

DECOLONISING SUSTAINABILITY: SUBVERTING AND APPROPRIATING MYTHOLOGIES OF SOCIAL CHANGE

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This essay explores some possibilities for decolonising the concept of sustainability in southern African discourses of environmental education by drawing attention to examples of the ways in which imperialist interests appear to be privileged in local expressions of selected transnational mythologies of social change. In a previous issue of this journal the author argued that southern African environmental educators should be suspicious of globalisation - pressures on nation states to integrate their economies into the international marketplace. Here it is argued that there may also be reasons to be suspicious of pressures to comply with international policy trends in environmental education, such as those reflected in publications from the World Commission on Environment and Development (*Our Common Future*, 1987), the International Union for the Conservation of Nature (*Caring for the Earth*, 1991), and the United Nations Conference on Environment and Development (*Agenda 21*, 1992).

POSITIONING THIS ESSAY AUTOBIOGRAPHICALLY

How can I - an Australian academic who has spent only short periods of time in southern Africa - presume to write an essay about decolonising southern African discourses of environmental education? Is not this article itself an exercise in neocolonialism? Perhaps it is, but I hope not - and I think that the best way of preventing it from being read as such is for me to describe very precisely the standpoint from which I speak and write.

I am one of six Australian university academics participating in a two-year institutional links project funded by the Australian federal government to aid 'capacity-building' in environmental education in South African universities and teachers colleges. Clearly, our participation in the project is intended to be catalytic in some way we are here to 'help' - and I am very uncomfortable with being positioned as a 'helper'. I try to heed the advice of Lila Watson, an Australian Aboriginal educator and activist, who is reported as saying, "If you've come to help me you're wasting your time. But if you've come because your liberation is bound up with mine, then let's work together" (quoted in Wadsworth, 1991:11). Whether we are Australian or South African, the need to decolonise our respective local discourses of environmental education is, I believe, the kind of shared emancipatory project that will allow us to work together in mutually supportive and rewarding ways, rather than positioning one party as 'helping' the other.

My present understanding of the local conditions and circumstances in which environmental education is enacted in southern Africa has principally been

derived from a small number of face-to-face and e-mail conversations with South African environmental educators and from a great deal of reading.

However, I am acutely aware that most of the stories I have read about environmental education in southern Africa are those that have been shaped by the necessity or desire for them to be accepted into an imperialist archive. For example, Taylor's (1998:202) report of his study of trends in primary school environmental education in ten southern and eastern African countries is "based on the secondary analysis of national reports describing the status of EE", most of which "were commissioned by international donor agencies, [or] prepared for international conferences". These reports tell us no more about environmental education in southern Africa than their respective authors are prepared to share with representatives of international donor agencies and delegates to international conferences.

Thus, I cannot say that I am particularly well-informed about environmental education in southern Africa at this time, and I am certainly under no illusions that I am anything but an outsider - a tourist - whose perceptions and judgements can easily be challenged as being superficial or naive. But being an outsider also gives me a standpoint from which to observe environmental education in southern Africa that is different from that of my local colleagues. Nor do I mean to be apologetic about being a tourist: as I argue elsewhere (Gough, 1994), Baudrillard's (1988) *America*, which documents his provocative reflections on travelling in the USA in 1980, demonstrates the extent to which an

outsider can illuminate much that is invisible to a nation's residents. This standpoint might make it easier for me to identify some of what Wagner (1993:16) would call the 'blind spots'- which he distinguishes from 'blank spots'- of environmental education researchers in southern Africa at the present time. In Wagner's schema, what we "know enough to question but not answer" are our blank spots; what we "don't know well enough to even ask about or care about" are our blind spots: "areas in which existing theories, methods, and perceptions actually keep us from seeing phenomena as clearly as we might".

POSITIONING THIS PAPER METHODOLOGICALLY

Much of my work as a research methodologist and environmental educator is informed by narrative theory and poststructuralism. In brief, narrative theory invites us to think of all discourse as taking the form of a story, and poststructuralism invites us to think of all discourse as taking the form of a text. Some of the uses to which I have put narrative theory and poststructuralism to date are described in the stories of my attempts to reconceptualise research and teaching in environmental education as postmodernist textual practices (see for example Gough, 1991; 1993a,b,c; 1994; 1996; 1997b (in press)).

