge to be accumulated and rendered truthlike is achieved through social methods of organising the production, transmission and utilisation of knowledge. An essential component is the social organisation of trust (p. 553).

Turnbull here echoes Steven Shapin (1994) who argues in his social history of science in 17th century England that the basis of knowledge is not empirical verification (as the orthodox view of 'scientific method' has it) but trust: 'Mundane reason is the space across which trust plays. It provides a set of presuppositions about self, others, and the world which embed trust and which permit both consensus and civil dissensus to occur' (p. 36). In a gesture towards Bruno Latour's (1987, 1991) 'actor network theory', Turnbull (1997) also suggests that the linking of heterogeneous components of a knowledge system is achieved by both social strategies and 'technical devices which may include maps, templates, diagrams and drawings, but are typically techniques for spatial visualisation' (p. 553).

Turnbull (1997) argues that a major analytic advantage of this spatialised perspective is that, because all knowledge systems have localness in common, many of the small but significant differences between them can be explained in terms of the different kinds of work – of *performance* – that are involved in constructing 'assemblages' from the people, practices, theories and instruments in a given space. While some knowledge traditions move and assemble their products through art, ceremony and ritual, the productivity of Western science has so far been accomplished by forming disciplinary societies, building instruments, standardising techniques and writing articles. Turnbull (1997) thus concludes that each form of knowledge production entails 'a process of knowledge assembly through making connections and negotiating equivalences between the heterogeneous components while simultaneously establishing a social order of trust and authority resulting in a knowledge space' (p. 553). These performances provide a basis for comparing and framing knowledge traditions.

This is not the place to explore Turnbull's specific examples in detail but his analysis demonstrates that the achievements of Gothic cathedral building, Polynesian navigation, modern cartography, Indonesian rice farming *and* modern (Western) science are, in each case, better understood performatively – as diverse combinations of social and technical practices – than as results of any internal epistemological features to which 'universal' validity can be ascribed. As already noted, the purpose of Turnbull's emphasis on analysing knowledge systems comparatively in terms of spatiality and performance is to find ways in which diverse knowledge traditions can coexist rather than one displacing others. He argues that nourishing such diversity is dependent on the creation of 'a third space, an interstitial space' in which local knowledge traditions can be 'reframed, decentred and the social organisation of trust can be negotiated'. The production of such a space is, in Turnbull's (1991) view, 'crucially dependent' on 'the reinclusion of the performative side of knowledge':

Knowledge, in so far as it is portrayed as essentially a form of representation, will tend towards universal homogenous information at the expense of local knowledge traditions. If knowledge is recognised as both representational and performative it will be possible to create a space in which knowledge traditions can be performed together (pp. 560-1).

Turnbull is suspicious of importing and exporting representations that are disconnected from the performative work that was needed to generate them. For example, when I began working as a teacher educator in Australia in the early 1970s, much of the 'curriculum theory' we taught at that time was imported from the USA. It included an emphasis on behavioural objectives for instruction and their classification by reference to Benjamin Bloom's taxonomy of educational

objectives. Many of my colleagues and students were mystified by the hyperrationality of planning curriculum by reference to a register of behavioural objectives which, in retrospect, might be explained by our lack of a 'performative history' of objectives-based curriculum work. We had not experienced working with objectives as US teachers had, first in the 1920s (in the wake of Franklin Bobbitt's work) and, later, in the 1950s (under the influence of the Tyler rationale). Nevertheless, many Australian teacher educators accepted the Tyler rationale, behavioural objectives, and Bloom's taxonomy as representations of a universal rationality. They persevered in 'performing' them, despite being received with bemused incredulity by many students and classroom teachers, who interpreted the teacher educators' persistence as further evidence of the chasm between 'theory' and 'practice'.

Internationalising curriculum studies: performing transnational imaginaries in a global village

Turnbull's analysis suggests to me that emphasising the performative rather than the representational aspects of curriculum inquiry might facilitate resistance to the homogenising effects of globalisation and internationalisation in the field of curriculum studies. The 'internationalisation' of curriculum studies might then be understood not so much in terms of translating local representations of curriculum into a universalised discourse but, rather, as a process of creating transnational spaces in which local knowledge traditions in curriculum inquiry can be performed together.

It can be argued that international journals, through their social and technical protocols, traditions and conventions, should more deliberately and reflexively aspire to be transnational performative spaces of this kind. However, the implications of emphasising spatiality and performance in curriculum inquiry extend well beyond the practices of scholarly journalism. Indeed, the need for vigorously and rigorously recuperating local knowledge systems, in both their performative and representational idioms, has been amplified for me by some recent experiences of doing curriculum work in southern Africa. Here many local knowledge traditions have been rendered invisible by the effects of universalising imperialist discourses and practices. For example, in countries such as Zimbabwe and Malawi, the concept of a 'good education' for the vast majority of African

students, most of whom live in rural subsistence settlements, is equated with *failing* Cambridge University O-level examinations in English. The absurdity of this situation to Western eyes is captured by Doris Lessing's (1992) recollections of visiting a rural school in Zimbabwe in 1988 during which one member of her party lamented the country's unserviceable infrastructure and the lack of people skilled in – or being trained to be skilled in – mending broken valves, taps or pipes:

'The trouble is that all these poor bloody kids, in all the schools of Zimbabwe, have decided that only a literary education is worth having. Where do you find the ultimate bastion of respect for the Humanities? Not in Thatcher's Britain! No, in the bush, where generations of black kids have decided they are too good to be engineers and electricians, and are taking O-levels in English which they mostly fail...

'I was in an office in Harare. An American Aid worker was arguing that the education being given to the children was inappropriate, what was the point of teaching them the British syllabus, with books suitable for Europe? What was needed was a good basic technical education. A black woman who was waiting her turn turned furiously on her. She said, "I see you whites are still just the same. You don't want our children to have a real education. Oh no, that's for your children. We want a good education for our children, just the same as yours" (pp. 200-1).

Thinking about this incident in terms of represented and performed curriculum is illuminating. The apparent point of disagreement between the American Aid worker and the black woman is that the curriculum in question, 'the British syllabus, with books suitable for Europe', represents 'a real education... a good education' in *both* Western and Zimbabwean contexts for the black woman. But it is 'good' in only one context (Western) for the American Aid worker. We could also say that the black woman imagines 'a good education' transnationally whereas the American Aid worker is imagining it locally. Many of us might want to argue that the represented curriculum was as 'inappropriate' in Thatcher's Britain as it still is in Mugabe's Zimbabwe. But both women might be able to agree that this British syllabus produces, in Turnbull's terms, a performative 'equivalence', especially if it can be shown that (say) exhibiting perfect recall of the key events and protagonists in the English Reformation is as necessary a condition for winning the class struggle in postcolonial Zimbabwe as it is in postindustrial Britain. As Lessing (1992) writes, 'In Zimbabwe today [1988] you need five [O-level] passes to get a job. With three you can train to be a nurse' (p.

212). A key curriculum problem here is the instrumental role of a curriculum in effecting social stratification, a problem which may be obscured by focusing on issues of superficial 'appropriateness' or 'relevance'. If the performative function of the curriculum is, in effect, to make both black kids and white kids jump through white hoops, merely painting one set of hoops black does not resolve the problem (if we persist with this metaphor, we also need to ask: who is doing the painting and with what authority?).

One of the questions raised by Lessing's vignette is: who is deploying a transnational imaginary here? Stereotypically we might expect the American Aid worker to have a more 'global' or 'international' perspective, but it is the black woman who seems to be assuming (or desiring) English O-levels to be part of the global economy of 'a good education' and the American Aid worker who wants to privilege (or 'protect' in economic terms) local knowledge. The difficulty I perceive for the field of curriculum studies is that I suspect that our intellectual resources are presently geared towards defending the American Aid worker's position rather than responding constructively and, in a literal sense, *hopefully* to the black woman.

The internationalisation of curriculum studies demands more ingenuity, artistry and diplomacy of curriculum scholars than simply fixing the commercial exchange value of Cambridge O-levels – or Silicon Valley software – in a global economy of knowledge. The world is not yet so 'small' that we can equate local knowledges with those that pretend to be 'universal', and the global marketplace is only one location for curriculum deliberation within the global village of our imaginations.

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Chapter 9

Learning from *Disgrace*: a troubling narrative for South African curriculum work

Preamble: why I (almost) ignore outcomes-based education

When the editors of the South African journal Perspectives in Education invited me to contribute an article to a special issue on curriculum, my first impulse was to write an essay in which the words 'outcomes-based education' (and its now familiar acronym, 'OBE') would not appear. However, upon reflection, I decided that I would prefer not to risk readers interpreting my silence on what Jonathan Jansen (1999) calls 'the single most important curriculum controversy in the history of South African education' (p. 3) as either ignorance or antipathy. I share Jansen's (1998) scepticism about the merits of OBE as a guiding philosophy for curriculum reform, but I also recognise that politicians and administrators have legitimate reasons for attempting to encapsulate their policy initiatives in the types of procedural theories and rhetorics that OBE appears to provide. I neither hope nor predict that OBE will fail to facilitate desirable curriculum change, but I am troubled by the tendency for debates about curriculum transformation in South Africa to be coterminous with debates about the virtues and vices of OBE. There is much more to curriculum work than can be signified by reference to outcomes, competencies, standards, range statements, bands, phases, and the myriad other terms that now constitute the familiar slogan system of OBE in South Africa. The language of OBE draws attention to the instrumental functions of curriculum and limits the meanings available to curriculum deliberation to those that can be constructed with its procedural concepts.

In this chapter, as in those which precede it, I privilege autobiography, a work of fiction, and other narrative referents for curriculum inquiry, which dispose me to attend rather more to the cultural determinants of a curriculum than to its anticipated behavioural outcomes. Thus, if I pay scant attention to OBE in what follows, it is not so much because I wish to diminish the significance of educational outcomes in South African curriculum reform but, rather, because the language of curriculum inquiry that I will deploy is more hospitable to exploring other (and, I would argue, no less important) aspects of curriculum work.

Literature, culture, curriculum: a personal reflection

The impetus for this essay arose from a missed celebration. Sunday 4 September 1999 was Fathers' Day in Australia, but my commitments to an institutional links project funded by the Australian federal government during 1998 and 1999 required that I begin a period of work in South Africa (my fourth in 15 months) on 3 September. My children gave me two books to read on the plane as an early Fathers' Day gift – a South African novel for the forward journey, and an Australian one for my return. The South African novel was J.M. Coetzee's (1999) Disgrace, which coincidentally is set chiefly in Cape Town and near Grahamstown, the two places in which I was to spend most of my time on this particular visit. I would have read *Disgrace* eventually – especially since it won Britain's most prestigious literary award, the Booker Prize, two months later – but the specific circumstances in which I first read Coetzee's novel undoubtedly heightened my appreciation of both its moral and literary qualities. Thomas Barone (1992a) quotes the novelist Robert Stone as remarking that, 'in the absence of honest storytelling, people are abandoned to the beating of their own hearts' (p. 142). *Disgrace* is an uncompromisingly honest story and, although my experiential knowledge of the novel's sociopolitical milieu was relatively superficial at the time I first read it, I have no doubt that it allowed me to feel the beating (and aching) of other human hearts.

I read novels not only for personal satisfaction but also because I respect the embodied and embedded cultural knowledge they bring to my professional attention. Like Madeleine Grumet (1999/1989) I understand culture to be 'a system of meanings available to actors situated in shared space, time, history, and possibility' (p. 233) and, since curriculum is both a product and a (re)producer of culture, I see South African literature as constituting a significant discourse for curriculum inquiry. Certainly, as a non-resident curriculum scholar, a novel such as *Disgrace* provided me with one way to learn more about the 'system of meanings' available to my South African colleagues on an everyday basis. The literary sources of much that I have learned about South African society and culture to date include established authors like Coetzee – Breyten Breytenbach,

André Brink, Michael Cope, Athol Fugard, Nadine Gordimer, Bessie Head, Christopher Hope, Alex La Guma, Anne Landsman, Miriam Tlali, and Etienne Van Heerden among others – as well as newer and/or younger writers such as those represented in anthologies compiled by Ted Leggett (1998) and Linda Rode and her colleagues (see, for example, Rode & Bodenstein, 1996; 1998; 2000; Rode & Gerwel, 1995; 2001).

