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Ferreira, Jo-Anne

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An unorthodox account of failure and success in environmental education

Jo-Anne Louise Ferreira

**Higher Diploma in Education
Bachelor of Arts (Honours)
Master of Environmental Education**

**School of Arts
Faculty of Arts
Griffith University**

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ABSTRACT

By offering a positive account of the specific conditions of modern liberal modes of rule, this study undertakes to revise an established view of the empowerment of environmentally active and informed citizens through environmental education. As its distinctive contribution to the debate regarding the effectiveness of environmental education in transforming environmental conduct, this study examines whether the failure proclaimed in environmental education circles is an accurate reflection of the circumstances and outcomes of environmental education. The aim is to examine whether a sense of failure exists because environmental education has indeed failed or whether it exists because the field has set itself over-idealised and utopian goals that are both unnecessarily moral and – in an important sense – designed or pre-destined to entail failure.

In order to examine these issues, this study redescibes two central aspects of contemporary environmental education: first, the orthodoxy that the role of environmental education is to transform society through empowering individuals so that they are able to take action *for* the environment, that is, be active and informed environmental citizens and, second, the mechanisms, strategies and techniques used in environmental education to bring such personas into being. These aspects are examined – for the first time in a discussion of environmental education – through a lens provided by the notion of “governmentality”. The study concludes by arguing that it is the goal of transformation that leads to a sense of failure in the field of environmental education. Conversely, some successes can be seen when empowerment is understood not as a means to transformation but as a governmental technique through which self-governing “environmental” citizens can be fashioned.

The aim of this study is not to identify a truth about the “best” way to produce “good” environmental behaviour. Neither is it to draw out propositions about environmental education that can then be “applied” to similar issues. Nor does this study seek to develop a general theory of “government”, “power”, “governmentality”, “identity”, or “behaviour change”. The aim is instead to pay closer attention to the mundane, the humble, the everyday. It is to open to examination the ways in which certain dispositions or “mental habits” about environmental education have come to hold positions of unquestioned truth and, therefore, power within the field. Through this examination it becomes possible to offer a more positive account of environmental education by describing the governmental mechanisms, strategies and techniques – the “technologies of citizenship” – that environmental educators employ to fashion active and informed environmental citizens. The actual ways in which new personas are fashioned – in which a range of “environmentally friendly” capacities and attributes are successfully acquired – are described. In doing so, this study demonstrates that there are some grounds – albeit definite and limited – for claiming success in environmental education. Such a claim entails, however, a rethinking of the notion of “success”. The contention, then, is that success can be seen for environmental education in the fashioning of self-governing beings who are not necessarily morally transformed but who are nevertheless equipped with concerns, interests and capacities that enable them to live in an environmentally sustainable fashion.

STATEMENT OF ORIGINALITY

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, this thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Jo-Anne Louise Ferreira

Date

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List of Acronyms

AAEE	Australian Association for Environmental Education
AJEE	Australian Journal of Environmental Education
ARIES	Australian Research Institute in Education for Sustainability
AuSSI	Australian Sustainable Schools Initiative
CEC	Commission on Education and Communication
DCSD	Danish Committee on Scientific Dishonesty
DESD	Decade of Education for Sustainable Development
IEE	Institute for Earth Education
IEEP	International Environmental Education Program
IUCN	International Union for the Conservation of Nature
NEEC	National Environmental Education Council (Australia)
NGO	Non-Government Organisation
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USA	United States of America
USAid	United States Agency for International Development
WSSD	World Summit on Sustainable Development

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Final thanks go to the Indigo Girls (1989) for reminding me that
there’s more than one answer to these questions
pointing me in a crooked line
and the less I seek my source for some definitive
closer I am to fine.

CHAPTER ONE

ENVIRONMENTAL EDUCATION: A UBIQUITOUS SENSE OF FAILURE

For by grace you are saved through faith, and this is not from yourselves, it is the gift of God; it is not from works, so that no-one can boast. (The Epistle of Paul the Apostle to the Ephesians: Chapter 2, Verses 8-9)

Environmentalism ... is radical in that it challenges the way people view the world, presenting a moral and even spiritual approach that has significant ramifications for how people live their lives and conduct their affairs. (Thomashow 1995: 5)

[T]raditional environmental education has strengths which should be acknowledged and incorporated into a theory and practice to heal, reconnect, and celebrate the rest of nature. (Clover, Follen *et al.* 2000: 20)

Environmental education for sustainability involves ... developing the kinds of civic values and skills that empower all citizens to be leaders in the transition to a sustainable future. (Fien 2001 in Australian Government and Curriculum Corporation 2005: 8)

THE QUEST FOR MORAL TRANSFORMATION

The field of environmental education¹ seems intent on disregarding changes in environmental behaviour² if these changes do not also display a commitment to a priori environmental attitudes, values and beliefs, that is, to a pre-determined higher-order norm. In this thesis, I seek to understand why. Why is it that good works alone are never enough? Why, in environmental education, is there such

¹ The focus of this study is contemporary environmental education in countries that are primarily English speaking and have liberal forms of government. This is referred to as “the West”. The terms “environmental education”, “education for sustainability”, “education *for* the environment”, “sustainability education”, “education for sustainable development”, “education for sustainable living”, “education for a sustainable future” and “environmental education for sustainability” are used interchangeably. A justification for this seeming disregard for nomenclature is provided in Chapter Four where I discuss struggles over language within the field. “Environmental education”, “education *for* the environment” and “education for sustainability” are the most commonly used terms, both in this study and in the field.

² My use of the term “environment” refers to the natural or ecological environment. When environment is used to imply something other than this, such as the contextual, social, political or cultural environment, the relevant adjective is applied in-text. Equally, I use the terms “environmental behaviour” and “environmental lifestyles” to refer to activities that do not “unduly damage” the environment, and the terms “environmental attitudes”, “environmental values” and “environmentally friendly” to denote “pro-environmental” attitudes, values, choices and actions.

a focus on transforming the whole person, indeed, the whole society? Is such a focus necessary? Can the environmental crisis be resolved by deeds alone or does it require a new faith – a feeling of deep and innate connection to planet Earth? Or is this desire to transform the whole person part of a very old tradition of transcendental goals, beliefs and practices,³ long at war in the West with liberal modes of rule?⁴

I also seek to understand why there is such a heavy sense of failure in environmental education (Beringer 2006, Fien 1993b, 1999, 1999/2000, Fien and Ferreira 1997b, Gough, A. 1997a, Huckle 1999, Jickling 2006, Oulton and Scott 2000, Scott and Gough 2003a, Walker 1997a). How has it become possible, for example, that in 2006 Almut Beringer is able to claim that

the pathway to sustainability – *we have to educate the next generation* – ... so familiar a mantra in environmental education, [is] becoming less and less convincing in light of the fact that the world has by now had environmental education for 30 or so years; nonetheless, the planet is still in decline? (2006: 30) (Author's emphasis)

It is my contention that this sense of failure exists because environmental education has set itself an unachievable goal of transformation of the whole person and entire societies, a goal that, given its religious – monastic – genealogy, has an inherent pre-disposition towards failure. Could it be that transformation is a form of life-conduct for a privileged few, an impossible target for the many? Is the goal of transformation an illusion of the environmental education elite, an illusion that is mismatched with reality? I want to ask if it is possible to see success for environmental education, even if there has not been a wholesale moral conversion of entire populations to an environmental world-view. Is it even possible to think about recognising

³ The link between religion and our environmental beliefs has been made by many authors, most notably Lynn White jr. (1967). See also the range of papers in Volume 11, 2006 of the *Canadian Journal of Environmental Education* that examine, in various ways, the religious and the spiritual in environmental education. These papers primarily call for a greater recognition and inclusion of the spiritual in environmental education.

⁴ In Chapter Two I outline how modern liberal modes of rule are less interested in governing according to particular principles (such as Christian principles) and more interested in bringing self-governing citizens into being using a range of mechanisms, strategies and techniques that are well suited to particular circumstances, rather than a reflection of particular principles. Chapter Two also describes how modern liberal modes of rule are limited in their ambitions, seeking small, localised changes in conduct, not wholesale changes to the morality or conduct of entire populations.

success for environmental education if it does not seek to transform whole beings, merely their environmentally undesirable behaviours?