Following Van Maanen's (1995:4) characterisation of different dimensions of qualitative inquiry as 'fieldwork, headwork, and textwork', I think of myself chiefly as a 'textworker', and more specifically as an essayist, where 'essay' is understood as a verb - to attempt, to try, to test. In conceptual inquiry an essay serves a similar function to that of the experiment in empirical research - a disciplined way of investigating a question, problem or issue. Both 'essay' and 'assay' come to English via the French *essayer* from the Latin *exigere*, weigh; 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 be for a conference presentation or for a scholarly journal - is a form of inquiry: most of the time, I really do not know what the final thesis of my essay will be when I start to write it. Ideas about narrative and textuality are the instruments and apparatus with which I produce 'data' in my conceptual laboratory.

My methodological (dis)position is captured succinctly by the literary critic Johnson's response (quoted by Salusinsky 1987:81) 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 organise the 'noise' that is being disregarded.

Thus, 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. Deconstruction helps us ask questions about what has been muted, repressed, and unheard in our discourse/practices - following Wagner, but with aural rather than visual metaphors, we might call these 'deaf spots': voices and stories that existing theories, methods, and perceptions actually prevent us from hearing.

NARRATIVE AND TEXTUAL ANALYSIS IN/AS ACTION

Much of what we (collectively and individually) claim to 'know' in or about education comes from telling each other stories of educational experience. As Connelly & Clandinin (1990:2) write:

humans are storytelling organisms who, individually and socially, lead storied lives. The study of narrative, therefore, is the study of the ways humans experience the world. This general notion translates into the view that education is the construction and reconstruction of personal and social stories; teachers and learners are storytellers and characters in their own and other's stories.

We can therefore approach educational inquiry as the analysis and criticism of the stories we encounter in our work - teachers' stories, children's stories, policy makers' stories and so on - as well as the myths (pervasive or persistent stories in our cultures and subcultures) which mediate interactions between actors in educational settings. These stories are constituted in the discourses and practices in which we engage - in the informal exchanges of anecdotes and gossip, in the formalised discourses of policy statements, textbooks and journal articles, in the rituals of teaching and conference presentations, and in all the

other texts, artifacts and media with which we construct meaning in our daily lives.

Narrative approaches to educational inquiry take us beyond analysis and criticism to considering questions of choice, decision and action. As Brink (1998:19) 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". MacIntyre (1984:216) goes even further by asserting a crucial - even necessary - role for narrative analysis in practical reasoning and ethical thinking:

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.

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. These discourses are given substance and pattern through the stories we deploy in our social interactions. Reflecting critically on the stories we read, hear, live and tell, may help us to understand how we can turn our own discourses and practices against those which constrain us. The relevance of such an approach to the circumstances facing many southern African environmental educators is evident in Chapman's (1998:86) 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 1990's 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.

If narrative is such an 'intense and comprehensive expression' of culture, as Chapman suggests, then we need to examine the stories in which we participate very carefully - to recognise the myths and meanings in their sequences and structures, to be aware of how they are permeated with our histories and hopes, and to have a self-critical awareness of how our interpretations of these stories influence our thoughts and actions. If we are to look closely and critically at the stories we encounter in our work and at what they might 'tell' us, we must understand them as constructions. They are not objective or impartial; they are neither true nor false. Stories are created or told by someone and interpreted by someone; both parties act and interact within a social context and their purposes in telling and interpreting the story may or may not be similar.

FIVE TRANSNATIONAL MYTHOLOGIES

As MacIntyre (1984) asserts, mythologies are at the heart of many of our stories. Myths organise culturally salient material into stories or symbols that have a pervasive and telling effect, summarising and compressing complex experiences into readily assimilable forms. Following (with some modifications) an analysis provided by Michael & Anderson (1986), I will outline here five types of story that are competing for the world's attention and that constitute what we might call transnational mythologies of social change. These are the sorts of stories that appear to operate and circulate both within and beyond nation states to provide explanations for where things have come from and anticipate where they are (or ought to be) going. Although I will demonstrate that traces of some of these stories can be found in southern African discourses of environmental education, I do not offer them as any kind of comprehensive framework for structurally analysing these discourses. Rather, I intend these stories to be catalysts for generating the types of questions that Lather (1991:156) appears to have in mind when she writes:

poststructuralism helps us ask questions about what we have not thought to think, about what is most densely invested in our discourse/practices, about what has been muted, repressed, unheard.