I use *Disgrace* as a point of departure for rethinking the meanings made available to South African children in their 'shared space, time, history, and possibility'. Of course, I interpret the world Coetzee creates from the standpoint of my own, which means that my reading constitutes a recontextualisation of his story. That is, in writing Disgrace, Coetzee has abstracted phenomena from domains of everyday perception and experience that are familiar to most South Africans - such as the contested relationships between races, sexes and socioeconomic classes, the difficulties of (re)distributing land and other resources in socially just ways, and the pervasiveness of violent crime – and built a fictional discourse around them. My reading recontextualises these phenomena by returning them to the worlds I understand, enjoy and care about, including the academic and professional domains within which I work as a curriculum scholar in Australia, South Africa and elsewhere. However, I must emphasise that in performing this reading I have not sought to collapse the meaning of Coetzee's text into my own story. Indeed, I take Paul Ricouer's (1981) position that the meaning of a text cannot be collapsed to either the writer's or the reader's world. Rather, Ricouer points to a third domain constituted by, but not identical to, the writer's and reader's worlds - a domain of *possibilities* rather than of the 'realities' within which the writer and reader generate their respective meanings. Thus, the meanings that emerge from my reading of *Disgrace* invoke this third domain, a space of possibility generated where Coetzee's world converges with my experience.

In previous chapters I have explained and demonstrated a number of ways in which narrative theory and poststructuralism informs my work as a research methodologist and curriculum scholar. In particular, I have argued that narrative approaches to educational inquiry invite us to go beyond analysis and criticism to consider questions of choice, decision and action. As South African novelist and literary scholar André Brink (1998) writes: 'Once the world is perceived as story, with an endless capacity for renewal, metamorphosis, and reinvention... the reader is actually encouraged to act upon the world' (p. 19). But the particular ways in which we give meaning to ourselves, others and the world may be formulated through discourses of which we are largely unaware or which are taken for granted. Novelists like Coetzee give these discourses substance and pattern and help us not only to perceive the stories and mythologies that frame our social interactions, but also to recognise and deploy their potentials for renewal, metamorphosis, and reinvention. When we acknowledge our own agency within the stories we read, hear, live and tell, we might become better equipped to turn our own discourses and practices against those which constrain us. The relevance of such an approach to the circumstances now facing many South African educators is evident in Michael Chapman's (1998) consideration of 'the issue of storytelling... as an attempt to capture, reorder, and even reinvent a sense of self in society':

The issue clearly has pertinence to South Africa, where questions as to whose story is being told, or what constitutes a South African story, reflect the concerns about – some might say crises of – identity that have accompanied massive changes since the unbannings of the liberation movements in 1990 and the ongoing transition from an apartheid state to a constitutional democracy. The issue... also has applicability to a world which since 1989 has seen dramatic rearrangements of relationships between West and East, and - more directly to my concern - between the West and Africa, or to use post-Cold War terminology, between the rich North and the poor South. Although one hears of the 1990s as a time in which economics has superseded ideology, I intend to pursue the view... that explanations of the global neighbourhood will be primarily neither ideological nor economic, but cultural... fundamental differences among societies can be grasped only by our interpreting the stories people tell about themselves and others... the power holding individuals together in the community of the nation is at bottom narrative:... the story is the most intense and comprehensive expression of the culture, or the site where sensibility is both mirrored and actively shaped (p. 86).

I believe that *Disgrace* exemplifies many of Chapman's propositions about the power and potential of narrative. It can certainly be read 'as an attempt to capture, reorder, and even reinvent a sense of self in society' and explicitly raises questions about 'what constitutes a South African story' in the context of an 'intense and comprehensive expression' of South Africa's post-apartheid culture and (albeit implicitly) its place in 'the global neighbourhood'. Thus, reading

Disgrace invites those of us who perform curriculum work in South Africa to consider how we might act to 'reinvent' the stories South African children receive about the worlds they will inherit and inhabit.

Reading *Disgrace*

For a man of his age, fifty-two, divorced, he has, to his mind, solved the problem of sex rather well. On Thursday afternoons he drives to Green Point. Punctually at two p.m. he presses the buzzer at the entrance to Windsor Mansions, speaks his name, and enters. Waiting for him at the door of No. 113 is Soraya (1).¹

Despite the slightly smug sense of self-satisfaction that imbues these opening sentences of *Disgrace*, we soon learn that this is a delusion of which Coetzee's white protagonist, David Lurie, is not wholly unaware. Once a professor of modern languages, Lurie is now adjunct professor of communications, 'since Classics and Modern Languages were closed down as part of the great rationalization' at the reinvented 'Cape Technical University, formerly Cape Town University College' (3). Like all 'rationalized personnel', he is allowed to teach one course in his specialist field each year ('this year he is offering a course in the Romantic poets'), regardless of enrolment numbers, 'because that is good for morale' (3). Yet Lurie's morale is low, and he doubts the Communications 101 handbook's claim that 'human society has created language in order that we may communicate our thoughts, feelings and intentions to each other' (3-4). He suspects that 'the origins of speech lie in song, and the origins of song in the need to fill out with sound the overlarge and rather empty human soul' (4).

Some of the emptiness in Lurie's own soul stems from his sense of academic stagnation. During his twenty-five year university career 'he has published three books, none of which has caused a stir or even a ripple', and he has recently been thinking of writing a book on Byron. However, 'all his sallies at writing have bogged down in tedium. The truth is, he is tired of criticism, tired of prose measured by the yard. What he wants to write is music: *Byron in Italy*, a meditation on love between the sexes in the form of a chamber opera' (4). This aspiration hints at an unacknowledged doubt in Lurie's appraisal of his

To avoid repetition, all direct quotations from *Disgrace* are sourced only by parethetic references to page numbers.

relationship with Soraya, in which he concludes that ninety minutes of loveless sex with a part-time prostitute each week 'are enough to make him happy, who used to think he needed a wife, a home, a marriage' (5). Other sources of Lurie's malaise include the frustrations of teaching in a university that has been restructured in the name of economic rationalism (and, in the case of South Africa, social reengineering). Some of these will be familiar – perhaps uncomfortably so – to anyone who works in a contemporary Western higher education system, as the following reverie illustrates:

Through his mind, while he faces his Communications classes, flit phrases, tunes, fragments of song from the unwritten work. He has never been much of a teacher; in this transformed and, to his mind, emasculated institution of learning he is more out of place than ever. But then, so are other of his colleagues from the old days, burdened with upbringings inappropriate to the tasks they are set to perform; clerks in a post-religious age.

Because he has no respect for the material he teaches, he makes no impression on his students. They look through him when he speaks, forget his name. Their indifference galls him more than he will admit. Nevertheless he fulfils to the letter his obligations towards them, their parents, and the state. Month after month he sets, collects, reads, and annotates their assignments, correcting lapses in punctuation, spelling and usage, interrogating weak arguments, appending to each paper a brief, considered critique.

He continues to teach because it provides him with a livelihood; also because it teaches him humility, brings it home to him who he is in the world. The irony does not escape him: that the one who comes to teach learns the keenest of lessons, while those who come to learn learn nothing. It is a feature of his profession on which he does not remark to Soraya. He doubts there is an irony to match it in hers. (4-5)

Those who champion the new vocationalism of universities will no doubt dismiss Lurie's dissatisfaction as self-pitying nostalgia for an elite and conservative academy, but the curriculum issues raised by the above passage are not trivial. If university subjects are conceived chiefly as instruments for imparting vocational skills rather than deeper cultural understandings, and if universities are sites of learning where activities that fill out the human soul (such as the 'fragments of song' that flit through Lurie's mind) are perceived as peripheral distractions from 'core business', then we should hardly be surprised that they produce indifferent students and teachers who see their work in terms of fulfilling obligations. Courses such as Classics are easy targets for rationalisation in South Africa – a luxury for the privileged classes that cannot be afforded in a higher education system that is attempting to respond to economic and socio-political imperatives –

but other manifestations and consequences of the swing to vocationalism (in South Africa and elsewhere) seem less explicable and defensible. At the time I wrote this essay, trends in university enrolments were front page news in Victoria, Australia, with one paper leading its coverage of the annual race for tertiary entrance by reporting that 'Victoria's universities and TAFE [Technical and Further Education] colleges have offered a record number of places for new students this year, but may struggle to fill their science courses after a slump in demand' (Carolyn Jones, 2000, p. 1). Another newspaper led its weekly higher education supplement with the headline 'Enrolments favour vocation' over a report that begins: 'The days of education for its own sake appear to be passing, with Victoria's latest bunch of tertiary entrants spurning traditional arts and science degrees for vocational courses in record numbers' (Guy Healy, Dorothy Illing & Colleen Egan, 2000, p. 23). Jones (2000) quotes the Victorian Minister for Post-Compulsory Education's concern regarding 'the alarming fall in demand for science courses' and the government's consideration of 'developing a strategy or campaign to encourage more students to study science' (p. 1). I am less alarmed by the fall in demand for 'traditional arts and science degrees' than by the complicity of senior management in universities with the marginalisation of these courses. I have no interest in defending tradition or education for their own sakes but, for my children's sake, and for the sake of all young people who aspire to a university education, I worry about the loss of diversity in higher education learning opportunities. When universities rationalise physics, geography, and social studies of science out of existence, as my own university has done, we not only lose the educative potentials of these disciplines themselves but also the possibilities for hybridisation (and what evolutionary biologists call 'hybrid vigour') that might materialise from their coexistence with vocational studies such as eco-communication, public relations and police studies.

But I digress from *Disgrace*. The final paragraph I have quoted above reveals more disturbing aspects of Lurie's self-absorption than his attitude to the academy manifests. He dismisses the possibility that the 'irony' he perceives in his 'profession' is matched in Soraya's; he is blind to the possibility that Soraya might continue to be a sex-worker because it provides her with a livelihood, that it teaches her humility, and brings it home to her who she is in the world. That is, he denies Soraya's capacity for self-examination and a humanity to match his own. Her sex, colour and class mark her difference from Lurie, but as the story unfolds we are left in little doubt that Coetzee intends us to pay particular attention to Lurie's ambiguous, but ultimately patronising, attitude towards women. Indeed, Lurie's misreading of Soraya soon becomes evident when she terminates their arrangement following his chance observation (of which she is aware) of her on a family outing with her husband and children. Lurie fails to persuade Soraya to resume their weekly meetings, and he subsequently pursues Melanie, a young student with whom he is 'mildly smitten' (11) from his Romantic poetry class. She is acquiescent but clearly troubled by their differences in age and position and their affair soon sours. With the encouragement of family and friends (and possibly at their initiative), Melanie lodges a complaint of sexual harassment against Lurie. Disgraced, he resigns from his job at the university, leaves Cape Town, and goes to stay with his daughter Lucy, who raises daffodils and boards dogs on a smallholding in the Eastern Cape. Coetzee deftly sketches the location – 'five hectares of land, most of it arable, a wind-pump, stables and outbuildings, and a low, sprawling farmhouse' (59) – and the mixture of familiarity and estrangement in Lurie's relationship with his daughter:

From the shade of the stoep Lucy emerges into the sunlight. For a moment he does not recognise her. A year has passed and she has put on weight. Her hips and breasts are now (he searches for the best word) ample. Comfortably barefoot, she comes to greet him, holding her arms wide, embracing him, kissing him on the cheek.

What a nice girl, he thinks, hugging her; what a nice welcome at the end of a long trip!

The house, which is large, dark, and, even at midday, chilly, dates from the time of large families, of guests by the wagonful. Six years ago Lucy moved in as a member of a commune, a tribe of young people who peddled leather goods and sunbaked pottery in Grahamstown and, in between stands of mealies, grew dagga. When the commune broke up... Lucy stayed behind on the smallholding with her friend Helen. She had fallen in love with the place, she said; she wanted to farm it properly. He helped her buy it. Now here she is, flowered dress, bare feet and all, in a house full of the smell of baking, no longer a child playing at farming but a solid countrywoman, a *boervrou* (59-60).