I seek to answer these questions through undertaking a redescription of environmental education's currently unquestioned goal of transforming individuals – through empowerment – into “environmentally active and informed citizens”.⁵ This redescription is achieved by drawing upon certain ideas encapsulated in the notion of “governmentality”⁶ (Foucault 1991a). These ideas allow us to explore the possibility that – in modern liberal modes of rule such as ours – environmental education is most productively understood not as a force for moral transformation, but rather as one of the principal ways in which our environmental conduct⁷ is governed and through which we learn to govern our own environmental conduct. In reframing environmental education in this new way, one might be better placed to see the fashioning of environmentally active and informed citizens as a successful, but limited, *governmental* means for managing the environmental conduct of particular populations, rather than as a quasi-religious endeavour intent on total moral transformation of the whole person and entire societies. This is the principal argument that this thesis advances.

⁵ According to the environmental education literature, an “environmentally active and informed citizen” is one who knows about environmental problems, wants to do something about them, and has the capacities and skills to do so. They are “responsible” citizens whose lifestyle choices contribute to, rather than hinder, efforts to achieve sustainability (see, for example, Fien 1993b, Gough, A. 1997a, Scott and Gough 2003b, Tilbury and Cooke 2005). Theorists such as MacPherson (2005) have put forward detailed proposals for what such a citizenship might look like, calling for a new vision of citizenship for environmental education, such as global ecological citizenship.

⁶ The term “governmentality” refers to the mentalities and practices of a form of governmental rule that understands the task of government as the “conduct of conduct”. The idea was first put forward by Michel Foucault in his 1978 Collège de France lecture titled *Governmentality* (1991a). His initial ideas have been expanded upon by many Foucault scholars, most notably Nikolas Rose and Mitchell Dean.

⁷ The term “conduct” is used here to denote something broader than “behaviour” (understood at its simplest as human actions). Conduct encompasses not only our actions (behaviours) but also our habits of thought, our attitudes, our desires, and so on. The term incorporates ways of relating to self, to others and to natural and cultural settings. Most importantly, the term also incorporates an argument that the concerns, interests and capacities in individuals are not innate but are the result of quite specific and practical governmental mechanisms, strategies and techniques.

SEEING FAILURE: AN ORTHODOX EVALUATION

Transforming our relationship with the environment in such a way that it results in consistently “good” environmental behaviour is generally regarded as the ultimate aim of environmental education (see, for example, Brody and Ryu 2006, Gough, A. 1997a, Hungerford and Volk 1990, Jickling 2004, Simmons and Volk 2002). However, a focus on “behaviour change” poses problems for many in the field of environmental education who see such an aim as too technical or technicist – if not Pavlovian. This has led in particular to calls to “empower” both individuals and communities so that they will, willingly and freely, change their own behaviour and become active and informed citizens (Fien 1993b, 1998, Palmer 1998, Scott and Gough 2003b, Tilbury 1995, Tilbury and Cooke 2005, Tilbury, Stevenson *et al.* 2002). Regardless of how it is couched, however, the aim of environmental education remains clear: to alter behaviour in order to render lifestyles more environmentally sustainable, thereby enabling individuals and communities to prevent (or reverse) an environmental crisis. Unfortunately, it seems that in environmental education this outcome is not to be “properly” achieved without first transforming entire belief systems to match a self-evident, a priori, environmental heaven or “ecotopia”.⁸

For many environmental educators, we are still a long way from such a place.⁹ Claims abound that we are daily adding to the litany of problems that together threaten to plunge us deeper into a state of environmental crisis. Thus, many environmental educators see failure, as environmental education has neither transformed the belief systems of entire populations, nor resulted in the lifestyles of all individuals being rendered environmentally sustainable.

The need to make lifestyles more sustainable is considered to be an urgent task. Science tells us that we are accelerating down the path of environmental destruction towards an epochal environmental crisis from which it will be

⁸ The term “ecotopia” was first coined by Ernest Callenbach in his 1975 novel, *Ecotopia: The notebooks and reports of William Weston* (1975).

⁹ See, for example, Alvino (1995), Fallis (1991), Fien (1999, 2003, 2006, 1997b), Gough (1997a, 2006a), Gralton *et al.* (2004), Hungerford and Volk (1990), Nagel (2005), Puk and Makin (2006), Spork (1992), Thomashow (1995), Tilbury (2004, 2006), and Whelan (2005).

difficult to escape (Gore 2006, Stern 2006). Talk of ‘ever-increasing threats to the resources of the Earth and to the health and stability of its societies’ leads to the sense that there is ‘an urgent need for an informed global citizenship’ (Palmer 1998: 35). So widely unchallenged is the belief in an environmental crisis that scholars are able to state that

few would doubt the urgency and importance of learning to live in sustainable ways ... of conserving the world’s natural resources ... and of taking care of the Earth today so that future generations may not only meet their own needs, but also enjoy life on our planet. (Palmer 1998: ix)

Indeed, the looming environmental crisis is the *raison d’être* for environmental education. It is also the reason why so many in the field can believe that environmental education to date has failed. The continuing threat of an environmental crisis is understood as a clear sign of the field’s failure to educate people to behave in an environmentally responsible way.

As the sense of an impending environmental crisis has grown, so too has the recognition that humans have played a leading role in causing the crisis. Environmental education is one of the strategies developed in an attempt to minimise human impact on the environment.¹⁰ The first recorded use together of the words “environment” and “education” was in the 1940s.¹¹ However, it was not until the great upsurge in awareness of environmental problems in the 1960s that the term “environmental education” gained currency and came to be used more regularly. Its first recorded use in the United Kingdom was at a 1965 conference at Keele University (Palmer 1998: 5). By 1969 the *Journal of Environmental Education* had been founded in the United States of America with the first national environmental education conference in Australia following not long after in 1970 (Gough, A. 1997a: 3). More recently, the field has come to refer to itself as “education for sustainability” or “education for

¹⁰ This is, of course, not the first time that humans have thought about their relationship with the natural environment. Such a concern has been, and remains, a feature of many indigenous cultures. There was also an upsurge of interest in “nature” in the West in the late 1800s. However, since the 1960s there has been a far more widespread recognition of our relationship with – and dependence on – the environment.

¹¹ According to Wheeler (1985, cited in Palmer 1998: 5) the term is first used in 1947 in the Goodman and Goodman text *Communitas*. However, Disinger (1983, cited in Palmer 1998: 5) claims it was first used at an IUCN meeting in Paris in 1948.

sustainable development”. Despite the change in nomenclature, however, the focus has remained firmly on changing human behaviour and lifestyles in order to lessen their negative impacts on the environment.

Environmental education’s goal of transforming individuals and communities to live more sustainably is now canonical. It appears as the principal goal in every directional statement the field has produced. For example, the Tbilisi Declaration states that the goal of environmental education is ‘to create new patterns of behaviour of individuals, groups, and society as a whole towards the environment’ (UNESCO-UNEP 1978: 3). This declaration was the final document produced by an Intergovernmental Meeting on Environmental Education organised by the International Environmental Education Program (IEEP) of the United Nations Education, Science and Culture Organisation and the United Nations Environment Program (UNESCO-UNEP). The Tbilisi Declaration represented the culmination of wide-ranging discussions arranged by IEEP and meetings such as the one held at Belgrade in 1975, which outlined objectives for environmental education (UNESCO-UNEP 1976). Thirty years later, it remains a core directional document for the field.