In poststructuralist terms, the five transnational mythologies outlined below are 'metanarratives' -

stories which purport to legitimate other stories. The poststructuralist position is that meta-narratives should be treated with incredulity.

Progress Stories

Progress stories are a continuing legacy of the modern era in which Western nations came to be dominated by industrialism and the sciences and technologies that support it. As part of the dominant ideology of the West, progress stories manifest a culturally imperialistic myth of 'development' that includes elaborate rationalisations of how and why so-called 'primitive' societies can and ought to become capitalist democracies. Progress stories faltered when the illusion of development was punctured by the 1980's debt crisis, but have since been revitalised by the new organising principle of globalisation (see McMichael, 1996). According to the progress-as-globalisation stories, nation states no longer 'develop' but, rather, position themselves in the global economy.

Progress stories are deeply embedded in southern African discourses of educational reform. For example, Mungazi & Walker (1997:188) quote with approval the assertion in Zimbabwe's Transitional National Development Plan that educational reform must be "set in a dynamic framework of a developing economy"; these authors also assert that the development strategies for southern African nations "must entail mobilising natural resources to finance educational reform" and that this economic support for educational reform must be "cast in the setting of free trade with minimum or no government control". While Le Grange, Schreuder & Reddy (1997:9) assert that in South Africa a concept of 'people-centred' development "offers an alternative to development which is simply associated with growth in economic output", an Environmental Education Curriculum Initiative (EECI) (1997:7-8) discussion document explicitly sees 'education for sustainability' as instrumental in positioning South Africa in the global economy:

Without concerted efforts at life-long education for sustainability, South Africa will not only fail to secure a competitive position in the world market, but sustainable use of natural resources - water, soil, energy - is the basis of our economy and the health of the citizens.

Progress stories are also implicated in many African nations' efforts to resolve environmental problems and issues through, for example, their participation in the National Environmental Action Plan (NEAP) process. Falloux & Talbot (1993:xv) provide several case studies of African countries that embarked on the

NEAP process in the late 1980's as part of their effort "to overhaul their economies by adopting a holistic approach to environment and natural resource management practices". While these authors assert that NEAP's are 'not a World Bank process', others such as Dorm-Adzobu (1994:1014) argue that "the [NEAP] process which originated in 1987 was spearheaded by the World Bank, which has been criticised for insisting on the preparation of a NEAP as a conditionality of IDA loans".

Neo-Marxist Stories

The classic Marxist story of revolution promised the overthrow of the capitalist state and its transnational offshoots, the reallocation of wealth and an end to class conflict. During the 1980's, neo-Marxist environmentalists argued in books like *Red and Green: A New Politics of the Environment* (Weston, 1986) that it is capitalism rather than industrialism as such which underlies many environmental problems. Even taking the collapse of communism in eastern Europe into account, versions of Marxist stories can still be found among the official ideologies of many nations (and inspire liberation movements, guerrillas and terrorists). Neo-Marxist stories are waning somewhat in the intellectual world at large but they remain a strong force among academic educators (it may be a measure of the deep conservatism of institutionalised education that a neo-Marxist interpretation of the role of schools in reproducing structural inequalities in society is still considered to be a 'radical' position among many sociologists of education).