Although my prime purpose in this essay is not to offer a literary appreciation of Coetzee's novel, I cannot resist drawing attention to the economy and precision with which he exposes the ironies and contradictions of white, male, South African liberal consciousness, manifested here by the incommensurable discourses in which Lurie's response to seeing Lucy are couched. She is not only highly sexualised (he notices first her 'ample' hips and breasts) but also, and emphatically, a 'nice girl'. She is not only a child grown into a 'solid countrywoman', but is also a lesbian *boervrou*, a pairing of terms that I suspect might almost be unthinkable in the Calvinist colonial discourse evoked by the Afrikaner word, and barely less so in many other South African discourses of resistance and liberation, which retain strong elements of both patriarchy and homophobia.²

For a time, the rhythms and routines of farm life with Lucy return some sense of purpose and meaning to Lurie's life. He helps with the dogs in the kennels, takes produce to market, and helps to treat injured animals at a nearby refuge. All of these activities are ambiguous satisfactions, but none more so than his work at the Animal Welfare League clinic, which is less a place of healing than of last resort. He assists with the humane killing – mostly of suffering or neglected dogs from Grahamstown's impoverished black settlements – and disposes of the corpses in the local hospital's incinerator. Many of his conversations with Lucy anticipate the crises in their lives that are to follow. For example, Lurie 'has never been able to understand what Lucy sees in [Helen]; privately he wishes Lucy would find, or be found by, someone better' (60), and so he is relieved that Helen has returned to Johannesburg. He asks if Lucy is nervous, living by herself:

Lucy shrugs. 'There are the dogs. Dogs still mean something. The more dogs, the more deterrence. Anyhow, if there were to be a break-in, I don't see that two people would be better than one.' (60)

Later, he tells Lucy about his plan to write a chamber opera on the last years of Byron's life:

'I thought I would indulge myself. But there is more to it than that. One wants to leave something behind. Or at least a man wants to leave something behind. It's easier for a woman.'

'Why is it easier for a woman?'

'Easier, I mean, to produce something with a life of its own.'

For example, I find it telling that there is no mention of female homosexuality in Derek Attridge and Rosemary Jolly's (1998) collection of essays dealing with the impact of decolonisation and democratisation on South African literature, although several chapters deal with feminist and gay (male) writing. There is a similar silence in the twenty-one short stories collected in *Unwrapped: Irrelevant Fiction for a Post-Calvinist South Africa* (Leggett, 1998), most of which are concerned with sexual liberation, but only with respect to heterosexual and male homosexual relationships.

'Doesn't being a father count?'

'Being a father. . . I can't help feeling that, by comparison with being a mother, being a father is a rather abstract business. But let us wait and see what comes.' (63)

What comes is a violent robbery, during which two men and a teenage boy rape Lucy, Lurie is badly injured, and the dogs are killed. Lucy insists that they report to the police only the robbery and the violence against Lurie and the dogs. She refuses to talk with Lurie about these events until she learns that she is pregnant. Despite Lurie's protests – he offers to pay for an abortion and for her to go and live with her mother in Holland – she decides to keep the child and stay on the farm (keeping *this* child is, of course, a decision that stands in stark contradiction to Lurie's previous assertion that it is 'easier for a woman... to produce something with a life of its own'). At the novel's end, Lucy is negotiating a settlement with her black neighbours, which may include becoming a token third wife to her former farmhand Petrus, exchanging her land for his protection, even though the boy who raped her (who may be mentally ill) is now living nearby as part of Petrus's extended and expanding family.

Although baffled initially by Lucy's refusal to respond to her attack in the way he expects, Lurie begins to understand that there might be ways to construct a female identity that are very different from the patterns people like him expect – a realisation that he could perhaps accept from no-one but his daughter. He seems to have learned little about the exercise of male power, and its complex interactions with sex in the production of domination, in his relations with Soraya and Melanie. For example, it is the reader rather than Lurie who realises that the accommodation that Lucy seems prepared to make at the novel's conclusion has an unsettling resonance with the gendered power relations between Lurie and the 'docile' Soraya that open the story. The youthfulness of the rapist who might be the father of Lucy's child is foreshadowed in the novel's second paragraph by Lurie's realisation that 'technically he is old enough to be [Soraya's] father; but then, technically, one can be a father at twelve' (1).

There are many occasions in the story when the reader's attention is drawn to the wider social milieu in which the events unfold. For example, Lurie asks Lucy if her decision not to report the rape is a veiled attempt to rebuke him, to remind him 'of what women undergo at the hands of men' (111). Lucy replies: 'Nothing could be further from my thoughts. This has nothing to do with you, David. You want to know why I have not laid a particular charge with the police. I will tell you, as long as you agree not to raise the subject again. The reason is that, as far as I am concerned, what happened to me is a purely private matter. In another time, in another place it might be held to be a public matter. But in this place, at this time, it is not...'

'This place being what?'

'This place being South Africa.'

Elsewhere Coetzee makes it clear that the shifting balances of power in the country are decentring European culture as a normative referent, which includes a displacement of English (the language in which he writes) as a privileged means of enunciation. For example, Lurie reflects on why Petrus was absent at the time of the attack and whether he was in any way complicit in it. 'In the old days one could have had it out with Petrus... to the extent of losing one's temper and sending him packing and hiring someone in his place' (116). But Petrus is no longer hired help, but 'a neighbour who at present happens to sell his labour, because that is what suits him' (117). In spite of his suspicions, Lurie 'feels at home with Petrus, is even prepared, however guardedly, to like him':

Doubtless Petrus has been through a lot, doubtless he has a story to tell. He would not mind hearing Petrus's story one day. But preferably not reduced to English. More and more he is convinced that English is an unfit medium for the truth of South Africa. Stretches of English code whole sentences long have thickened, lost their articulations, their articulateness, their articulatedness. Like a dinosaur expiring and settling in the mud, the language has stiffened. Pressed into the mould of English, Petrus's story would come out arthritic, bygone.

Coetzee's novel can thus be read as an exploration of a possible future for South Africa that involves shifts in cultural practices as well as satisfying demands and desires for restitution, retribution and reconciliation. Certainly, as Janet Chimonyo (1999) writes:

Lucy's decisions about her land, her body and her black neighbours are not simply a rejection of Lurie's middle-class expectations. They also rewrite the way in which whites might continue to live in the world of a black South Africa. In the withering phraseology of colonial condemnation, Lucy chooses to 'go native'.

Lurie, to his credit, is finally able to acknowledge that this choice represents a realistic, if not particularly easy, alternative for the South African white who wants to be fully part of the life of that country, rather than remaining in an enclave marginal to it... Lurie, like any loving parent, may well have his heart in his mouth for his daughter and her future. Yet for her, expecting an unknown assailant's child, her decision has the pragmatism of realpolitik. Like women everywhere and through all time, she makes a calculated assessment of the most favorable outcome for herself and her child (p. 10).

Although Chimonyo might be guilty of essentialising women in the last sentence quoted above, I agree that *Disgrace* concludes on a note of hope: a child will be born who, like all newborn children, embodies an anticipation of the future generations that are South Africa's best and brightest hope for repairing the terrible economic, social and cultural damage wrought by apartheid.

Learning from *Disgrace*

My reading of *Disgrace* compels me to ask: what types of curriculum work can my South African colleagues and I do that might sustain our hopes for present and future generations of South African children, including Lucy's child?

There are, of course, no simple or straightforward answers to such a complex question, but I am confident that the *least* satisfactory responses are those that permit the erasure of difference. *Disgrace* reminds us that multiculturalism in South Africa has got to mean much more than legislation that recognises eleven official languages and stipulates that schools must be racially integrated. *Disgrace* demands of us that we imagine a deeply inclusive curriculum in which the dominant texts and voices will not marginalise, or tacitly label as Other, a child who is, for example, born to a (white) lesbian *boervrou* living under the protection of a (black) patriarch whose story is irreducible to the language in which this essay is written.

My own response to the curriculum questions raised by *Disgrace* is to cultivate suspicion of the standpoints with which I am most familiar and to encourage my South African colleagues to do likewise. In the remainder of this essay I will focus on 'troubling' two aspects of curriculum work in South Africa at the present time, namely, the dominance of the English language (and the concomitant tendency for curriculum problems to be resolved by reference to colonialist curriculum discourses) and the dominance of race in the hierarchy of inequalities that the work of transforming the legacy of apartheid education is expected to ameliorate. For each of these aspects of curriculum work, I will briefly consider how they contribute to the suppression rather than the expression of difference, and why it might be important for curriculum workers to develop counter-practices to present tendencies.

Troubling English

If we agree with Lurie's assertion that 'English is an unfit medium for the truth of South Africa'³ for at least some students and teachers (and I suspect that it might be for many), then perhaps we should question the wisdom of trying to implement a South African curriculum policy framework that, according to Jansen (1999), consists of 'almost word-for word translations' (p. 9) from the writings of William Spady, a US specialist in curriculum administration.⁴ This situation reminds me of Kwame Anthony Appiah's (1992) complaint, made on behalf of African intellectuals, that: 'Our only distinction in the world of texts to which we are latecomers is that we can mediate it to our fellows' (p. 157).

At this point it might be useful for me to explain why I am troubled by South African curriculum workers appearing to be complicit in their own intellectual colonisation. If the effects of South African curriculum workers appropriating and adapting Spady's version of OBE were restricted to South Africa, then I could easily be convinced that what they do is none of my business. But some of the products of South Africa's investment in OBE are now traded in a global economy of knowledge. For example, Smangaliso Mkhatshwa (1999), South Africa's Deputy Minister of Education, recently contributed a chapter to a book, *Third Millennium Schools: A World of Effectiveness and Improvement*, jointly edited by an Australian and two British academics, arising from the International Congress for School Effectiveness and Improvement (ICSEI) 1998 Conference held in Manchester, England. Mkhatshwa (1999) asks a rhetorical question: 'What can we, in South Africa, learn from other countries as we tackle the task of regenerating our schools?' (p. 342). His answer is to list a number of 'key

³ Although I do not usually privilege an author's opinions over those of her or his characters, Coetzee expressed his views on this subject in an interview for *Newsweek* (26 October 1999) in which a reporter, Tom Masland, asks: 'Does writing about Africa in English, in the European tradition, frustrate you? Can an English-speaker feel at home in Africa?' Coetzee replies: 'I am not sure that English is at home in Africa – not yet' (p. 95).

⁴ Jansen (1999) acknowledges that Spady was not the only influence on the development of OBE in South Africa, and cites other 'foreign experts', from Australia, England, New Zealand and Scotland (all English-speaking countries), as well as the USA, as 'affirming and assisting in the development of OBE'. However, he also asserts that there is a striking 'lack of originality and context in the espousal of South African OBE ideas' that can directly be attributed to their dependence on Spady's work (pp. 8-9).

points... from international research' that he sources to the familiar US and UK literature on school effectiveness and school improvement dating from the 1970s. He also cites more recent South African literature, much of which, in Appiah's terms, 'mediates' this literature to fellow South Africans. Thus, Mkhatshwa's chapter digests knowledge produced by US and UK researchers but then, as Sohail Inayatullah (1998) puts it, 'regurgitate[s] it back to the West as the view from the Other' (p. 594), confirming the meaningfulness of Western knowledge in other sites. Although I have no doubt that Mkhatshwa (or his advisers) wrote this chapter with good intentions, it nevertheless reinforces the view that, while Western academics produce universal and general knowledge, non-Westerners merely write about what it means to be a part of that enterprise (or not), thus becoming 'the official Other' (Inayatullah, 1998, p. 594).

I would like to pursue a little further the wider ramifications of Lurie's admission that Petrus 'has a story to tell' and that while he 'would not mind hearing Petrus's story one day', he would prefer it not to be 'reduced to English' for fear that it would be distorted if it were to be 'pressed into the mould of English'. This could be interpreted as an excuse not to engage people like Petrus in dialogue by representing their stories as ineffable, but it can also be understood as a challenge to English-speakers to find ways of 'hearing' such stories. I understand why so much of the discourse of curriculum transformation in South Africa has been 'pressed into the mould of English', but I am puzzled that the language of curriculum work seems not even to have been *inflected* by South Africa's non-Western cultures. Even in works that include many critical perspectives on OBE and Curriculum 2005⁵, such as Jonathan Jansen and Pam Christie's (1999) Changing Curriculum, I can find few traces of the knowledge traditions and customs of Africa's indigenous people that might be pertinent to curriculum work. English-speaking researchers and policy-makers, regardless of their own ethnicity and race, appear to be perpetuating the silencing of the Other as effectively as did South Africa's settler colonists.