The goals outlined in the Tbilisi Declaration are reflected in more recent statements such as that developed at UNESCO’s 1997 Thessaloniki conference, which reaffirmed that the goal of environmental education is to effect ‘fundamental changes in human attitudes and behaviour’ (UNESCO 1997: 1). The most recent World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002, confirmed the central role of education in bringing about a sustainable society. It stated that ‘education [is] a key agent for change’ (UNCED 2002: 45). In a position paper from the Third Session of the Preparatory Committee for the Johannesburg WSSD, education is seen

not [as] an end in itself. [Rather, it is seen as] ... a key instrument for bringing about the changes in the knowledge, values, behaviours and lifestyles required to achieve sustainability ... Hence it must be a high priority to reorient educational systems and curricula towards these needs. Education at all levels and in all its forms constitutes a vital tool for addressing virtually all global problems relevant for sustainable development ... Education for sustainable development (ESD) implies

providing the learners with the skills, perspectives, values and knowledge to live sustainably in their communities. (UNESCO 2002: 2)

The years 2005-2014 have been designated the “Decade of Education for Sustainable Development” (DESD) by the United Nations (UN). In DESD documents, it is claimed that education for sustainable development is ‘the primary agent of transformation towards sustainable development, increasing people’s capacities to transform their visions for society into reality’ (UNESCO 2005: 17). The DESD has as its goal the ‘[integration of] the values inherent in sustainable development into all aspects of learning to encourage changes in behavior that allow for a more sustainable and just society for all’ (UNESCO 2005: 5). This will only be achieved, it is claimed, through ‘transformative education, [that is,] education that helps bring about the fundamental changes demanded by the challenges of sustainability’ (UNESCO 2005: 16).

These sentiments are echoed by para-governmental organizations such as UNESCO and non-government organizations alike. The International Non-Government Organization (NGO) Forum Treaty, for example, argues that environmental education ‘affirms values and actions which contribute to human and social transformation and ecological preservation ... Environmental education [should promote] the transformation and construction of society [and] is an act for social transformation’ (1992: 1). The Australian Government also believes that this is the role of environmental education, claiming that ‘schools will be important in preparing and empowering students to assume responsibility for creating and enjoying a sustainable future. Such a vision for school education is transformative’ (Australian Government and Curriculum Corporation 2005: 3). What is clear here is that the goal of environmental education has remained the same for the last 30 years: transforming the environmental attitudes, values and behaviours of entire societies.

At the same time, a quite different feature of the field has also become canonical, that of failure. Indeed, according to many contemporary accounts, environmental education has been markedly unsuccessful in meeting the goal of

individual and social transformation. For example, Hungerford and Volk claim that

[r]egardless of what we as educators would like to think, we can point to relatively few successes that offset the severity of environmental degradation and the serious problems associated with human reproductivity. This is a bitter concept for educators to accept. Although we are prone to defend our practices in EE, we must stop and evaluate how successful we are in the overall battle to resolve urgently important environmental issues. (1990: 15)

John Huckle also sees failure for the field: 'Despite its transformative rhetoric, the reality of environmental education as practised has too often suggested that it has become a "mere fashion or slogan" that fails to confront the real causes of unsustainable development or address radical solutions' (1999: 43). Annette Gough is equally clear when she states that 'actions to date in environmental education have had only minimal effect' (1997a: xix). John Fien is even more blunt with his assertion that 'environmental education [is] failing to make the grade' (1999: 3). As we saw earlier, assessments of failure are still being made now (Beringer 2006).

While not all assessments are as explicit as these, a pre-occupation with failure is nonetheless generally evident in the field. Thus Fien and Ferreira have claimed that 'several recent studies provide evidence of a need for caution in claiming that good practice in environmental education is widespread' (1997b: 238). There is also a range of 'conflicts, inconsistencies and limitations' (Palmer 1998: 96) identified in the environmental education literature, all of which point to "failure". It is worth noting that the discussion regarding failure occurs largely within the field itself, and is not necessarily the assessment made from outside the field. The current study does not seek to identify yet more instances of failure but seeks instead to problematise this discussion, by examining how a sense of failure has arisen and what its implications are for achieving change, thereby contributing a new, more productive, way to understand failure and success within the field.

The field of environmental education, then, sees failure in its fundamental inability to reorient individuals, social structures, economic and governmental

institutions, political processes, and particular paradigms or ideologies towards an ecological or sustainability world-view. This ubiquitous sense of failure is most evident in a range of “sites of failure”. Three of these are examined in more detail here: the continuing authority of the “dominant paradigm”; the inability to settle on a common definition of and purpose for environmental education; and the limits placed on environmental education practice by governmental institutions such as the school.

Changing Paradigms

Separately or together, these areas of failure are considered problematic because they are understood as constrained by the influence of the ‘dominant techno-centric paradigm’ and the ‘dominant social paradigm’ (Fien 1993b, 2000, Huckle and Sterling 1996, Schreuder 1995, Sterling 1996, 2001). These paradigms are understood as the ‘world view or ideology which has become entrenched by the structures of power in a society’ (Fien 1993b: 4), power being understood in a wholly negative or repressive sense. According to Sterling, the dominant techno-centric paradigm ‘sees sustainability as a matter of making adjustments to present human activities, to sustain the twentieth century project largely unchanged and unchallenged into the twenty-first’ (1996: 18). This paradigm is thus seen as the underlying cause of the environmental crisis because it allows us to think that ‘mere adjustments’ to human behaviour and social systems will be enough to avert an environmental crisis. However, it is argued that what is needed is a ‘new environmental paradigm’ that ‘transforms’ not adjusts (Fien 1993b, Sterling 1996). Advocates of the new environmental paradigm claim that

[a] radical cultural shift of world view is both beginning and required, one which represents fundamental rethinking of most patterns of human activity, which integrates ecological sustainability with social justice, and which sees sustainability as a promising metaphor for a historic and necessary structural and personal transformation. (Sterling 1996: 18-19)

For such advocates, environmental education to date has failed to overthrow the dominant paradigm and replace it with a new environmental paradigm. The failure to bring about the structural and personal transformation of entire

societies is thus a principal reason that environmental education is deemed to have failed.

It is interesting to note, however, that the a priori of the “transformation” premise is never called into question, is never seen as a possible reason for the field’s “failure”. No one asks whether total transformation can be achieved by all, or even by enough individuals to result in the social transformation that is dreamed of. No one asks whether this genealogically religious goal is suitable for an environmental education that seeks to empower individuals to conduct themselves as environmentally active and informed citizens. Such questioning is, however, the work of this thesis.

Defining Environmental Education

Another major reason cited for the field’s failure is its inability to settle on a definition of exactly what environmental education is, and on the best approach to take if we are to realise the goal of transforming the unsustainable lifestyles of individuals and entire societies (see, for example, Hungerford 2002b). While some, such as Robottom (1987a), argue that consensus is not necessary, the field continues to seek consensus and argue that these issues are fundamental to ensuring success. For example, in 2000, the Commission on Education and Communication (CEC) of the International Union for the Conservation of Nature and Natural Resources (IUCN) published *ESDebate: International debate on education for sustainable development* (Hesselink, van Kempen *et al.* 2000) and in 2002 UNESCO argued that there was a need to ‘continue the conceptual work aimed at a commonly agreed definition of the notion of “Education for Sustainable Future (*sic*)”’ (2002: 3).

At a more specific level, debate continues over whether environmental education should be *for* something¹² and, if it is purposive, whether it should be for sustainability or for sustainable development.¹³ Discussion also occurs

¹² See, for example, Fien (2000), Jickling (1992, 2003, 2006), Jickling and Spork (1996) and van Rossen (1995).

¹³ See, for example, Bak (1995), Barraza *et al.* (2003), Chapman (2004), Gough, N. (1998a, 2006b), Hopkins *et al.* (1996), Huckle (1999, 2001), Jickling (1999), Plant (1995), Sauvé

around whether or not referring to the field as education for sustainable *development* supports the dominant techno-centric paradigm's focus on economic development – a focus which is deemed utterly inimical to bringing about the kinds of individual and social transformations that are claimed to be required to avert an environmental crisis.

It is not the aim of this study to propose a unified definition for the field. Rather, the aim is to explore the possibility that the desire to reach consensus and settle on a common definition – and the seeming inability to do so – is a symptom of the problem that arises when proponents of differing moral positions are in a contest for primacy.¹⁴ It is also to argue that perhaps one definition has already attained a position of supremacy.