In southern Africa, one of the most striking attempts to reshape education by reference to a neo-Marxist story was (President) Nyerere's effort to reform Tanzania's educational system in 1967. Nyerere argued that Tanzania's system, then modelled on the British system but with an even heavier emphasis on subservient attitudes and white-collar skills, was based on the assumptions of a colonialist and capitalist society and encouraged individualism rather than cooperation. Nyerere's reforms stressed the concept of *ujamaa* - 'familyhood' - and put a high priority on mass primary and adult education (rather than elite secondary and higher education) and curricula which emphasised agriculture, community service, and productive labour. But as Bray (1997:111-112) reports, few of Nyerere's reforms lasted more than a decade:

Most were broken on the rocks of individual and family self-interest, and the capitalist forces and accompanying educational structures soon reasserted themselves. The context for education since the early 1980's has been 'structural

adjustment' of the type advocated by the World Bank and other capitalist institutions.

Bray (1997:112) notes that similar patterns are evident in other socialist nation-states, in Africa and elsewhere, that embarked on educational reform as part of their decolonialisation projects. For example, education was a major dimension of the Mozambican Liberation Front's operations and of Ho Ch Minh's liberation campaign in Vietnam. As part of its preparations for postcolonial nationhood, North Vietnam established a unified nine-grade education system in 1950, with over a million enrolments by 1953, and had more than 1 500 higher education institutions by 1954. Similarly, in 1972, the Mozambican Liberation Front (FRELIMO) operated 160 primary schools serving 20 000 children in Mozambique's liberated zones, while adult literacy work reached another 20 000 people (see Bray, 1997:107). But today, "schools in Vietnam and Mozambique are again strongly capitalist in the values they transmit, and are in considerable contrast to the institutions operated by the liberation movements in the pre-Independence eras" (Bray, 1997:112).

There may be hints of a neo-Marxist story in le Grange, Schreuder & Reddy's (1997:9) suggestion that the new South Africa's aspiration to 'people-centred' development "links the concept of sustainable development with issues of social justice and equity in the distribution of resources". However, two of these authors, le Grange & Reddy (1997:14), seem to fear that the prospects for people-centred sustainability are threatened by the narrowing of the education policy agenda in South Africa following the 1994 elections - "a shift in education policy from earlier talk of people's education and robust civil participation to a technocratic discourse emphasising centrally-defined outcomes-based education and a unified education system".

Religious Fundamentalist Stories

Many people in many different countries yearn for a return to a society governed by Christian values - or, more accurately, their understandings of such values.

Christian fundamentalism is often implicated in social oppression and environmental exploitation. For example, the Roman Catholic Church long supported the policies of the Portuguese in Angola and Mozambique, and until 1970 the Dutch Reformed Church supported apartheid in South Africa for the biblical 'reasons' that black and white people had nothing in common and

thus were 'unequal even before God' (see Mungazi & Walker, 1997:181, 193). In environmental matters, the Judeo-Christian theology of stewardship stresses the obligation of humans to be caretakers of the earth and to use its resources wisely, but some Christians still take literally the Genesis text which tells humans to 'subdue' the earth and to have 'dominion' over it (equating 'dominion' with domination and thus acting as though humans are superior to nature and free to use it in any way they please). Christian fundamentalists tend to be suspicious of foreign and federal influences, fiercely protective of national and state sovereignty, and deeply pessimistic about rapid change. Some people manage to combine progress stories with Christian fundamentalism but there is a basic conflict between them. To set increased consumption as a goal for oneself, when one knows full well what the consequences for others will be, violates fundamental Christian virtues.

There are other religious fundamentalist stories with Islam being among the most prominent in global politics. In much of the so-called 'developing' world, including parts of Africa, Islam is the only real adversary to Western stories of progress. Islam offers to oppressed peoples a persuasive political and economic ideology, rooted in cosmology, and is often the basis for a pox-on-both-your-houses rejection of capitalism and Marxism. Compelling questions about the inter-relationships of science and culture have been raised by studies in Islamic science (e.g. Sardar, 1989) which have joined other post-colonial critiques of the social and environmental effects of modern Western science (e.g. Harding, 1993, 1998; Petitjean, Jami & Moulin, 1992; Sardar, 1988; *Third World Network*, 1988). The 'Islamisation of knowledge' aims to replace dominant Eurocentric conceptions with a historical and cultural consciousness that is indigenous to the Muslim world (and thus parallels other forms of 'liberation theology' in Latin America and elsewhere).