For example, I have yet to hear or read any sustained critique of the individualistic emphasis in OBE from a standpoint informed by *batho* (Sotho) or

⁵ 'Curriculum 2005' was the name given to post-apartheid South Africa's new curriculum framework by the Department of National Education (1997).

ubuntu (Zulu). I have heard a number of homilies or proverbs from speakers of these languages – as well as from speakers of Kikuyu, Pedi, Shona, Southern Sotho and Xhosa – that can be 'reduced to English' as 'a person is only a person through other people' (or variations thereon).⁶ I would be interested to learn how a person who takes the position that *umuntu ngumuntu ngabantu* can also support an approach to curriculum that emphasises, in the words that Cliff Malcolm (1999) uses to characterise Spady's approach to OBE, 'individuals moving efficiently through the course without regard for belonging to any group' (p. 92). I must emphasise here that I am not assuming that such positions are incommensurable, but I suspect that at present neither Zulu nor English-speakers have very much in the way of any shared understanding of how these positions might articulate with one another in specific sites. For example, being committed both to OBE and to *ubuntu* might mean that the idea of 'learner-centredness' is clearly and operationally understood as being irreducible to individuals in a particular school or classroom.

To summarise to this point, I suggest that *Disgrace* reminds us that English is a limited medium for South African curriculum work, and that we should therefore be alert to its limitations, and rigorously seek to rehabilitate knowledge traditions that are amply and variously represented in South Africa but that are not easily reduced to English. A multiculturalism that seeks deep inclusiveness cannot risk the cultural homogenisation that might result if Kikuyu, Pedi, Shona, Sotho, Xhosa and Zulu stories continue to be silenced, occluded or marginalised in the discourses of South African work, or distorted by being 'pressed into the mould of English'.

Troubling transformation

For much of the 1990s the 'New South Africa'⁷ was an international media spectacle. Cathy Randall (1996) introduces a story on the changing culture of

⁶ I am very grateful to Lynette Masuku and Edgar Neluvhalani for their assistance in interpreting and translating representations of *ubuntu*.

⁷ The term 'New South Africa' has become a commonplace in the rhetoric of transformation since F.W. de Klerk coined it in his famous speech on 2 February 1990 (Saunders & Southey, 1998, p. xxv). However, I place the words in 'scare' quotes because I believe that too much of the 'old' South Africa remains for the term to be used as if it were unproblematic, uncontested, and intersubjectively meaningful.

substance abuse in a way that captures both the fascination and self-interest with which South Africa during this time was viewed in other countries:

When South Africa elected its first black president, Nelson Mandela, on April 27, 1994, it swapped its status of the world's pariah for that of the world's darling and, as Africa's fastest-developing nation, was welcomed back into the Western world's economic and cultural order. No sooner were sanctions lifted and the cultural boycott ended than McDonalds [sic] golden arches graced shopping centres throughout the country, Homer Simpson cried 'd'oh' on TV sets across the nation, and the Springboks won the World Cup (p. 76).

This global, macropolitical view of South Africa's transition from apartheid to democracy, and from economic and cultural isolation to free-market customer and consumer, is now being fed back to many South Africans, especially urbandwellers, via CNN and other transnational media. *Disgrace*, as I read it, provides a very different perspective. *Disgrace* demonstrates vividly that the 'new' South Africa is far too diverse and contradictory to be viewed as an unproblematic triumph of multiculturalism over racism or of free-market economics over self-sufficiency. *Disgrace* asks profound questions about the micropolitics of freedom, social justice, law and responsibility among particular people living in a particular time and place. *Disgrace* thus provides those of us who perform curriculum work in South Africa with a textual site in which to explore the possibilities and responsibilities that attend our freedom to make decisions and to take action in the particular circumstances of our work as educators.

For example, the dismantling of the apartheid denominations of African, Indian, coloured and white means that multiculturalism is now being negotiated and contested both between and within these arbitrarily marked categories. We can reasonably expect that Lucy's child's subjectivity, like that of other children of her or his generation, will be constituted through new discourses of social identity, and will be given substance and pattern through new storylines in which previously over-determined racial categories are constantly in a process of disruption and renegotiation. Nadine Dolby's (2000a; b; 2001a; b) ethnographic inquiries in newly multiracial schools in Durban exemplify a type of research that might help to inform curriculum workers about the new forms of 'identity work' that can be anticipated among South African students and teachers in the near future. In one of these studies, Dolby (2001b) shows how 'whiteness' after apartheid has taken on different hues and is being remade in multiple forms, and

there seems little reason to doubt that the other denominations of apartheid will similarly proliferate and hybridise into a variety of subject positions. Lucy's child's racial identity will not be fixed by his or her allocation to one of four categories but will be constituted and reconstituted through a variety of discursive practices to which s/he will have access in daily life. Some of these discursive practices will emanate from what Dolby (2000a) calls the multiple 'sites of memory' that are available within any given society. Dolby examines how two sites of memory in South Africa - the Truth and Reconciliation Commission (TRC) and a history classroom in a predominantly white girls' high school – impact on students' interpretations of the history of apartheid. By examining how these two sites interact and conflict in a particular instance, Dolby (2000a) shows how 'the discourses of a classroom can be interpreted through its interaction with outside forces that shape students' lives and perceptions' (p. 192). In the case of the classroom she observed, Dolby (2000a) concludes that 'the influence of the TRC and its particular construction of history has implications for how... students understand apartheid, and how they might position themselves as actors in the still unfolding narrative of the new South Africa' (p. 192). To what sites of memory will Lucy's child have access? How will the options provided by the curriculum in the school that s/he attends influence how s/he might position her/himself as an actor 'in the still unfolding narrative of the new South Africa'?

A critical question for South African curriculum workers is, therefore: to which cultural storylines, sites of memory, and potential subject positions does Curriculum 2005 deliberately and explicitly provide access? If I interpret Jansen (1998) correctly, this question is not being asked at present, because the instrumentalist focus of OBE 'sidesteps the important issue of values in the curriculum':

Put more directly, OBE enables policy makers to avoid dealing with a central question in the South African transition, namely what is education for? For example, there is little evidence in the report of the Learning Area Committee for Human and Social Sciences that this question has been directly addressed. One would expect in this Committee that core values and commitments would be [evident]... Yet there is not a single commitment to combatting racism and sexism in society or developing the Pan-African citizen or on the role of dissent in a democracy. Of the 17 learning area outcomes identified, the closest approximation to a value statement is the phrase 'participate actively in promoting a sustainable, just and equitable society', a statement so broad as

to be meaningless, especially when this is unpacked in specific objectives such as 'display constructive attitudes' or 'participate in debate and decisionmaking'. These statements could have been written for Hawaii or Buenos Aires or Western Nigeria. They are bland and decontextualised global statements which will make very little difference in a society emerging from apartheid and colonialism (p. 327).

Disgrace provides an extreme example of why statements that are 'so broad as to be meaningless' are inadequate and unsatisfactory ways of specifying values and commitments. From the standpoints of some South Africans, Lucy's assailants could be understood as promoting 'justice' (rape as retribution) and 'equity' (robbery as wealth redistribution). Lucy admits this to herself and to Lurie when she speculates that being raped might be 'the price one has to pay for staying' on her smallholding:

'Perhaps that is how they look at it; perhaps that is how I should look at it too. They see me as owing something. They see themselves as debt collectors, tax collectors. Why should I be allowed to live here without paying? Perhaps that is what they tell themselves' (158).

Perhaps. Perhaps not. But the moral complexities to which Lucy alludes impel me to agree with Jansen that the promotion of 'a sustainable, just and equitable society' through education requires a clear specification of values and commitments, not 'bland and decontextualised global statements'. *Disgrace* shows us that concepts such as freedom, justice and responsibility for many South Africans now refer to something much more complex and problematic than that which accompanied the constitutional abolition of apartheid. Lucy's assailants were 'free' to rape and to rob her with relative impunity as a direct consequence of social and economic transformation. Jansen's question – 'what is education for?' – implies a much deeper question: what is freedom from institutionalised racism and economic subjugation for? Rosemary Jolly and Derek Attridge (1998) suggest at least one answer to this question when they write of a 'predominantly potential' liberty beyond the world of legislative politics:

South Africans during the period [of transition] have been and are increasingly at liberty to identify and to reject not only the determinisms of apartheid, but also the determinisms of those systems which, in addition to racism, were implicated in and supported the ideological machinery of apartheid: patriarchy, sexism, homophobia, class and language bias, ethnic nationalism, and so on (p. 2). Jolly and Attridge's list is not exhaustive. As Disgrace illustrates, systems of land ownership and use were similarly implicated in the operations of the apartheid state. But Jolly and Attridg could also be naming some of the silences in postapartheid curriculum work: 'patriarchy, sexism, homophobia, class and language bias, ethnic nationalism'. Silence about these matters cannot help us to develop ways of reading, representing and narrating difference without fearing or fetishising it, or to practice forms of inquiry that acknowledge and respond constructively to the effects of difference in mediating educational change. The collapse of the most visible forms of institutionalised racism raised expectations that other forms of oppression might be seen more clearly, especially the discrimination against and hostility to women in South Africa that is dramatised so chillingly in *Disgrace*. Both Lurie and Lucy recognise that her rape was as much a manifestation of men's subjugation of women, regardless of colour, as it was racially motivated retribution. Such an interpretation is supported by Elaine Unterhalter's (1999) analysis of the autobiographies of both black and white women in which she demonstrates 'the ways in which patriarchal relations persist so viciously in South Africa, despite the many decades of schooling for girls' (p. 63).

The silence surrounding patriarchy has been endemic in South Africa's educational systems both during and after apartheid. Unterhalter (1998) notes that while forces associated with the apartheid regime were blind to the gender divisions in society, those in the democratic movement noted some of their effects, but failed to conceptualise redress or equity with regard to the integration of education and training in ways that took account of gendered social relations' (p. 360). Unterhalter (1998) reviews the policy framework for educational reform in South Africa between 1989 and 1996 and observes that 'in not noting gender in areas where it has a significant impact upon education and training, the nature of the social relations commented on is distorted'. For example, policies on early childhood 'educare' note that 'families of more than half the children in the country are poor' and that 'migrant labour and domestic (and other forms of) violence affect these children'. But these same policies are 'silent on the ways in which both migrant labour and domestic violence have special and striking results for women that are different from those for men and hence have a differential impact upon children'. Moreover, although one policy framework 'notes sexual

harassment and discrimination against women teachers, this perception is not carried into the discussions of teacher training nor the policy proposals for teacher management and development' (p. 359).⁸

Another form that the erasure of difference takes in the discourse of educational transformation is detailed by Nazir Carrim (1998) in his study of attempts to desegregate schools in the Gauteng region. He argues that structural initiatives at the macro level may desegregate educational institutions but they do not deracialise them, 'because they do not address the complexities and specificities of "race" and racism [at] the micro level of the school, as experienced by people themselves' (p. 314). Carrim (1998) points out that the 'multiculturalist' practices in Gauteng schools 'have tended to portray people of different racial groups as being culturally different, implying a shift from "race" to ethnicity':

This is particularly evident in the fact that cultural diversity within racialised groups is denied consistently. It is easier to talk of a Zulu as being culturally different, as opposed to an Italian, in 'white' school settings, for example. This denial of cultural differences within racialised groupings lends credence to the claim that this type of multiculturalism is a reconstructed form of racism itself (p. 314).

Carrim (1998) further notes that 'the proliferation of cultural categories is applied mainly to "blacks". "Whites" are considered and projected as being ethnically homogeneous... cultural differences are highlighted only when applied to interracial group encounters' (p. 315). He suggests that many multicultural educational practices 'take on racist connotations when they highlight selectively when and among whom cultural differences are emphasised, when they construe people's identities in certain ways and when they ignore the power dimensions to questions of racism itself' (p. 315). Carrim (1998) thus argues that 'on both the macro and micro level, questions of identity and difference are central in developing a school (and societal) environment that is not only free from racism, but other forms of discrimination too' (p. 301).