Schooling for Transformation

The institution of the school as the “home” of environmental education is another problem area for the field. Some, such as Weston (1996), insist that environmental education needs to be emancipated from the constraints of the school if it is to be successful.¹⁵ Others argue that the school must be “transformed” – to be “more educational”, “more environmental” or “reoriented towards sustainability”. Writing in this vein, for example, are Jickling (1997), Jardine (1996), Steen (2003), Fien (1988, 1993b, 1997, 1999, 2003, 2006), Huckle (1983a, 1986b, 1990, 2001) and Tilbury (1995, 2004, 2006). The basic argument advanced by these latter authors (Fien, Huckle and Tilbury) is that environmental education seeks to transform individuals and society while schools seek to reproduce traditional norms and values and thus conserve the existing social order. Others, such as Sterling, see the school as a more complex institution, one that is ‘both part of the problem and the

(1999a, 1999b) and van Harmelen (2003). See also the *Environmental Education Research* special issues on “The Language of Sustainability” (2001, Vol. 7, No. 2), “On the Possibility of Education for Sustainable Development” (2002, Vol. 8, No. 1) and “Researching Education and the Environment: Retrospect and prospect, Theme 1: EE and ESD: Tension or transition” (2006, Vol. 12, No. 3-4).

¹⁴ Indeed, this is the claim I make in Chapter Four.

¹⁵ Weston calls for environmental education to be part of more than just school learning, that is, for it to be ‘an expectation of all of us, all of the time’ (1996: 44). In a more recent paper, he argues that there is some possibility for the school, if ‘the social context of the school itself [is] rethought and rebuilt’ (Weston 2004: 36).

solution’, and a ‘paradox’ that environmental educators need to grapple with (1996: 18).

There is thus an underlying belief in environmental education that schools and their pedagogical practices are sites for social reproduction,¹⁶ not social transformation. This discomfort with the institution of the school as a site for overthrowing the dominant social paradigm has led to many and repeated calls for the need to “reorient” formal education systems towards sustainability (Cutter-Mackenzie and Tilbury 2002, Fien 1994, 1997, 1998, Henderson and Tilbury 2004, Tilbury 1995, Tilbury, Keogh *et al.* 2005b, UNESCO 2002, 2004). The situating of environmental education within an institution such as the school – in its present form – is therefore seen as a major reason to assert the field’s failure to halt the environmental crisis. This study does not try to establish whether the school is indeed a site for reproduction rather than transformation. Rather, the aim is to provide an alternative reading of this interminable debate by examining whether or not such an anti-institutional disposition is instead a symptom of a rather “other-worldly” manner of approaching real-world problems.¹⁷

The limiting effects of the school on the teaching of environmental education are thus asserted. The school, teachers, and environmental education curricula and programmes are all found wanting. The marginalisation of environmental education, that is, its failure to be successfully integrated into the mainstream of school-based education, is a common theme. For example, Palmer argues: ‘it seems that [environmental education] constantly has to engage in battle with the intricacies and demands of “education” in general rather than be a core element of it’ (1998: ix). Similar claims are made by, for example, Buchan (2004), Cutter-Mackenzie and Smith (2003), Fien (1993b), Gough (1997a), Henderson and Tilbury (2004), Huckle (1983a), Huckle and Sterling (1996), Robottom (1987b, 1996), and Tilbury, *et al.* (2005a). For Kim Walker, this failure means the field must rethink what it is doing: ‘we have failed to solve the problem of

¹⁶ Following Michael Apple and others (Apple 1995, 2000, 2004).

¹⁷ This issue is discussed in detail in Chapter Four.

marginalisation of environmental education [so] perhaps we should critically appraise our approaches' (1997b: 96).

These assertions of failure are made despite contrary evidence. In Australia, at least, environmental education is a component of all State and Territory school curricula¹⁸ and there are a range of teaching materials and in-service programmes to support teachers in the delivery of environmental education in schools (Ferreira, Ryan *et al.* 2006). In addition, there are governmental policies and well-funded initiatives such as the Australian Sustainable Schools Initiative (AuSSI) and the Australian Research Institute in Education for Sustainability (ARIES) (Tilbury 2006). This is not enough, however, with claims of failure still posited. Could it be, this study asks, that any success will “never be enough” because the goal of total transformation is utterly unachievable?

Many environmental educators claim that teachers are pivotal to the success of environmental education and hence the main reason for the field's alleged failure lies with them. This is why there are calls to ‘give emphasis to a reorientation of teacher education towards sustainable development, in order to empower the world's 60 million teachers to become key agents of change’ (UNESCO 2002: 3). Such calls are widely supported (Fien 1991, 2006, Fien, White *et al.* 2000-2006, Tilbury 1993, Tilbury *et al.* 2005a). Such a change is necessary, it is argued, in order to prepare teachers to teach for sustainability (Tilbury *et al.* 2005a). Teachers' poor preparation to meet the goals of environmental education advocated by theoreticians is a common theme.¹⁹ For example, Spork (1992), in a seminal text, claims that teachers' ideological beliefs and their lack of understanding of the “true nature” of environmental

¹⁸ In Australia, education is the responsibility of State governments. However, in 1993 the Federal Government produced a set of *National Statements and Profiles* for schools. The *National Statements and Profiles* have underpinned efforts by each State to redevelop their own curricula and syllabi. In most States, environmental education is included in the interdisciplinary Studies of Society and Environment key learning area and is therefore required to be taught in schools, both State (public) and private.

¹⁹ For rare contrary positions, see Robertson and Krugly-Smolka (1997) and Walker (1997a) who argue that theorists need to become better attuned to the realities of teachers' circumstances.

education means that they fail to teach it correctly. Grace and Sharp (2000) provide a similar account of teachers' failure. In such accounts a "mismatch" between environmental education theory and its practice is identified, and this mismatch also leads to a sense of failure. More recently, Khalid (2001, 2003), Gil-Perez *et al.* (2003) and Cutter-Mackenzie and Smith (2003) have argued that there are poor levels of ecological and environmental literacy among teachers that limit their capacity to be good environmental educators.²⁰ Others argue that teachers must become "transformative intellectuals", capable of transforming themselves, their students, and the school (Fien 1993a, b, Huckle 1986b).

Environmental education curricula and programmes are another commonly cited area of failure. Fundamental contradictions are seen to exist between the interdisciplinary focus and the action-based pedagogy favoured by environmental education and what is claimed to be the discipline-based, abstract/theoretical nature of school (and higher education) learning (Chen 1997, Fien 1992, 1993b, Gough, N. 1987, Moore, J. 2005a, Palmer 1998, Stevenson 1993b, 1997, Summers, Corney *et al.* 2003, Tilbury *et al.* 2005a, Weston 2004). Some argue that environmental education is failing because its focus is too negative, leading to 'student apathy' and 'depoliticized student activism' (Lousley 1999), 'learned hopelessness' (Nagel 2005) and/or 'action paralysis' (Jensen 2002, Jensen and Schnack 1997). For others, the failure lies in too scientific a focus. Stevenson (1993b) argues, for example, that environmental education programmes in schools are overly scientific and, as a result, fail to meet the essential affective goals of environmental education.²¹ Hicks and Bord (2001) make a similar claim about the lack of attention to the affective aspects of learning about environmental issues in their paper, 'Learning about global issues: Why most educators only make things worse'.

²⁰ See also Daskolia and Flogaitis (2003).

²¹ The opposite claim – that there is too little "good", or too much "poor", science – has also been made. Sanera sees failure in environmental education not being factual enough, claiming that it does not provide a balanced scientific view (1998). Responses against his viewpoint were vigorous (see, for example, responses in Volume 3, 1998 of the *Canadian Journal of Environmental Education*). See also the discussion over national standards that Holsman (2001) and Hungerford (2002a, 2002b) refer to, as well as McClaren (1997), Roth (1997), and Wals and van der Leij (1997a, 1997b).