However, religious fundamentalism - be it Judaic, Christian or Islamic - has often supported patriarchy, despotism, genocide and environmental destruction on a grand scale, and its global persistence (in any form) should remind us that the reconciliation of religious beliefs and environmental ethics is a challenge of some magnitude for environmental education. We can speak of sustainable development, sustainable economies, sustainable democracy, a sustainable world order, and sustainable modes of health maintenance, but when we turn to spiritual matters we are faced with the black hole of green politics: what constitutes sustainable religion?

Green Stories

Each of the above three types of story is either a product of the scientific and industrial revolutions or, as told now, a reaction to them. But newer stories have also emerged in recent years. For example, during the 1980's, social researchers such as Harman (1985, 1988) detected in Western industrialised countries a strengthening of 'inner-directed' values - a clustering of ecological, humane and spiritual values accompanied by a deeper and more subtle shift in beliefs "away from the confident scientific materialism of the earlier part of this century" (Harman, 1985:325), together with a parallel shift in developing countries away from Western materialism and towards a reassertion of indigenous cultural values. Harman (1985:325) saw the change in both cases as involving "a shift in attitude toward our inner, subjective experience, affirming its importance and its validity". Green politics rode the tide of this change and, while the global green movement may have weakened in some respects during the past decade, it has not disappeared, and it may yet be a political manifestation of a broader and more enduring shift in cultural values (see also Gough, 1989; 1990). It should be noted that green stories are not homogeneous: Dunkley (1992:52) considers approaches to environmental problems and solutions that "are often flippantly colour-coded for convenience" and distinguishes 'light green' and 'deep green' positions among other approaches (including 'blue' and 'red') to sustainable socio-economic systems. Whatever their hue, green stories of one type or another clearly are circulating within the discourses of environmental education in southern Africa but, as is the case elsewhere in the world, they are vulnerable to 'colonisation'. For example, Masuku-van Damme (1997:26) begins her essay on indigenous knowledge in environmental education as follows:

The World Commission on Environment and Development in 1987 advised that society at large has a lot to learn from traditional skills and knowledge to manage complex ecological systems. This advice resulted from a realisation that impositions by First World donor agencies on development projects in developing countries often complicated rather than solved environmental problems.

There is a degree of irony in beginning an essay on the value of indigenous knowledge in environmental education by invoking the authority of the World Commission on Environment and Development (WCED). I am aware that there may be sound strategic reasons for legitimating indigenous knowledge by reference to a 'First World' agency, but I cannot ignore

the contradiction. I wholeheartedly agree that "society at large has a lot to learn" from local knowledge systems (see, for example, Gough, 1998). However, my support for this proposition stems not from my acceptance of WCED's patronising approval but, rather, from my interpretation of evidence of indigenous peoples' achievements in specific instances of local environmental management.

Other 'New Paradigm' Stories

Many people identify their versions of green stories with a paradigm shift but not all of the 'new paradigm' stories include commonplace features of green stories (such as feminism, cultural pluralism, steady-state population and economy, decentralisation, human-scale technology, and esoteric spirituality). Some new paradigm stories are super-progress - a sudden leap forward to an entirely new way of being - and, while some draw heavily on green politics, others embrace big business, high technology and the industrialisation of space. Some support their expectations by reference to new frontiers of science, such as chaos and complexity theories (see for example, Gleick, 1987; Prigogine & Stengers, 1984) and other manifestations of what Griffin (1988) calls the 'reenchantment' of the world. I have great admiration for many new paradigm storytellers, partly for their ingenuity and partly because they are just as prepared to see serious moral deficiency in Newtonian mechanics as in fundamentalist religions.

However, I am sceptical of the wisdom of invoking new understandings of nature as a ground for moral judgement. 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? Ross (1994:15) sums up the issue nicely when he writes: "ideas that draw upon the authority of nature nearly always have their origin in ideas about society". More recently, Ross (1996:114) has used chaos theory as an explicit example of the problem to which he alludes:

Outside of Jurassic Park, I have yet to see a critique of Chaos Theory that fully exposes its own kinship with New Right biology, underpinned by the flexible economic regimes of post-Fordist economics¹.