⁸ In responding to the silence surrounding patriarchy in curriculum work, André Brink's (1998) call for 'a completely reinvented South African history: history, in fact, reimagined as herstory' (p. 23) is suggestive; Brink (1998) argues that 'such an approach would address two silences simultaneously: that created by the marginalization of women, and that effected by a (white-dominated) master-narrative of history' (p. 24).

The need for South African educators to recognise and explicitly address issues of difference such as those raised by Unterhalter and Carrim is emphasised by Louise Chawla's (1999) report of implementing the 'Growing Up in Cities' environmental education program with children in Johannesburg. The program 'involves children in drawing, talking and writing about how they use and perceive their environment, neighbourhood tours and other activities, and discussions about priorities for improving local environmental quality'. Chawla provides some results of activities with two groups of children, one of which came from a squatter area on the edge of the inner city. In the course of the project, the squatter families were evicted and resettled in an area of empty veldt 44 kilometres outside the city centre. Seven months after resettlement, seven children were asked to portray themselves in drawings as they saw themselves prior to and after working on 'Growing up in Cities'. Chawla writes:

As had been expected, all of the children used the relocation of their settlement as the dividing line in their drawn representations of self. The two boys depicted better conditions at the new site (more room or less violence), and linked these new conditions to improvements brought about by the project on their behalf. The drawings of the five girls, however, depicted no personal capacities to explore and use the new environment, but in most cases contrasted positive images of their previous home and activities with different levels of personal disruption at the new site.

Although several interpretations of these findings are possible, the evidence of gender differences in the children's readings of their environments is very persuasive. Lucy's experience in *Disgrace* provides us with at least one intimation of the types of 'personal disruption' that girls might fear in a relatively isolated rural site. Yet I have seen and heard little in the stories and texts of environmental education curriculum work in South Africa that attends to the implications of gender differences. Chawla hints at other registers of difference but does not pursue them in the brief text from which I have quoted. For example, her report notes that discussions with the resettled children were in the language they preferred ('mostly English, but about 25% in Zulu') and that the project base for the squatter camp children had been an Islamic neighbourhood centre. Given that the purposes of the research were concerned with 'measurable beneficial psychological effects' in regard to 'self-esteem, locus of control and self-

efficacy', I am a little surprised that aspects of culture that are clearly constitutive of personal identity (such as language) appear not to have been examined.

André Brink (1998) suggests that 'the writer's primary engagement' is 'to *interrogate* silence', that 'all writing demonstrates the tension between the spoken and the unspoken, the sayable and the unsayable' (p. 14). Brink argues that the idea of 'interrogating silence' suggests new possibilities for South African writers since the dismantling of apartheid, and emphasises that the kind of interrogation he has in mind 'is not a power-play but a dialogue'. I am concerned that we (and I deliberately include myself in this 'we') are leaving too much unspoken and unsaid in the stories and texts that presently constitute curriculum work in South Africa. Brink's (1998) summation of the regenerative powers of South African literature thus provides a similar imperative for curriculum workers:

not simply to escape from the inhibitions of apartheid but to construct and deconstruct new possibilities; to activate the imagination in its exploration of those silences previously inaccessible; to play with the future on that needlepoint where it meets past and present; and to be willing to risk everything in the leaping flame of the word as it turns into world (p. 27).

In Coetzee's *Disgrace*, Lucy embodies this willingness 'to risk everything' in her determination to construct new possibilities – to build a way of living for herself and to bear a child who will in turn embody an 'exploration of those silences previously inaccessible' (or, as the offspring of miscegenation were previously regarded, inadmissible).

What inhibitions of apartheid remain that prevent us from naming patriarchy, sexism, homophobia and language biases (as well as the more subtle manifestations of race and ethnic bias to which Carrim alludes) as continuing constituents of our work? What are the possibilities for constructing language-and gender-inclusive curricula in South Africa? What research do we need to undertake to inform such curricula? How should we conduct such research? These are difficult questions, but I cannot even hear them being asked at present. My purpose in this essay is to suggest that we should try to move them from the silent margins and suppressed whispers of our work into the noisy spaces of our dialogues and conversations. What is freedom *for* in the 'new' South Africa if it does not include attending to the differences that enable and constrain the ways in

which *all* of its citizens – including Lucy's child, whoever s/he may be – can deploy that freedom?

Chapter 10

Speculative fictions for (re)imagining democracy: two thought experiments

Truth is a matter of the imagination. The soundest fact may fail or prevail in the style of its telling (Ursula Le Guin, 1973/1969, p. 9).

I suggest that democracy, too, is 'a matter of the imagination', and that regardless of its soundness as a social philosophy, it also might 'fail or prevail in the style of its telling'. If this is the case, then much of the work of educating for democracy is rhetorical and requires educators to attend to the quality of the democracy stories they choose to tell or to privilege. This is the type of work that this essay performs, although I can only say that in hindsight because it was not planned that way.

Gilles Deleuze and Félix Guattari's (1987) distinction between 'arborescent' and 'rhizomatic' thinking and writing is useful in describing why and how I came to write this essay. I began with no coherent focus or plan (and certainly not with any underlying structure in mind that resembled the orderly tree-like connections and articulations that characterise conventional Western ways of organising knowledge). Rather, a number of initially separate threads of meaning – requests, reflections, recollections and ruminations – coincided, coalesced, and eventually began to take shape as an object of inquiry.

Around the middle of May 2002 a number of email bulletins from the organisers of the Annual Conference of the Australian Association for Research in Education (AARE), to be held in December 2002, reminded me that the deadline for submitting abstracts was imminent. However, I was still vacillating about whether or not I would attend the conference and I continued to procrastinate.

At the same time, I had just finished reading Ursula Le Guin's (2000) science fiction novel, *The Telling*, which anticipates some of the ways in which humans might respond to the forced homogenisation of culture on a planetary scale and I found it to be particularly pertinent to my interests in questioning the social, cultural and educational effects and implications of global corporate capitalism. Then, within a few days of one another, I received three seemingly unconnected requests from colleagues in various parts of the world. From Slovenia I was invited to join the editorial board of a new interdisciplinary publication, *Managing Global Transitions: An International Research Journal*, which included a call for submissions of manuscripts to be considered for inclusion in its first volume. From South Africa I was asked to contribute a chapter to a forthcoming book, *Education and Democracy*. The third request was from a UK colleague, Justin Dillon, who had been invited to chair a discussion at the first Cheltenham Festival of Science entitled 'Happy Birthday *Silent Spring*' to mark the 40th anniversary of the publication of Rachel Carson's (1962) best-known book.¹ In preparing for this session, Dillon asked a number of colleagues in environmental education research to share their views of *Silent Spring*. As my thoughts about all of these matters meshed with, transformed and overlaid each other, I began to imagine a conference paper, a journal article and a book chapter that would connect global transitions, democracy, educational research and my reading of *The Telling* in what I hoped might be a generative way.

In a subsequent journal article, Dillon (2002) reveals that all except one of his colleagues viewed Carson's book very positively – in fact, the only negative criticism he received was my own brief response which concluded that '*Silent Spring* is politically incoherent' (p. 16). I must say here that I do not entirely disagree with my colleagues. I too admire Carson for her courageous and passionate exposé of the deleterious environmental effects of chemical pesticides, and acknowledge *Silent Spring's* significance as a trailblazing text in environmental consciousness raising. However, in recent years I have come to suspect that Carson's political responses to environmental crisis were at best naïve and at worst irresponsible. More importantly, for the purposes of this essay, my suspicions were not aroused by a direct re-examination of Carson's text. Rather, I

¹ *Silent Spring* is considered by many critics to be one of the most influential books of the twentieth century (as its publication in the Penguin Modern Classics series indicates). It focuses on the effects of the indiscriminate use of chemicals, describing how pesticides and insecticides were being applied almost universally to farms, forests, gardens and homes with scant regard to the contamination of the environment and the destruction of wildlife. Despite condemnation in the politically conservative US press and attempts by the chemical industry to ban the book, Carson succeeded in creating a new public awareness of the environment that led to changes in government policy and inspired the modern environmental movement.

returned to *Silent Spring* via its intertextual relationships with Frank Herbert's (1968/1965) cult science fiction novel, *Dune*.²

Dune, like *The Telling*, can be read as a thought experiment. Both novels produce alternative representations of present circumstances and uncertainties, and anticipate and critique possible futures. Each novel dramatises social transformation on a global scale. In *Dune's* case, the driver of transformation is ecological crisis, whereas in *The Telling* it is the lure of an intergalactic (rather than merely global) 'common market'. In this sense, each fiction speaks to a material world with which most readers will be familiar and demonstrates the defensibility of Donna Haraway's (1991c) assertion that 'the boundary between science fiction and social reality is an optical illusion' (p.149). I argue that critical and deconstructive readings of these novels might help us to produce anticipatory critiques of possible ways in which democratic institutions are being transformed by globalisation.

Science fiction and social reality: Dune and Silent Spring

I first read *Dune* in 1968, the year in which I began teaching high school biology. Over the next few years, I recall recommending it to students and discussing aspects of the novel that were most obviously relevant to their course. When I moved into teacher education in 1972 I listed it for wider reading in the biology and environmental education teaching methods courses I taught for several years. I found little of interest to me (or my students) in *Dune's* several sequels and, as I have noted elsewhere in this thesis³ other examples of SF became much more central to my work in teacher education and, eventually, to my research in curriculum studies. In the course of this more recent research, I became aware of

² Dune is a multiple award winning SF novel that spawned numerous sequels. It is a lengthy and elaborate adventure with a labyrinthine plot, much of which takes place on a desert planet called Arrakis (or Dune). Arrakis is the sole source of Melange, a spice that is necessary for interstellar travel and grants psychic powers and longevity, so whoever controls it wields great influence. When the Emperor transfers stewardship of Arrakis from the Harkonnen Noble House to House Atreides an intricate power struggle begins. Through sabotage and treachery the Harkonnens cast a young duke, Paul Atreides, out into the planet's harsh environment to die, where (not without considerable difficulty) he falls in with the Fremen, a tribe of desert dwellers who he recruits to his quest to reclaim Arrakis. However, Paul might also be the end product of a very long-term genetic experiment designed to breed a super human – a 'messiah' – and his struggles with this possible 'destiny' are as difficult and as complex as those he faces in the desert environments of Arrakis.

³ See especially my Introduction and Chapters 1-3.

the growing academic interest in literary studies of science and the relevance of these studies for my own work.

In 1996 the US Society for Literature and Science circulated a call for expressions of interest in contributing to an international sourcebook on the contemporary literature of nature, a 250,000-word volume of more than sixty chapters that was intended to cover the major geographic regions of the world as well as national literatures within those regions. The editor welcomed suggestions for other types of contributions and I offered to write a chapter on science fiction as environmental literature. I did this for two reasons. First, I was personally challenged by the prospect of writing in an academic discipline (literary criticism) in which I had no track record. Second, I was familiar enough with the literature of what was beginning to be called *ecocriticism* that emerged, especially in North America, during the mid-1980s⁴ to realise that SF might not be regarded as a form of nature writing by many of its practitioners and critics. For example, Thomas Lvon's (1996) 'Taxonomy of nature writing' includes the following five categories: field guides and professional papers; natural history essays; 'rambles'; essays on experiences in nature (including three subcategories: 'solitude and backcountry living', 'travel and adventure', and 'farm life'); and 'man's [sic] role in nature' (p. 278). Lyon makes no references to fiction at all, let alone to genres such as SF, and I began to suspect that such popular texts might constitute blind spots in scholarly studies of environmental literature. I thus saw my chapter as a deliberate intervention in the 'greening' of literary studies that complemented my long-standing interests in exploring and expanding the educative potential of SF in disciplines in which it is still relatively undervalued.