Weston (1996) follows this line of argument with his claim that environmental education programmes focus on skills rather than an affective “sense of connectedness” with all living things. Once again, we can ask whether it is possible that the claimed need for the affective/emotional is indicative of the reality of what is needed to establish “good enough” environmental conduct or is instead symptomatic of a certain moral or aesthetic norm of what is to be counted as a complete (environmental) human being. It is the contention of this thesis that it is the latter.

The identification of these sites of failure demonstrates that environmental education sees failure first, in its inability to overthrow the dominant paradigm; second, in its lack of consensus on a comprehensive definition; third, in the ways in which the institution of the school, as the principal setting for environmental education, is in need of “reorienting”; and fourth, in the ideologies and environmental understandings of teachers and programme developers which limit their capacity to develop and deliver truly transformative learning experiences for their students. These accounts preach an overarching message: environmental education is failing to meet the fundamental goal of transforming both individuals and communities to live sustainably.

This almost apocalyptic, even eschatological, view of failure is so common in environmental education that the phenomenon of failure can be said to have become an unshakeable disposition that permeates the field, making counter-assertions of success problematic. The aim of this thesis is to explore this situation in order to show the paralysing effect that such a discourse of failure has on the goal of bringing environmentally active and informed citizens – who are capable of living their lives in a more sustainable fashion – into being.

Indeed, as this thesis will show, an almost biblical belief that it is “faith” rather than deeds that will save us from ecological perdition seems to have taken hold of environmental education. Good environmental deeds in and of themselves are not enough: rather, the total moral transformation of individuals and

communities is seen as an absolute pre-condition of meaningful change, as I outline in more detail in Chapter Four. What is required, it would seem, is not simply a population that behaves well, in an environmental sense, but an entire society that has been transformed into a state of environmentally moral purity. It is my contention that this is a tall order for any school system *in this world* and as such can only fail to succeed.

By exploring the belief in and commitment to transformation in environmental education, I want to understand whether the desire for a morally transformed population limits the actual achievement of an environmentally active and informed population. I want to understand whether there is even a “Jacobin”²² or “sectarian” side to this dream of transformation – an a priori moral fanaticism – that may be at odds with the far more limited aims of the liberal modes of rule within and through which we live our lives in the West.

SEEING SUCCESS: AN UNORTHODOX EVALUATION

Prior to undertaking the present study, I completed a Masters degree in environmental education at Griffith University, under the tutelage of John Fien and Helen Spork. As a student of environmental education, I found it interesting that while claims of failure were plentiful, and while many documents outlined goals for the field, there was a distinct lack of attention in the environmental education literature to the *how*.²³ In other words, the *actual means* for successfully transforming individuals and communities so that they could live in an environmentally sustainable manner were largely neglected, being treated as a matter of merely secondary importance by comparison with the ends. It seemed to me that the few studies that did attempt to address the actual means for bringing about change were maligned for being in error or even sinful: for

²² The Jacobins - the radical French revolutionaries - had a strong moral agenda that led them to ‘arrest and murder thousands, confiscate their property, and punish them for their religious beliefs, *all in the name of the people*’ (Zakaria 2003: 65) (My emphasis).

²³ Kollmus and Agyeman (2002) also note that despite many studies having been undertaken, there is still no clear understanding in the field of how the “gap” is bridged between environmental knowledge/awareness and environmental behaviour. O’Donoghue and Lotz-Sisitka (2002, 2005) point to another gap in the field’s understanding of the *how* of environmental behaviour, and offer a “social processes” and “situated” perspective. The governmentality perspective I am taking in this study is related to the social processes and situated perspectives in that it focuses on the effects of relations of power on social change.

having an “individualist” or “behaviourist” or “instrumental” focus (for example, the work of Hungerford and his colleagues²⁴ on behaviour change, and the work of social marketing programmes such as those developed by McKenzie-Mohr and organizations like GreenCom and the United States Agency for International Development (USAid)²⁵) or for being “simply experiential” (for example, programmes such as those developed by the Institute for Earth Education and Mitchell Thomashow²⁶).

The Masters degree in environmental education that I undertook at Griffith University promoted the idea that a socio-critical²⁷ approach to environmental education was the only true solution to the environmental crisis. Indeed, I came to believe that a socio-critical approach was the most effective option as it acknowledged the need for both individual and social (structural) change. Given that this approach presents itself as the underdog (see, for example, the arguments cited above about the need to topple the dominant techno-centric paradigm) I began this study wanting to provide solid evidence that a socio-critical approach to environmental education was indeed an effective path to address problems of environmental degradation.

This initial project, however, was not to be. Along the way, I encountered Michel Foucault and his notion of governmentality (1991a). I began to think that environmental education could be understood instead as a strategy of modern liberal governments for managing the environmental conduct of their citizens. Initially, this sat easily enough with the socio-critical mindset I had adopted as it seemingly fed well into my then belief in the all-pervasive power of “the State” and the utter lack of power held by “the people”. However, the

²⁴ See, for example, Hungerford, Litterland, *et al.* (1988), Hungerford, Peyton, *et al.* (1980), and Hungerford and Volk (1990).

²⁵ See, for example, McKenzie-Mohr (2000, McKenzie-Mohr and Smith 1999) and Greencom (n.d.).

²⁶ See, for example, Thomashow (1995, 2002), van Matre (1988, 1990) and van Matre and Johnson (1987).

²⁷ A socio-critical or socially critical (as it is called in environmental education) approach is one that is critical of a perceived power differential that is said to maintain the “status quo” evident in social and institutional structures, values and norms. The socio-critical approach argues for a radical re-orienting of these structures to ensure a socially and ecologically just and equitable society for all (see, for example, Fien 1993b, Huckle 2001, Huckle and Sterling 1996). Its genealogy shows its indebtedness to Marxist thought.

better I understood Foucault, the less I came to see his work as that of a liberation theologian, ready to illuminate for “the people” an escape route from a repressive state. Rather, his work enabled me to uncouple my thinking from the rather dialectical, black-and-white, all-or-nothing, them-and-us thinking of socio-critical theorists. Rather than seeking to “prove” that one approach to environmental education was indeed the “true” way, I became more and more interested in understanding how – in relation to environmental education – modern liberal modes of rule such as ours, with their philosophical obligations to personal freedom, were able to successfully manage the conduct of populations in a manner that was not overly directive or repressive. I now wanted to understand how it was possible to manage and direct, that is, to govern, the environmental conduct of free, autonomous individuals.

I also began to wonder whether environmental education’s aims for individuals – to have the desire, commitment and ability to be an environmentally active and informed citizen – were in some way similar to liberal governmental aims for a population with the concerns, interests and capacities to be self-directing and self-governing citizens. Given that environmental education, and the socio-critical tradition in environmental education in particular, sees itself in opposition to “the State”, I wanted to understand what the actual differences were between these seemingly similar aims. I wanted to understand whether environmental education was actually failing to achieve its goals, in a world where there was so much evidence that liberal governments were achieving theirs.

In undertaking the present study, I want to argue that claims of failure in environmental education may not be an adequate description of actual circumstances. Rather, as I shall argue, such claims are better understood as a symptom of something else: the capture of a key agenda in environmental education by those who advocate the total moral transformation of individuals and the total transformation of social, economic and political structures. The desire for total moral transformation – suggestive as it is of a religious or even Jacobin genealogy – has embedded within it, I argue, a pre-disposition towards

failure. This pre-disposition or prejudice makes it impossible for its advocates to see any success – such as actual changes in conduct – that environmental education might bring about. Such changes are seen instead as “mere deeds” insofar as they lack a total, quasi-religious moral conversion or remaking of the whole person.

The total moral conversion of entire populations and societies seems an almost impossible aim for environmental educators. Is total moral conversion really a possibility for all, or is it only possible for an elite few? Can environmental education ever reach this goal, or is it a goal designed to entail failure?

The counter-argument I make in this study opens a way to see not failure but a measure of success. As I argue, some success *can* be seen for environmental education, albeit limited and specific, once we understand as a success the fashioning of self-governing persons who – though not necessarily totally morally transformed – are nonetheless citizens equipped with a broad range of concerns, interests and capacities that will enable them to live their lives in an environmentally sustainable manner. Indeed, if we begin to understand environmental education as a mechanism for governing environmental conduct, we might be better able to develop more effective means for bringing about the sorts of changes in lifestyles needed if we are to prevent environmental catastrophe.