According to Ross (1996), US Vice President Gore's (1992) book, *Earth in Balance*, is a case in point. Ross (1996:114) reads Gore as establishing

a pervasive kinship between ecological crisis and the latest crisis of Cold War liberal consen-

sus politics. However, the consensus-building machine of liberal capitalism has been thrown out of whack by the collapse of the communist threat.

Yet chaos theory explains that the ecological crisis is 'natural' and that it means we are moving to a higher state of equilibrium:

What Gore invites, then, is this conclusion:

far from owing anything to the legitimisation crisis of the national security state and the permanent war economy, the latest consensus crisis of liberal capitalism should be seen as a natural event, especially since the whole world is in a state of disequilibrium - 'nature is out of place.' The time is now ripe for the emergence of a new stable state of world equilibrium, consciously directed by the need to rescue its natural resources.

In other words, Gore uses popular understandings of the 'naturalness' of chaos and ecological crisis to legitimate the production of a 'new' world order that once again privileges stability and equilibrium - this time guaranteed not by the 'mutually assured destruction' of nuclear deterrence, but by the global equilibrating forces of 'free trade'. However, as the US environmental groups who initially supported Gore now realise, 'free' trade is neither fair nor environmentally ethical. For example, under the terms of the Uruguay round of the General Agreement on Tariffs and Trade (GATT) in the early 1990's, which was enthusiastically supported by the Clinton-Gore 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.

TELLING STORIES ABOUT STORIES

While the five types of story I have called 'transnational mythologies' are all competing for our attention, it should be apparent that some are commanding more attention than others in various parts of the world. Progress stories clearly dominate official education (including environmental education) policy discourses in southern Africa, although it is evident that neo-Marxist and green stories are also struggling to be heard. There is less evidence of the influence of religious or 'new [scientific or super-progress] paradigm' stories, but environmental educators should be alert to the strategic possibilities of appropriating,

mobilising and/or amplifying them as ways to trouble the hegemony of progress stories.

These stories are human inventions and, like all things of our own making, are likely to be most useful - and least harmful - if we understand their complex social histories and their possibilities for determining particular trajectories of social change. Rather than trying to shout each other's stories down we need to tell stories about stories. In le Roux's (1997) apt words, we need to encourage 'sustainable conversation' about the meanings we exchange and the effects of privileging some and diminishing others.

It is for this reason that I am optimistic about the long term effects of the global information culture. The proliferation of electronic linkages among once separate cultures, governments, economies and ecosystems brings with it the possibility of a worldview that is to some extent a global common property which can coexist with local stories. But if an information culture is to encourage the realisation and exchange of globally shared meanings, it must embody both information and information about information. Each story we live by is a selective and creative ordering of information available at the time of its telling and all stories are threatened by new information. Progress stories are subverted by news of toxic wastes, technological malfunction and economic crises. Marxists are so sick of hearing about the low productivity of Marxist economies that most of them have stopped being Marxists. Many religious fundamentalists do not want to know about modern science, let alone postmodern science. However, if the global information culture is to help us in the deconstruction of myths and meta-narratives then we must remember that cybernetic information systems are not ends in themselves but means for extending human capacities by enlarging and facilitating interactions among a global community of reflective, responsive and critical practitioners.

Despite the almost biblical status that documents such as *Our Common Future* (WCED, 1987), *Caring for the Earth* (IUCN, UNEP & WWF, 1991), and *Agenda 21* (UNCED, 1992) have attained among many environmental educators, they are still progress stories. Each of them takes typically Western capitalist ideological positions (including commitments to efficiency, control, manipulation, instrumentalism and utilitarianism) while tacitly denying ideology in their bland surface rhetoric. Each offers advice about correcting practice that reinforces present practice (such as the application of mechanistic systems models to environmental

research and management). Each largely ignores the effects of power in shaping the discourses of environmental practice. Pedagogically, the appropriate approach to these texts is not to ask learners to accept their recommendations and versions of 'sustainability' without question but to (i) critically analyse the meanings of their words and discourses, (ii) locate the meanings each text reproduces from historical, political, economic, cultural and linguistic perspectives and (iii) illuminate, explore, analyse and criticise the categories of discourse, modes of expression, metaphors, argumentative styles, rules of evidence and literary allusions that, as texts, they value and celebrate.