When I revisited *Dune* in the course of writing the sourcebook chapter (Gough, 1998b), I was less interested in its relevance to biology and science education than with appraising it from an 'ecocritical' standpoint. As a point of departure, I characterised my own position by reference to William Howarth's (1996) description of an *ecocritic* as 'a person who judges the merits and faults of writings that depict the effects of culture upon nature, with a view toward celebrating nature, berating its despoilers, and reversing their harm through

⁴ This literature included new periodicals such as *The American Nature Writing Newsletter* from 1989, and the journal *Interdisciplinary Studies in Literature and Environment* from 1993.

political action' (p. 69). Although I intended to focus principally on the distinctive features of SF as environmental literature, I also thought it would be prudent to draw attention to what the genre shares with more conventional forms of nature writing:

For example, homages to solitude and wilderness, accounts of rambles in remote areas, and other reflections on experience in nature can be found in specific works of SF, such as Ursula Le Guin's (1986) meditation on scrub oaks in *Always Coming Home* (pp. 239-41) – an exemplary exercise in heightened attentiveness to nature. Furthermore, SF usually responds to the same cultural imperatives that motivate other nature writers, as Brian Aldiss and David Wingrove (1986) demonstrate by devoting a whole chapter of their comprehensive history of SF to 'the flight from urban culture' that characterized many of the genre's most typical works between the 1890s and the 1920s. Similarly, Frank Herbert's novel (1965), *Dune,* which he dedicated to 'dry-land ecologists, wherever they may be', can be seen to reproduce what R.J. Ellis (1990) calls the 'discourse of apocalyptic ecologism' (p. 104) generated in North America during the 1960s by books like Rachel Carson's (1962) *Silent Spring* (Gough, 1998b, p. 409).

I also pointed out that, as a response to an environmental crisis (in this case, massive desertification on the planet Dune), Herbert's story displays some of SF's least admirable stereotypes, such as the assumption that virtually all problems are amenable to technical solutions (although *Dune* tends to emphasise appropriate and environmentally sensitive technology rather than high-tech gadgetry for its own sake). Less defensibly, given the novel's rhetoric of holistic approaches to environmental problems, Herbert invests much of the political power to intervene in *Dune's* ecology in an individual, Paul Maud'Dib, an extraordinary and increasingly autocratic frontier hero (another SF stereotype). This hero is (of course) male, and *Dune* explicitly reproduces many of the patriarchal discourses that are so disabling in attempts to resolve social and environmental problems

According to Ellis (1990), Herbert hoped that *Dune* would be 'an environmental awareness handbook'⁵ and admitted that the title was chosen 'with the deliberate intent that it echo the sound of "doom" (p. 120). Ellis (1990) also

An 'environmental awareness handbook' might seem to be a more appropriate description of *Silent Spring* than of Herbert's SF novel, but this is just one of the ways in which each book 'borrows' some of the other text's generic conventions. For example, *Silent Spring's* first chapter, 'A Fable for Tomorrow', is written in the past tense and somewhat clumsily emulates dystopian science fiction.

demonstrates that the apocalyptic representation of ecological balance in Dune is 'constrained from coherence by its narrative reproduction of the discursive formulations of the science of ecology in mid-century America... and these discourses' instabilities' (p. 106). Ellis does not suggest that Silent Spring's apocalyptic representation of the impact of chemical pesticides upon North America's ecosystems was a direct influence on *Dune*⁶ but, rather, that both books are symptomatic, in their discursive formations, of key features of scientific representations of the USA's environmental status during the late 1950s and early 1960s. Dillon's request to comment on *Silent Spring* reminded me that it shared a degree of political naivety with *Dune* – that both books were (to paraphrase Ellis) similarly constrained from coherence by their narrative reproduction of the discursive formulations of democratic governance, civil society and citizenship in mid-twentieth century America and these discourses' instabilities. However, I am now persuaded that, for all its limitations, Dune's narrative location within the SF genre allows Herbert to deploy a set of generic expectations that enable him to explore the political implications of ecological crisis *more* creatively and critically than Carson does.

Carson argues that ecological disaster is imminent but fails to suggest any program of political action or power redistribution that might avert her doomsday scenario. She indicts governments and chemical companies for their actions and inactions but her engagement with political power arrangements degenerates into anguished and repetitious hand wringing about the effects of insecticides:

Who has made the decision that sets in motion these chains of poisonings, this ever-widening wave of death that spreads out, like ripples when a pebble is dropped into a still pond? Who has placed in one pan of the scales the leaves that might have been eaten by the beetles and in the other the pitiful heaps of many-hued feathers, the lifeless remains of the birds that fell before the unselective bludgeon of insecticidal poisons? Who has decided – who has the *right* to decide – for the countless legions of people who were not consulted that the supreme value is a world without insects, even though it be also a sterile world ungraced by the curving wing of a bird in flight? The decision is that of the authoritarian temporarily entrusted with power; he [sic] has made it during a moment of inattention by millions to whom beauty and the ordered world of nature still have a meaning that is deep and imperative (p. 121).

A much more obvious influence is *Deserts on the March* by Paul Sears (1947).

This passage simplistically equates control with tyranny and individualised authoritarianism – hardly an enabling analysis of political power in the US of the 1960s. Carson's uncertainty about political agency is consistent with Naom Chomsky's (1997) argument that throughout the 20th century US media figures and other elites have promulgated 'spectator democracy' rather than participatory democracy. Wayne Ross (2000) argues that social studies education in the US continues to promote spectator democracy by reproducing proceduralist conceptions of democracy in which 'exercising your right to vote' is the primary manifestation of good citizenship: 'Democracy based on proceduralism leaves little room for individuals or groups to exercise direct political action; this is a function left to a specialized class of people such as elected representatives and experts who advise them' (p. 241).

Compared to *Silent Spring*, the narrative of *Dune* presents a relatively clear and coherent analysis of its political themes. Although Herbert's exploration of the political choices facing the inhabitants of Dune are focused on the dilemmas confronting an individual, he actively interrogates the relationships of power, control, responsibility and foresight through Paul Maud'Dib's constant agonising about the ways he is being elevated to the status of Messiah and his fears that by assuming control of Dune's future he will become a tyrant. In *Dune's* sequels, this ecopolitical theme is subordinated to portrayals of cosmic conflict – banal space operas comparable to the more recently produced episodes in the *Star Wars* cinema saga. But *Dune* itself is rescued from such banality by its persistent engagement with the politics of *responding* to global ecological crisis. Moreover, this engagement is made accessible to readers by the relatively obvious implicit parallels that can be drawn between the history of Dune and the history of the US.

In other words, returning to Howarth's (1996) characterisation of an ecocritic, I argue that Carson's *Silent Spring* is ecocritical to the extent that it depicts the effects of culture upon nature, celebrates nature, and berates its despoilers, but that it largely ignores or oversimplifies the possibilities of 'reversing their harm through political action' (p. 69). But this is precisely what *Dune* offers: a dramatic rehearsal of possible human responses to ecological crises and catastrophes.

I do not want to overstate this particular comparison. There is no shortage of ecocatastrophic literature from the era of *Silent Spring* and *Dune*. I personally believe that J.G. Ballard's stories of the earth in ecological ruin, such as *The*

Drowned World (Ballard, 1963) and *The Drought* (Ballard, 1965) surpass *Dune* in literary and ecocritical merit, although neither enjoyed the latter's mass popularity. I could also have made several more direct comparisons between books on similar themes, such as Paul Ehrlich's (1968) *The Population Bomb* and John Brunner's (1968) *Stand on Zanzibar*. My purpose is to draw attention to the different qualities of texts drawn from different genres that deal with similar 'big issues' in particular times and places and to caution against investing all or most of our interpretive efforts in those that come with labels such as 'non-fiction', 'documentary' or 'educational' rather than those which are categorised as 'fiction' or 'entertainment'.

Katherine Hayles (1990) makes a similar point in her archaeology of textual representations of nonlinear dynamics ('chaos theory') in literature and science:

different disciplines, sufficiently distant from one another so that direct influence seems unlikely,... nevertheless focus on similar kinds of problems [at] about the same time and base their formulations on isomorphic assumptions.... Different disciplines are drawn to similar problems because the concerns underlying them are highly charged within a prevailing cultural context. Moreover, different disciplines base the theories they construct on similar presuppositions because these are the assumptions that guide the constitution of knowledge in a given episteme. This position implies, of course, that scientific theories and models are culturally conditioned, partaking of and rooted in assumptions that can be found at multiple sites throughout the culture (p. xi).

As a curriculum scholar, I am interested in how the different qualities of these texts from different disciplines might best be deployed by teachers and learners. And I would argue that, although every text must be judged on its own merits, SF stories often are more hospitable to democratic and socially critical educational purposes than 'non-fiction' texts because they are open-ended 'thought experiments' rather than assemblages of evidence, arguments, and foreclosed conclusions. Books such as *Silent Spring* and *The Population Bomb* are a mixture of rhetorical forms but typically include sermons, moral exhortations and reprimands, didactic instructions, indictments and arraignments, cases for the prosecution, 'scientific evidence' and conclusions, conclusions, all characterised by *foreclosure*, by the author's assumption and assertion of a rhetorical dead-end (guilty, QED).

Much SF is not foreclosed. In *Frankenstein*, Mary Shelley (1992/1818) asks: what if a young doctor creates a human being in his laboratory...? In *Dune*, Frank Herbert asks: what if massive desertification threatens a planet very like Earth...? As Le Guin (1979) writes:

The purpose of a thought-experiment, as the term was used by Schrödinger and other physicists, is not to predict the future – indeed Schrödinger's most famous thought-experiment goes to show that the 'future,' on the quantum level, *cannot* be predicted – but to describe reality, the present world.

Science fiction is not predictive; it is descriptive (p. 156; emphasis in original).

As discussed in more detail in Chapter 6 with respect to environmental education, instrumentalist approaches to curriculum and learning tend to reflect and naturalise models of social interaction in which 'rational' behaviour is assumed to follow from human actors pursuing their more or less enlightened self-interests. These approaches readily accommodate 'instructive' texts like *Silent Spring* because they privilege 'scientific' understandings that are assumed to be instrumental in enabling humans to pursue such 'rational' choices. I have no doubt that *Silent Spring* energised and inspired many readers to become environmental activists and educators,⁷ but I suspect that many others might have been paralysed by its apocalyptic storyline, in much the same way that the threat of nuclear holocaust prompted some citizens to work for peace and others to build bomb shelters. A thought experiment like *Dune* invites a socially critical approach to curriculum and curriculum inquiry because it foregrounds socio-political structures and agency as well as technoscientific responses to an environmental crisis.

Of course, all of this is to be wise after the event. If I had been disposed to think about texts in the 1960s and '70s in the ways I think about them now I might have taught high school biology and science, and methods of teaching science and environmental education to undergraduate teacher education students, very

Dillon (2002) quotes an 'Australian EE doctoral student' as follows: 'I read *Silent Spring* for the first time as a fourteen-year-old teenager. At the time I was horrified, but vividly inspired by this text. It provided a doorway to the environmental movement and... inspired me to enter the debate ... Ten years have passed, and I am still intrigued by *Silent Spring*, such that I now endeavour to lead a career in the environmental movement and live my life accordingly' (p. 15).

differently. My interest now is in what this sort of analysis means for my present practice as a university teacher and researcher.

The Telling: a thought experiment in social transformation and cultural globalisation

I suggest that there are at least three reasons for educators to appraise speculative fictions that might help us to generate new ways of imagining global transitions in social environments and civil society, including the relations between democracy and education, in our present times and circumstances.

First, many nation-states are in various stages of economic, political and social transition from authoritarian regimes to more liberal and market-oriented societies and the role(s) that education can, should or actually does play in their democratisation remains open to question. For example, Holger Daun et al. (2002) report recent studies of student perceptions of and attitudes toward democracy and its representation in textbooks in four transition countries (Bosnia-Herzegovina, Yugoslavia, Mozambique, and South Africa) and conclude that 'a rather dark picture emerges in all four countries' (p. 192). They found that 'curricula do not deal very much with matters on democracy or in a way that could make the students less authoritarian and more democratic' (p. 192) and that 'judging from teachers' and students' answers, they do not see the school as a place where democracy and such matters are discussed and learnt' (p. 193). Daun et al. (2002) also write that in these four countries 'it is evident that curricula and textbooks do not embrace a broad perspective of democracy (including the participatory type of democracy) and that large proportions of the students do not have what in Western liberal democracies is seen as democratic attitudes' (p. 4).⁸

Second, although Western liberal democracies might embrace the rhetoric of participatory democracy, it does not necessarily follow that education and other social practices enact or encourage active citizenship. For example, I have already noted the cultivation of spectator democracy in the US, and I would argue that Australia during the past 20 years has fulfilled Marcus Clarke's prophecy – made more than 120 years ago – by becoming 'a Democracy tempered by the rate of

⁸ Daun et al. (2002) note that participatory democracy appears as an important theme in South Africa's new curriculum framework and textbooks but that large majorities of students in all four countries agree with such authoritarian positions as 'every country needs leaders whose decisions are not questioned' and 'some political parties should be forbidden' (p. 192).

exchange'.⁹ That is, Australian social and educational policy is now a function of the nation's position in a global marketplace understood as 'a grand democracy of consumption' (Lindy Edwards, 2002, p. 39).