In this study I therefore argue that it is the limited – that is, non-transformative – ambitions of liberal forms of government that allow for a certain success to be claimed for environmental education. In addition, I argue that modern liberal modes of rule have great flexibility and responsiveness in dealing with pressing environmental issues largely because they are a form of rule that is not committed to a pre-determined moral norm. There may thus be a greater chance of success from programmes and strategies that are targeted at specific and limited problems – programmes and strategies that are able to fail and then try again to find another, more effective solution if need be – than there is from a quasi-religious position of high principle committed to the wholesale moral

transformation of entire populations. It is important to note that the failure of programmes being referred to here is different from the failure to achieve transformed beings of which environmental educators speak. According to Foucault, governmental programmes see failure not as evidence of 'their breakdown ... [but] as the impulse for a perpetual effort to reform' (Foucault, in Gordon 1980: 250). The argument here is thus not for a competing moral norm. Instead, what is proposed is a perspective on environmental education that does not continue to assume a moral principle as a necessary pre-condition to "successful" change in environmental conduct.

There will, of course, be objections to this line of argument from many in environmental education, given that the field is so obligated to morality and high principle. Some objections will be predictable. For example, there will be those who claim that seeing the mechanisms, strategies and techniques of government in a positive light is a "technicist/statist/right-wing" view symptomatic of the "dominant paradigm". Some will want to argue that a change in environmental behaviour that is not accompanied by a deep and meaningful change in moral position (evidenced through a change in personal belief systems, ethics and values) must be superficial and merely external, if not Pavlovian, behaviourist or even an embrace of indoctrination. Still others will want to argue that seeing environmental education as a technical strategy for governing populations equates it with mere training and that "true" education involves much more than this. I suspect, however, that such arguments are made by those who occupy a high moral ground from where they propose to lead people into a new and promised world. This thesis has a more modest and mundane concern: to show that success may be possible through non-transformative conduct change, thereby freeing the practice of environmental educators from the heavy constraints of the ecotopian dream of total moral transformation.

AIM OF THIS STUDY: EXPLORING THE GOVERNMENTAL

It is my contention that a sense of failure in environmental education derives from an unrealistic goal of empowering all individuals to transform themselves

into individuals who are willing and able to transform society. My proposition is that this “transformation agenda”, given its religious genealogy, has embedded within it a pre-disposition towards failure. I hypothesise that some success can be seen for environmental education when the empowerment of individuals is understood not as a quest for moral transformation, but rather as an activity through which governments are able to govern – fashion – the environmental conduct of particular populations.

In asserting the validity of this hypothesis, I present a reading in Chapter Four of the establishment of transformation as a goal for environmental education, showing both how it has become an orthodoxy that governs the field, and its pre-disposition towards asserting failure. I use a “governmentality framework” to show that this sense of failure can be understood not as an actual representation of the circumstances and outcomes of environmental education but rather as an inevitable consequence of a focus on transformation. A governmentality framework allows some success – at fashioning new environmental personas – to instead be seen for environmental education. To support this argument, I present a reading of two environmental education programmes in Chapter Five that illustrates how environmental education can be understood as a governmental means for managing – in definite but limited ways – environmental conduct.

In reframing environmental education in this new way, one might be better placed to see some successes: success in establishing the goal of transformation as orthodoxy and success in fashioning new types of persons who are able to live their lives in an environmentally sustainable manner. This allows environmental education to be understood not as a quasi-religious endeavour intent on total moral transformation but rather as one of the means available to modern liberal governments for managing the environmental conduct of their citizens. In this way, the question of failure is addressed by describing how environmental education can be successful, not at awakening a pre-arranged inner being, nor at transforming evil into good, but at fashioning some new

environmental personas with concerns, interests and capacities that enable them to live their lives in environmentally sustainable ways.

A NEW LENS: GOVERNMENTALITY

This thesis adopts Foucault's notion of governmentality as a conceptual, analytical and methodological framework through which to examine environmental education and, specifically, the claim that it is failing to achieve its goal of transforming individuals to be environmentally active and informed citizens capable of, and willing to, transform society. The notion of governmentality synthesises Foucault's historical reading of modern liberal modes of rule. Foucault argued that modern liberal approaches to government entail a particular mentality of governance – one that sees government not as oppressive or coercive rule over people, but as a 'caring', 'pastoral' means of 'conducting the conduct' of a population (Foucault 1991a).

I therefore begin this study by constructing a framework or lens through which to provide a new, "governmental" reading of environmental education. This framework rests on two key insights. The first is that modern liberal modes of rule are morally "abstemious" and focussed on resolving specific, practical problems. The second is that governing within modern liberal modes of rule occurs through conducting the conduct of citizens. To comprehend government as the "conduct of conduct", however, requires a new understanding of the unique ways in which power, knowledge and the self are intimately interconnected within modern liberal forms of government.

I then describe how I use the notion of governmentality as a methodological framework for this study. While Foucault did not develop a specific methodological framework for examining governmentality "in action", his historical – archaeological and genealogical – techniques have underpinned the development by Anglo-Foucauldians of a quasi-methodological approach referred to as an "analytics of government" (Dean 1994, 1999, Dean and Hindess 1998, Kendall 2005, Kendall and Wickham 1999, Rose 1996c, 1999, Soyland and Kendall 1997).

An analytics of government is quasi-methodological because it does not articulate a standard set of propositions that one applies to a range of problems or issues. Rather, an analytics of government provides a descriptive method for investigating the practices through which modern liberal governments govern conduct, and for investigating the forms of thought, or mentalities, that govern these practices (Dean 1999: 40). This approach aims to ‘provide a purchase for critical thought upon particular problems in the present’ (Rose 1999: 9) by asking specific sorts of questions referred to as the “how” questions (Dean 1999: 27-38, Rose 1999: 4-60). Reflecting the quite definite perspective on relations of power, knowledge and the self that is encapsulated in the term governmentality, these questions ask:

- How does a particular state of affairs, such as environmental conduct, become a social and governmental problem?
- How are particular governmental strategies or modes of governing developed and deployed to address problems?
- How are these modes of governing able to appear in certain times and places, that is, how are they influenced by their setting?
- How do these modes of governing constitute us as subjects who are both governable and self-governing?

These questions thus seek to understand the actual means – the mechanisms, strategies and techniques – through which we think about government, come to be governed, and come to govern ourselves. These questions provide a new way to understand environmental education. For example, they allow for an historical account of *how*, and with what *effects*, the goal of empowering individuals to be environmentally active and informed citizens capable of transforming themselves and society has become orthodox in environmental education. These questions also allow for the governance of environmental conduct – through the fashioning of new personas – to be understood as a positive exercise of governmental power.

CONTRIBUTION OF THIS STUDY: SEEING SUCCESS

This study makes five original contributions to the field of environmental education. Firstly, this is the only study in the field to approach environmental education as a major apparatus through which modern liberal governments come

to govern the environmental conduct of their citizens. Such a claim is currently not heard in environmental education.²⁸ Indeed, given the anti-statist and anti-institutional orientation the field of environmental education has routinely taken, my reframing of the field as a governmental apparatus for fashioning new personas makes a distinctive contribution.

Secondly, in a field burdened with a sense of failure, this study offers a new possibility for the field to recognize its success in achieving its goal of empowering individuals to be environmentally active and informed citizens. This possibility is significant because it offers a way for small changes in environmental conduct to be seen as the quite remarkable successes they are, thus freeing the practices of environmental education from the paralysing effects of the rhetoric of failure – and from the normative imperative of total moral transformation – to which the field has become addicted.