To develop critical perspectives on the stories we tell and are being told we need to explore, analyse, translate, extend and evaluate the myths and meanings that are embedded in these stories. A good example of the importance of telling a story about stories is the feminist critique of history, society and culture. In this respect, Brink's (1998:23) call for 'a completely reinvented South African history: history, in fact, reimagined as herstory' is pertinent; Brink (1998:24) argues that "such an approach would address two silences simultaneously: that created by the marginalisation of women, and that effected by a (white-dominated) master-narrative of history".

Feminist scholars worldwide have demonstrated convincingly that global ills like the arms race, the shrinking of arable land, diminishing food and fuel resources and epidemics of diseases caused by industrial pollution, have much less to do with new technologies than with the destructive power of patriarchy - with a largely uncritical acceptance of a myth of human making (for a feminist critique of environmental education see Gough, 1997). Feminist scholars have helped us to understand how marginalised and oppressed groups often conspire in their own marginalisation and oppression by taking up the discourses of their oppressors. Similarly, southern African environmental educators need to be alert to the dangers of taking up the versions of 'sustainability' produced by those who privilege Western stories of progress, development and globalisation. *Caring for the Earth* (IUCN, UNEP & WWF 1991:10) states that "if an activity is sustainable, for all practical purposes it can continue forever". Some people find this definition useful but it troubles me, since it can be used to legitimate the continuance of practices that deserve to be terminated. Unless southern African environmental educators 'decolonise' the language of sustainability they deploy, they risk aiding and abetting the forces of

global capitalism that sustain economic exploitation, servitude, and even apartheid in the region.

A METHODOLOGICAL POSTSCRIPT

When I presented an earlier version of this essay at the 1998 EEASA conference, questions from (and ensuing discussions with) a number of southern African colleagues alerted me to the need to elaborate and emphasise some aspects of the methodology I have used here. For example, one colleague suggested that I could draw no more than limited and simplistic inferences from the single extracts I have quoted from certain documents - that these extracts should not (and perhaps cannot) be interpreted without reference to the complex social, cultural, economic and political histories that produced the document and positioned its author(s). My response is that such interpretations would undoubtedly be worthwhile, but that I had no intention of producing an archaeology or genealogy of southern African discourses of environmental education. Furthermore, while I recognise the dangers of taking words and sentences out of context, I believe that the extracts I quote merit the attention I have given them. For example, context is in one sense irrelevant to my assertion that the sentence I quote from the EECEI (1997) discussion document constitutes a trace of a Western progress-as-globalisation story. To make a crude analogy, I would be justified in asserting that a single hair constitutes a trace of a mammal, regardless of whether I found it on a warthog's back or in a bowl of vegetable soup.

The five transnational mythologies I have described and deployed here have no use beyond provoking questions about southern African discourses of environmental education. My use of them is in the spirit of the following interchange between William of Baskerville, the medieval monk-cum-detective who is the central character in Eco's (1983:492) novel, *The Name of the Rose*, and the novice Adso:

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.

William could equally well be describing the transnational mythologies I have mobilised here. They are my ladders and nets - an 'erroneous order' that can be thrown away now that they have served their purpose of foregrounding certain aspects of the discourses on which this essay is focused. Readers must themselves decide if I have 'found something' worthy of their attention.

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NOTES

¹ Like social Darwinism before it, 'New Right biologism' refers to a selective and strategic deployment of biological ideas in the pursuit of conservative political and economic goals. Like biotechnology, applied research in chaotic and complex systems has attracted considerable government and commercial support, and Ross (1996) invites us to critically examine the motives for such support. Similarly, chaos theory may be attractive to free-market economists who champion global economic integration and deregulation, which contrasts with national development models in which the agricultural and industrial sectors of a nation's economy are internally regulated and articulated. Rather than national economies built from networks of interlocking primary and secondary industrial assembly lines, post-Fordism promotes a global market in which efficiencies are achieved through, for example, farm concentration and specialisation.

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