This leads to my third reason for appraising speculative fictions in democracy and education. As globalisation blurs nation-state boundaries and undermines national authority, the grounding of public education systems in national democracies is destabilised. Carlos Alberto Torres (2002) notes that the purposes of public education have typically included preparing future labour for the nation's economy and preparing citizens for the nation's polity but that globalisation 'shifts solidarities both within and outside the national state' (p. 364). He thus argues that alternative futures for democratic education under globalisation must address the questions raised by the globalisation of the two traditional bases of formal education systems, namely, governance and economies:

These questions are very straightforward: Will globalization make human rights and democratic participation more universal, or will globalization redefine human enterprise as market exchanges invulnerable to traditional civic forms of governance? Whether education as a publicly shared invention, contributing to civic life and human rights, can thrive depends on the future of globalization – a future that may offer the internationalization of the ideals of a democratic education or may reduce education, and civic participation, to narrow instruments of remote and seemingly ungovernable market forces (p. 364).

Torres thus calls for a reexamination of democratic education in the light of the transformations of individual and collective identities into both more privatised and more globalised forms and concludes that 'to ask how educational policies could contribute to a democratic multicultural citizenship poses a formidable challenge to the theoretical imagination' (p. 376). I suggest that part of this challenge involves questioning our taken-for-granted assumptions about the types of cultural materials and media that constitute appropriate resources for the 'theoretical imagination'.

⁹ Marcus Clarke is a significant figure in the history of Australian literature, best known as the author of an epic popular novel, *For the Term of His Natural Life*. This quotation is taken from an essay, 'The Future Australian Race', published in *The Marcus Clarke Memorial Volume* (Hamilton Mackinnon, 1884, p.251) but must date from some years previously because the term of Clarke's own natural life expired in 1881.

Clearly, globalisation is a contemporary example of what, to borrow Hayles's (1990) terms (as quoted above), we could call an 'underlying concern' that is 'highly charged within a prevailing cultural context'. We can reasonably expect that 'theories and models' of globalisation 'are culturally conditioned, partaking of and rooted in assumptions that can be found at multiple sites throughout the culture'. To understand the cultural work performed under the sign of globalisation we need to consider how different disciplines represent globalisation as a focus for inquiry and speculation and how they resolve the questions, problems and issues that arise from these foci.

I think it is fair to say that when we¹⁰ present globalisation as a topic in education courses or conceptualise it as an object of educational inquiry, we tend to privilege texts from a relatively limited range of disciplines and sites of cultural production. For example, books that explicitly link globalisation and education (e.g., Burbules & Torres, 2000; Stromquist, 2002; Stromquist & Monkman, 2000) tend to rely on work in the economics, politics and sociology of education, comparative education, and policy studies. Scholars from other disciplines whose work is drawn upon by educational researchers again tend to emphasise areas such as economics, politics and sociology (e.g. Appadurai, 1996; Bauman, 1998; Beck, 2000; Brown & Lauder, 2001; Giddens, 2000; Jameson & Miyoshi, 1998; Waters, 1995). These works rarely refer in any detail or depth to the arts and popular culture as sites for the production of meanings of globalisation.

Studies that relate globalisation to issues of multiculturalism, postcolonialism and identity politics (including diasporan cultural identities) are more likely to refer to examples from literature and the arts (e.g. Coombes & Brah, 2000; Grant & Lei, 2001; Hage, 1998; Phillips, 2001; Sardar & Cubitt, 2002; Wilson & Dissanayake, 1996). Few education academics are likely to question the relevance of Salman Rushdie's (1981) *Midnight's Children* or, more recently, Zadie Smith's (2001) *White Teeth*, to understanding the cultural identity politics of globalisation, but novels such as these come with relatively 'high culture' credentials. I suggest that many works of genre fiction – as well as many 'low' cultural artefacts,

¹⁰ By 'we' here I mean People Like Us – academic researchers and teachers in higher education institutions who edit and contribute articles to scholarly journals.

including advertising, blogs and jokes¹¹ – might be equally rich sites for exploring the wider cultural meanings and manifestations of globalisation.¹²

Which brings me to *The Telling*, Le Guin's most recent contribution to her series of so-called 'Hainish' novels and short stories. The common background for this series supposes that, at least half a million years ago, intelligent humanoids from the planet Hain spread across the galaxy and settled on nearly a hundred habitable worlds (including Earth) that were then left alone for many millennia. Le Guin's stories imagine that communication and travel between the worlds has resumed and that a loose interplanetary federation, the Ekumen, coordinates the exchange of goods and knowledge among the myriad of diverse cultures, religions, philosophies, sciences and forms of governance¹³ that have evolved separately on the various planets. Representatives of the Ekumen travel to each planet when it is rediscovered and invite peoples of Hainish descent to participate in the federation, if they wish. Worlds have much to gain from joining the Ekumen, but also risk losing their distinctive identities.

Sutty is a Terran Observer for the Ekumen, a language and literature specialist who has travelled to the planet Aka¹⁴ to continue studies initiated by the Observers who first made contact with the Akan people some seventy years earlier. When

¹¹ An email joke circulating in 2002 supplied this 'High Distinction answer from ECO101 tutorial, first year, School of Economics and Commerce, Australian National University':

Q: How do you define globalisation?

A: Princess Diana's death.

Q: Why?

A: An English Princess with an Egyptian boyfriend crashes in a French tunnel, driving a German car with a Dutch engine, driven by a Belgian affected by Scotch whisky, followed closely by Italian paparazzi, on Japanese motorcycles, treated by an American doctor, using Brazilian medicine.
 (Sent to you by an Australian, using American [Bill Gates] technology which he stole

from the Taiwanese.)
 ² To demonstrate that I am prepared to practice what I preach, I will note here that I have included references to SF and/or popular culture in several of my own publications on globalisation (see, for example, Chapters 7 and 8 of this thesis and Gough, 2002c).

¹³ Readers who are interested in other thought experiments in governance are likely to find an earlier novel in Le Guin's Hainish series, *The Dispossessed* (1975/1974), particularly rewarding. In some editions *The Dispossessed* carries a subtitle, *An Ambiguous Utopia*, which signals the novel's implicit questioning of the conventional form and substance of utopian writing in Western literature. The central character of *The Dispossessed* is a theoretical physicist located in a century-old anarchist society at a time when it is becoming more structured. Not to be confused with nihilism or libertarianism, philosophical anarchism is based on a belief that moral responsibility rests with individuals and views cooperation (solidarity, mutual aid) rather than competition as the key to evolutionary survival.

¹⁴ Le Guin places great importance on naming things in both her fiction (see, for example, Le Guin, 1987) and literary essays (see Le Guin, 1989a), so it seems very likely that she intends the name of the planet Aka to invoke the acronymic abbreviation 'aka' (also known as).

she arrives she finds little to study because, while she has been travelling to Aka¹⁵, the traditional culture has been brutally suppressed and almost completely replaced by a technophilic ruling class that has enthusiastically embraced 'The March to the Stars'. Differing local spiritual practices and dialects, and the ideographic writing and literature she had studied, are now deemed subversive, and Sutty finds that she might be the only person on Aka who can still read texts that were written only a generation ago. The Corporation that governs Aka normally forbids Observers from travelling outside the new cities, which have been constructed and settled since the first contact with the Ekumen.

Sutty unexpectedly receives permission to travel upriver from the capital to an old provincial town where she gradually finds her way into the unofficial, traditional culture of Aka, which still survives and to some extent thrives in the locations and activities of daily life that are most difficult to police. She learns of the yearlong and lifelong cycles and patterns of feasts, fasts, indulgences, abstinences, passages, and festivals – observances that resemble the practices of most of the religions with which she is familiar. These are now unobtrusively interwoven into the fabric of ordinary life so that the Monitors of the Sociocultural Office find it difficult to identify any particular act as forbidden.

Sutty's problem (and, as I read it, the novel's) is how she and her fellow Observers might help to 'save' this culture from the destruction that the Ekumen's arrival on Aka inadvertently precipitated. Sutty initially is hostile towards the leaders of the Corporation – personified by a Monitor who tracks her activities – but she also recognises that her hostility is self-destructive and self-defeating. Her struggles with her own hatreds and self-doubts are in part located in the personal and historical baggage she brings from Terra to her work on Aka. Sutty grew up in a period of severe religious repression on Earth, and realises that she must learn to deal with her own tragic experiences of religious warfare and terrorism if she is to deal fairly with the Akans. The complexity of Sutty's background and its influence upon her development as an Observer offers a convincing vision of the difficulties and the opportunities of contact between different cultures for the people whose identities are constituted by those cultures.

¹⁵ A period of many years – the technology exists to transmit information instantaneously across any distance, but physical travel through space still takes a long time.

Sutty begins to resolve her dilemmas when she leaves the city and listens to her fellow travellers talk about the events of their daily lives:

She heard about them, their cousins, their families, their jobs, their opinions, their houses, their hernias... These dull and fragmentary relations of ordinary lives could not bore her. Everything she had missed in [the capital city], everything the official literature, the heroic propaganda left out, they told. If she had to choose between heroes and hernias, it was no contest' (pp. 34-5).

Part of what makes *The Telling* so curiously compelling is its sustained focus on the lives of ordinary people and the subtlety and sensitivity with which it renders everyday life. As is the case with Dune, the stakes in the novel are high - the survival of an entire world's traditional knowledge and culture – but in The *Telling* the struggle for survival takes place primarily within the registers of daily life, because it is the very richness of 'ordinary' life that Aka's totalitarian 'March to the Stars' threatens. Cultural destruction on Aka proceeds by grand and hideous macropolitical gestures, but its traditional culture survives and flourishes in small acts – choices about what to eat, what words to use, what stories to tell. In this sense, The Telling's title can be understood as a call to witness and celebrate culture as the telling of stories that give form and meaning to everyday life. I see the politics that Le Guin dramatises here as being consistent with Nancy Fraser's (1993) feminist view of a 'global solidarity' that is 'rooted in a concrete sense of human interdependence in everyday life, a vivid sense of the forms of emotional and practical support people require from one another in daily life, not only when they are very young, very old, or sick but also when they are healthy adults' (p. 22).16

Thus, one reading of *The Telling* is as a thought experiment in recuperating democratic ideals in the wake of their destabilisation by global corporatism. As such, it addresses Torres's (2002) questions about globalisation's effects on solidarities within and outside the nation-state by imagining in rich and plausible

⁶⁶ Fraser (1993) outlines three other ways of formulating an 'inclusive, universalist, global view of solidarity as shared responsibility which does not require shared identity', namely: a socialist view 'based on... our interdependence in a common global political economy... where wealth is the common creation of all people's labor'; an environmentalist view 'based on our... interdependence as inhabitants of a common biosphere'; and a radical-democratic view 'rooted in the fact that we inhabit an increasingly global public space of discourse and representation... that might be redefined as a space in which all people deliberate together to decide our common fate' (p. 22). Traces of the latter view can be discerned in *The Telling* (and a variation on it is particularly apparent in *The Dispossessed*; see n. 14, above).

detail how we might *perform* a citizenship premised on shared responsibility for each other's everyday existence. Although Fraser (1993) theorises this mode of solidarity as 'feminist' she emphasises that it does not require shared identity but, rather, a shared understanding of 'those upon whom we feel entitled to make claims for help and those whom we feel obliged to help in turn' (p. 22). Fraser's political principle clearly meets Torres's (2002) 'challenge to the theoretical imagination' but Le Guin delivers a similar challenge (and represents a similar principle) without the abstractions of theoretical labels. *The Telling* is a work of the *practical* imagination, a rehearsal of the concrete choices, decisions and actions that men, women and children can make to protect civic life and human rights (and resist their erosion) at a local, micropolitical level.¹⁷

Another reading of *The Telling* is to interpret its defence of daily life as an allegory of Tibet's plight under Chinese occupation. The ways of Akan telling resemble traditional Tibetan Buddhist practices and the modes of its suppression resemble Mao's Cultural Revolution. Le Guin confirms this interpretation in an interview with Mark Wilson (n.d.):

I was really just trying to work out in fictional terms what something like the Cultural Revolution in China or the rise of fundamentalism in Arabic countries does to the people involved in it – whether it's the suppression of a religion, which is what happened in China, or the dominance of a religion and the suppression of politics, which is happening in a lot of the Arab world. These are terrifying phenomena – this stuff's going on right now, all around us. And it is something obviously that human beings are likely to behave this way given the right circumstances. So I sort of had to write a book about it.¹⁸

Nevertheless, the Akan government is called the Corporation and the novel's vision is as applicable to the homogenisation of culture under corporate capitalism as it is to China's cultural wars. Le Guin's thought experiment gives us detailed historicised and contextualised visions of possible and plausible futures that are rooted in the choices we face in the present moment.