The third contribution this study makes is, therefore, to provide grounds for recognising that environmental education is capable of registering success. In arguing this case, this thesis offers a new framework and provides a new language for understanding both the practices of environmental educators and claims of failure – or success – within the field. It offers a new understanding of how power works, and of the role of environmental education experts in developing and deploying governmental strategies and techniques. It also offers a new understanding of techniques such as empowerment not as the “rebirthing” of an innate knowledge or power but as a calculated strategy of government for shaping the conduct of targeted populations. This new framework, which merges domains usually considered as radically opposed – the State and the individual, freedom and coercion, education and training, power and knowledge – allows for a novel, more productive description of the field to take place.

²⁸ There has been some grappling with what could be termed “post-modern” and/or “post-structuralist” thinking in environmental education, as outlined in Chapter Three. However, none of these studies view environmental education through the governmentality lens, nor claim that environmental education is a governmental apparatus through which environmental conduct is governed.

This study makes a further contribution to the field of environmental education by showing “schooling” as not only the principal mechanism through which environmental education is delivered, but also in a less critical light than usual. Here the challenge is to see the “training” in new forms of environmental conduct that takes place through environmental education in a positive light, not as evidence of the innately non-transformative and reproductive nature of schooling.

Finally, this thesis offers a new view of environmental education as a work of government. Foucault has demonstrated how modern liberal modes of rule should not be understood simply as all-powerful, repressive and uncaring. Rather, the task of governing in our time can instead be understood as a positive and productive activity that occupies us all. This thesis therefore invites us to see governing not simply as a task of “the government” or “the State” but rather as a task that, in liberal modes of rule at least, we are all intimately and continuously engaged in.

OVERVIEW OF THIS STUDY

In order to understand both how the goal of moral transformation has become orthodox and how environmental education is able to successfully fashion new environmental personas, this thesis begins with a discussion of governmentality as a conceptual and analytical framework (Chapter Two) and as a methodological approach (Chapter Three). These two elements of the notion of governmentality are in reality intertwined. However, for the purpose of addressing the requirements of a Ph.D., such a separation must be made. These two chapters thus probe this research orientation in order to establish a framework for reassessing how failure and success, and transformation and empowerment, are currently understood in environmental education.

The two chapters following these mount a redescription of two aspects of environmental education: the development and effects of the orthodoxy of transformation, and the governmental mechanisms, strategies and techniques

that are used to fashion new types of – environmental – personas. Chapter Four thus considers how the goal of transforming populations by empowering them to be environmental citizens has become orthodox in environmental education. This chapter identifies the settings, struggles and strategies in and through which this has occurred. The chapter also describes the effects of such a view on the field. In doing so, I am able to show the desire to transform individuals into environmental citizens as an historical instance, not a given. Indeed, we can see that environmental education has developed in quite particular ways because of definite circumstances, indicating that the current normativities in environmental education are less a reflection of universal moral truths about the environment, government or individuals, and more a reflection of particular historical, cultural and political circumstances. One such circumstance, for example, is the prevalence of liberal modes of rule in the West. Within the peculiarities of this form of rule, the disciplines, experts and technical expertise come to play a pivotal role in governmental efforts to fashion “citizens” from the populations they govern. Even environmental educators, as I will show, are engaged in this process. This chapter will therefore describe how a discourse that understands empowerment as transformative limits the enlisting of the concerns, interests and capacities through which individuals come to be fashioned – and fashion themselves – as environmentally active and informed citizens.

Chapter Five then proposes a way to understand empowerment as a governmental technique. This chapter thus describes actual mechanisms, strategies and techniques through which new personas are able to be fashioned within modern liberal modes of rule. In order to describe how this occurs in environmental education, two examples are presented. The first of these is the range of activities outlined by Mitchell Thomashow in *Ecological Identity: Becoming a reflective environmentalist* (1995). The second example is the range of environmental education programmes produced by The Institute for Earth Education (IEE). Neither example presents an untainted illustration of a governmental approach to empowerment or environmental education. Indeed, both these examples see their role as the “reawakening” and/or

“transformation” of an individual’s true, inner being. Despite this heavy moral burden, though, they both provide excellent examples of how individuals *are* able to craft for themselves new personas that are “environmental”. Here the challenge is therefore to separate the moral agenda of these programmes from the actual mechanisms and techniques that they deploy. This calls for a focussed description of the quite specific strategies and techniques of these programmes – strategies and techniques that are now widely used in environmental education – in order to be able to show how they are “governmental”.

The concluding chapter draws together the main arguments of the study to assert that environmental education is indeed an apparatus through which modern liberal governments are able to successfully govern environmental conduct. In environmental education, this sees the fashioning of new persons who are not necessarily totally morally transformed, but who do have a range of concerns, interests and capacities that will allow them to live their lives in an environmentally sustainable manner. It is in this sense that a claim of success can be made for environmental education.

CONCLUDING THOUGHTS

The overarching aim of this study is to contextualise the dominant discourse in environmental education – a discourse of moral transformation – within its particular historical, political and cultural circumstances. Such contextualisation can suggest that the desire for moral transformation has a history in the West that is much older than contemporary advocates of transformative environmental education acknowledge. In recognising this fact of historicity, one begins to suspect that while maintaining a focus on failure and moral transformation may well prepare one for a life in the next world, such a focus limits the possibilities for achieving and recognising success – indeed for our continued existence – in *this* world.

The thesis presented here calls instead for a more mundane and practical focus on what is achievable for us now, in this world. St. Paul, in his letter to the

Ephesians, argued that good deeds alone would not be enough to get one into heaven. Good deeds may be enough, however, to ensure our continued existence on this planet. For environmental educators, does this perhaps mean that manners should come before morality, if better environmental manners are *enough* to avert the environmental crisis we face?

CHAPTER TWO GOVERNMENTALITY: UNDERSTANDING GOVERNMENT AS THE “CONDUCT OF CONDUCT”

For all the benefits of freedom of conduct or freedom from anxiety which stem from a decline in religious practice, subjects are no longer “interpellated” as obligated to duty and charity. We face problems of motivating people to behave in altruistic and considerate, dignified, and conscientious ways without transcendental goals. This is not a matter of “ideals” or “morals” but of a daily practical mechanism of conduct, keyed-in to practices and institutions. (Hirst and Woolley 1982: 138)

I don't think that we should consider the “modern state” as an entity which was developed above individuals, ignoring what they are and even their very existence, but on the contrary as a very sophisticated structure, in which individuals can be integrated, under one condition: that this individuality would be shaped in a new form, and submitted to a set of very specific patterns. In a way, we can see the State as a modern matrix of individualization, or a new form of pastoral power. (Foucault 1982: 214-15)

[Government is] any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through our desires, aspirations, interests and beliefs, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes. (Dean 1999: 11)

DEVELOPING A NEW UNDERSTANDING OF GOVERNMENT

This chapter proposes a new framework for understanding the problem of environmental behaviour. It is a framework that may allow success to be seen for what are often perceived as the mundane – because they are non-transformative – objectives and outcomes of environmental education. As Paul Hirst and Penny Woolley suggest, motivating people to ‘be good’ may not be about ideals and morals but may instead be about developing ‘a daily practical mechanism of conduct, keyed-in to practices and institutions’ (1982: 138). Foucault's hypothesis concerning the distinctive means and mechanisms of

modern liberal modes of government – termed “governmentality”²⁹ – provides the guidelines of a constructive framework³⁰ for understanding how forms of governing within modern liberal modes of rule are able to engage populations ‘in [such] daily practical mechanism(s) of conduct, [that are] keyed-in to practices and institutions’ (Hirst and Woolley 1982: 138).

In order to fully understand the conceptual and analytical framework elucidated in this chapter, two key features of modern liberal forms of government need to be noted. The first of these is that such modes of rule are distinctive in being “morally abstemious”, that is, not driven by principle; are practically engaged, that is, concerned with quite specific and particular practical problems; and have limited capacities, that is, have limits to what they can do. The second key feature is that governing within modern liberal modes of rule occurs through a productive, even “pastoral”, conducting of the conduct of citizens. To comprehend government as “the conduct of conduct” (Foucault 1991a) we need to understand the reframing of three key concepts in Foucault’s work. These are an understanding of power not as repressive but as consisting of productive power relations, as dispersed outside of the state, and as productive of new truths and capacities; an understanding of what Foucault refers to as “power/knowledge”, where knowledge is connected to power rather than truth; and an historical, non-humanist understanding of the self that allows the ways in which power, knowledge and the self are intimately and distinctively interconnected within modern liberal modes of rule to be understood. The notion of governmentality acts as a “shorthand” for these key propositions and understandings.