These two readings do not exhaust the many possible interpretations of *The Telling* but they should be sufficient to indicate that Le Guin's fiction shares what

¹⁷ Le Guin's non-fiction essays on SF and fantasy demonstrate a persistent engagement with feminist politics (see, for example, 'Is gender necessary? Redux' and other essays in Le Guin, 1989) and much of her recent fiction challenges the gendered conventions of these genres.

¹⁸ http://www.scifi.com/sfw/issue189/interview.html <27 November 2002> As explained in Chapter 2, n. 17, I am not privileging Le Guin's interpretation of *The Telling* just because she wrote it.

Hayles (1990) calls 'isomorphic assumptions' with the more self-consciously 'academic' literature of globalisation, governance and social transformation. Many of its interpretive (and thus, I believe, educative) possibilities lie in what at first seem like minor details. For example, almost every significant event in the book is reported to Sutty, who witnesses almost nothing directly, at any point (a little like the way many of us get our news of world events via CNN and its affiliates). Also, Aka is a world with only one continent, so that all of its peoples live on just one landmass. Sutty's reflections on the significance of this difference from Terra – and its implication for the politics of identity – are intriguing, especially in relation to her conviction that traditional Akan spirituality is not a 'religion':

religion as an institution demanding belief and claiming authority, religion as a community shaped by a knowledge of foreign deities or competing institutions, had never existed on Aka.

Until, perhaps, the present time.

Aka's habitable lands were a single huge continent with an immensely long archipelago of its eastern coast... Undivided by oceans, the Akans were physically all of one type with slight local variations. All the Observers had remarked on this, all had pointed out the ethnic homogeneity... but none of them had quite realised that among Akans there *were no foreigners*. There had never been any foreigners, until the ships from the Ekumen landed.

It was a simple fact, but one remarkably difficult for the Terran mind to comprehend. No aliens. No others, in the deadly sense of otherness that existed on Terra, the implacable division between tribes, the arbitrary and impassable borders, the ethnic hatreds cherished over centuries and millennia. 'The people' here meant not *my* people, but people – everybody, humanity. 'Barbarian' didn't mean an incomprehensible outlander, but an uneducated person. On Aka, all competition was familial. All wars were civil wars (pp. 98-9).

We hardly need to be reminded of just how deadly our sense of otherness can be. The breadth of new antiterrorist legislation in nations such as Australia and the US – coupled in Australia with the present federal government's paranoid approach to 'border protection' and treatment of asylum seekers that amounts to institutionalised racism – is eroding the foundations of respect for human rights in these countries and worldwide. *The Telling* provides us with empirical evidence of the *possibility* of thinking what to many humans is unthinkable, such as imagining a world without 'foreigners'. What would social policy (and educational policy) look like if we too assumed that 'the people' meant 'everybody, humanity'? Le Guin reminds us that it is possible to think differently about identity and community, and questions of inclusion and exclusion, without ever underestimating the remarkable difficulty of doing so, and the even greater difficulty of bringing new imaginaries into effect.

Make a rhizome

Make a rhizome. But you don't know what you can make a rhizome with, you don't know which subterranean stem is going to make a rhizome, or enter a becoming, people your desert. So experiment (Gilles Deleuze and Félix Guattari, 1987, p. 246).

So I did. I have long been intrigued by Deleuze and Guattari's figuration of the rhizome, initially via Umberto Eco's speculations on 'the structure of conjecture' (see Chapter 2, p. 71, above) and more recently through the inspiration of writers such as Rosi Braidotti (2000) and Patricia O'Riley (2003). But I had only used the concept analytically until I wrote this multipurpose essay. Although accidents of experience (especially the coincidence of the several requests/demands I describe at the beginning of this chapter) helped to shape this particular narrative experiment, I was from the outset conscious of my desire to produce a rhizomatic textual assemblage. O'Riley (2003) writes that:

Rhizomes affirm what is excluded from western thought and reintroduce reality as dynamic, heterogeneous, and nondichotomous; they implicate rather than replicate; they propogate, displace, join, circle back, fold. Emphasizing the materiality of desire, rhizomes like crabgrass, ants, wolf packs, and children, de- and reterritorialize space (p. 27)

If *Dune* is the crabgrass in *Silent Spring*'s lawn, readings of *The Telling* offer us the ants, wolf packs, and children that deterritorialise futures for democratic education under globalisation.

Concluding notes

Rewording the world

Writing is a method of discovery, a way of finding out about yourself and your world. When we view writing as a *method*, we experience 'language-in-use,' how we 'word the world' into existence... And then we 'reword' the world, erase the computer screen, check the thesaurus, move a paragraph, again and again. This 'worded world' never accurately, precisely, completely captures the studied world, yet we persist in trying. Writing as a method of inquiry honors and encourages the trying, recognizing it as emblematic of the significance of language (Laurel Richardson, 2001, p. 35; emphasis in original).

Like Richardson, I write in order 'to learn something that I did not know before I wrote it' (p. 35). This thesis shares some of what I have learned by attempting to write reworded worlds of curriculum inquiry into existence by bringing SF stories and other literary and popular media fictions into 'play' within a theatre of representation and performance already occupied by the canonical and commonplace academic and professional texts that inform our work.

The essays I have selected and edited to constitute this thesis explore and enact the effects of foregrounding a number of methodological dispositions and orientations in curriculum studies. These include a privileging of fictional texts (in literature and other media) in the course of reading, writing, representing and working towards the resolution of curriculum problems and issues. Bringing fictions into the intertextual spaces of curriculum discourses-practices produces an expanded field and multiplying possibilities for inquiry and action – for rewording the worlds of curriculum. Borrowing John Sundholm's (2002) words, I could say that my dispositions enable me 'to make a move, not to follow a method, not to aim at fixed systematicity, but to explore different ways of proceeding' (p. 115).

Some of my dispositions and orientations have shifted during the decade of curriculum work in which I wrote these essays. For example, my earlier orientation to understanding curriculum as a practical art in the deliberative sense has been inflected and supplemented (though not entirely displaced) by a reconceptualist orientation to understanding curriculum as text. But my understanding of the reconceptualist project has also changed and some of the work of this thesis can be understood as a response to its gaps and silences.

For example, William Pinar et al.'s (1995) synoptic text, *Understanding Curriculum: An Introduction to the Study of Historical and Contemporary Curriculum Discourses,* portrays curriculum as a number of different types of text. Indeed, thirteen of the fifteen chapter titles take the form 'Understanding curriculum as [descriptor] text', where the descriptive term(s) include: historical (three chapters), political, racial, gender, phenomenological, poststructuralist, deconstructed, postmodern (the latter three in one chapter), autobiographical/ biographical, aesthetic, theological, and international.

I have used this text with postgraduate students in Australia, Canada and South Africa and find much in it to admire. I agree especially with Pinar et al.'s 'Postscript for the next generation' in which they foreshadow a future for curriculum inquiry in terms of generating and sustaining 'complicated conversations':

Curriculum is an extraordinarily complicated conversation. Curriculum as institutionalized text is a formalized and abstract version of conversation, a term we usually use to refer to those open-ended, highly personal, and interest-driven events in which persons encounter each other. That curriculum has become so formalized and distant from the everyday sense of conversation is a profound indication of its institutionalization and bureaucratization. Instead of employing others' conversations to enrich our own, we 'instruct' students to participate in others' – i.e. textbook authors' – conversations, employing others' terms to others' ends. Such social alienation is an inevitable consequence of curriculum [studies] identified with the academic disciplines as they themselves have been institutionalized and bureaucratized over the past one hundred years. Over the past twenty years the American [i.e. 'reconceptualist'] curriculum field has attempted to 'take back' curriculum from the bureaucrats, to make the curriculum field itself a conversation, and in so doing, work to understand curricula (p. 848).

But the 'complicated conversation' that Pinar and his colleagues invite is not yet complicated enough for me. At the time of writing, these authors seemed to be speaking principally for US and Canadian scholars and almost exclusively for those who work in Eurocentric scholarly traditions.¹ The research orientations and themes indicated by the chapter titles are diverse only within Western registers of

For example, a chapter title such as 'Understanding curriculum as aesthetic text' carries very different connotations from, say, 'Understanding curriculum as art' or even 'Arts-based curriculum inquiry'.

Concluding notes

difference in approaches to disciplined inquiry. For the most part, they seem limited to what they call the 'formalized and abstract' interests that motivate most 'institutionalized and bureaucratized' Western researchers rather than also including 'open-ended, highly personal' interests, including the emancipatory and esoteric interests of many non-Western and indigenous scholars.²

For example, in the chapter titled 'Understanding curriculum as international text', institutionalised and bureaucratised assumptions seem to underlie Pinar et al.'s (1995) assertion that there are seven traditions of international curriculum research, namely, descriptive, analytical, interpretive, evaluative, predictive, planning/organisational, and theoretical studies (p. 793-4).³ More complicated conversations might be generated by trying to understand curriculum in terms of Linda Tuhiwai Smith's (1999) list of twenty-five indigenous research practices: claiming, testimonies, story telling, celebrating survival, remembering, indigenizing, intervening, revitalizing, connecting, reading, writing, representing, gendering, envisioning, reframing, restoring, returning, democratizing, networking, naming, protecting, creating, negotiating, discovering, and sharing (pp. 142-60). These practices invite us to think not only of 'understanding curriculum as [choose your own descriptor] text' but also in terms of understanding curriculum as a named or implied performance.

I hope that the essays collected in this thesis suggest new chapters that might be written for any future edition of Pinar et al.'s synoptic text or its equivalent. For example, Chapters 1-4 and 9 might suggest 'Understanding curriculum as literary and popular media text' and Chapters 3 and 10 could inform 'Understanding curriculum as speculative text'. Chapters 7-10 might suggest different ways of writing 'Understanding curriculum as international text'.

² I must emphasise here that I am well aware that Pinar and his colleagues not only recognise the Eurocentric biases of their text (which represents work performed over more than a decade prior to its publication in 1995) but are actively addressing this limitation of the North American curriculum field. Pinar in particular has been very active in this respect. He coordinated and edited the *International Handbook of Curriculum Research* (Pinar, 2003) and organised the first Internationalization of Curriculum Studies Conference held at Louisiana State University, Baton Rouge, USA, 27-30 April 2000 (see Donna Trueit et al., 2003). He also initiated the formation of the International Association for the Advancement of Curriculum Studies in 2001.

³ Comparative studies is a curious omission from this list, although elsewhere in this chapter comparative education seems to be treated as a superordinate tradition.

As I stated in the Introduction to this thesis (p. 3, n. 3), I have a long-standing preference for texts that offer readers a 'narrative of inquiry' rather than a 'rhetoric of conclusions', and I thus share Susanne Kappeler's (1986) antipathy to the conventional ways of writing conclusions to texts:

I do not really wish to conclude and sum up, rounding of the argument so as to dump it in a nutshell on the reader. A lot more could be said about any of the topics I have touched upon... I have meant to ask the questions, to break the frame... The point is not a set of answers, but making possible a different practice (p. 212).

I trust that this thesis demonstrates that narrative experiments and intertextual turns of the types I have performed here make a different practice possible. The work of rewording the world of curriculum inquiry is always unfinished.

(To be continued...)

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