²⁹ According to Mitchell Dean, Michel Foucault’s works are ‘one of the more startling developments in the social and political sciences in recent years’ (1999: 1). However, not all of Foucault’s work has relevance to this thesis. Only three aspects of his work are of interest here: his notion of power as productive and relational; his notion of power as biopower (1991a) and his descriptions of the practices of self-reflection and self-constitution through which ethical selves came to be fashioned in classical Greece (1985). Foucault’s work on subjectivity outlined in texts such as *The Care of the Self* (1986), is not used. Instead, historical “persons” accounts of our subjectivity put forward by, for example, Mauss and Weber, are used to problematise environmental education’s humanist understanding of the subject/the self. Such a framework, while eclectic, is nonetheless rigorous.

³⁰ Governmentality is not a new totalising theory. It offers a particular way of understanding, not the only way.

This chapter provides an extended but necessary accumulation of key ideas from Foucault that will frame my account in this thesis of the *effects* of environmental education debates and practices on the field's understanding of failure and success. The chapter thus begins by offering two key propositions: that modern liberal modes of rule are "morally abstemious", practically engaged and have limited capacities; and that government can now be understood as "the conduct of conduct". In order to fully understand government as the conduct of conduct, however, Foucault's rethinking of three fundamental concepts – power, knowledge and the self – is examined. The chapter then draws these insights together in elaborating on the notion of governmentality. The chapter concludes by returning to the topic of environmental education, outlining precisely how a governmentality framework offers an opportunity for a substantial rereading of environmental education's goal of transforming society through empowering individuals to be environmentally active and informed citizens.

PROPOSITION ONE: LIBERAL MODES OF RULE ARE NOT GOVERNED BY PRINCIPLE

Powerless opinions, opinionless power. (Manent 1994: 180)

Modern liberal forms of rule have a history. This is not, as Foucault (1991a: 102) pointed out, a history of revolutionary replacements or evolutionary epochs. Various "forms" of liberalism – classical liberalism, modern liberalism, neo-liberalism, or advanced liberalism, and various liberal versions of the State such as the liberal constitutional State, the welfare State or the neo-liberal State – are best understood not as different "ages" of liberalism³¹ but rather as the multiple attempts that have been made to rationalise and operationalise the forms and, most importantly, the *means* of modern government in the West.

For Foucault, understanding modern attempts at governing in a linear fashion, that is, 'in terms of the replacement of a society of sovereignty by a disciplinary society and the subsequent replacement of a disciplinary society by a society of

³¹ For this sort of reading see, for example, George (1999).

government' (1991a: 102), is therefore not helpful. Foucault scholars, such as Mitchell Dean (1999), Nikolas Rose (1999) and Gavin Kendall (2003), argue that the term "governmentality" does not indicate a new means of exercising power that has superseded older exercises of power. It explains instead how the relations of power operating in modern liberal modes of rule have reinscribed, recoded, reorganised and reshaped the rationalities, techniques, strategies and mechanisms of these older forms of rule. A linear historical schema is not helpful, therefore, because it does not accurately portray the rich history – the genealogy³² – of government as an *activity* for conducting the conduct of its populations.

Other political commentators complement these moves to understand liberalism as a 'reaction against certain events, theories, and social and political tendencies ... that early liberals identified as especially dangerous' (Geuss 2002: 322). One such event was the 'exaggerated moralisation of politics ... propagated by the French Revolutionaries' (Geuss 2002: 322). In reaction to this 'exaggerated moralisation', liberalism presents a less moral, more 'cautious and self-critical ... approach to the problem of government' (Barry, Osborne *et al.* 1996: 8).

Liberal forms of rule, understood thus, have less to do with individual philosophies or moralities and more to do with the particular historical circumstances in which they arose and operated. Understanding these historical circumstances allows us to see that liberal modes of rule are not the reflection or application of a unified normative principle. Rather than the development of a cohesive doctrine of liberalism or a morally ideal society or community, a genealogy of liberalism shows how, at different times and in different places, quite particular "mentalities" or "rationalities" of liberal modes of rule inform the practices and techniques employed to equip the governed with concerns, interests and capacities that enable them to freely and willingly govern their own conduct.

³² Chapter Three outlines how Foucault's historical investigations, which he retrospectively referred to as "archaeologies" and "genealogies", provided an insight into the ways in which power, knowledge and the self intersect in completely new ways in modern liberal modes of rule.

At issue, then, is a description of the *hows* or *means* of government.³³ In this way, how we are *actually* governed can be understood less according to some transcendental principle, and more through the ‘multiple strategies, tactics, calculations and reflections’ (Rose 1996c: 152) that liberal governments deploy to encourage individuals to freely and willingly constitute themselves as self-governing citizens. A crucial shift in thinking is required: according to Foucault (1982), liberal modes do not seek to rule in a repressive fashion but rather to find more caring, pastoral and effective ways of governing through the “freedom” of the subjects they govern. As Rose notes, ‘there is [amongst liberal thinkers] agreement over the belief that human beings are, in their nature, actually, potentially, ideally, subjects of freedom and hence that they must be governed, and must govern themselves, as such’ (1999: 62). Seen in this “liberal” light, the governed are both the object and end of governmental interventions *and* the ‘necessary (voluntary) partner or accomplice of government’ (Burchell 1996: 23).

Genealogies of modern liberal modes of rule illustrate this governmental concern with the *means* through which populations are to be governed. Liberalism here is not a moral project but a political programme that seeks to engage with specific problems via particular, limited and contextual governmental arrangements. According to Raymond Geuss, it is

[t]he historical struggle against theocracy, absolutism, and dogmatism [that] has left behind in liberalism a thick deposit of scepticism not only vis-à-vis all-encompassing worldviews, but also vis-à-vis universalist political theories of any kind ... Classical liberalism did not wish to be an all-encompassing, universal worldview but merely a political programme aimed at eliminating specific social and political evils. (2002: 332-3)

Liberalism thus understood involves a move away from transcendent values, universal moral a priori and fundamental philosophical principles as rationales for rule. The move is instead to a mode of rule that is, in a sense, “unprincipled”

³³ A genealogy of modern liberal modes of rule provides a non-sociological account of this form of rule. Such an account has no interest in identifying, for example, a series of dialectics between “the state” and “civil society”, or in determining who holds power or why.

or “self-denying”. According to Pierre Manent, for this shift in rationales to occur, ‘power and opinion had to be radically separated’ (1994: 178). In short, there had to be ‘powerless opinions, [and] opinionless power’ (Manent 1994: 180).³⁴ Manent’s argument is that for liberal modes of rule to work successfully, they have to be able to respond to problems with reference to the peculiar circumstances of these problems, not with reference to transcendental moral norms, philosophical positions or universal a priori.

This project to “liberalise” modes of rule in the West has not yet been completed. Indeed, governing “without principle” is still taken – by advocates of higher-order values – to be problematic. We have seen, for example, the ways in which moral issues come to the fore in governmental decisions regarding the environment, with governments often urged by partisan advocates to do what is “environmentally” morally right.³⁵ While modern liberalism always runs the risk of succumbing to pressures to govern according to a priori, Geuss reminds us that liberal modes of rule have been able to govern successfully for so long because ‘the ideal of liberalism is a practically engaged political philosophy that is both epistemically and morally highly abstemious’ (2002: 333).

Modern liberal modes of rule are practically engaged because they seek to govern through addressing small and specific problems. Programmes of liberal government seek to target particular populations who have been identified – in a range of ways – as being problematic.³⁶ In focussing on specific problems and

³⁴ Such an understanding of liberalism raises interesting – and challenging - questions about our contemporary sense that there is a necessary relationship between opinion (democracy) and power (liberal modes of rule). Perhaps this relationship is peculiar to our times, rather than necessary, and perhaps it is a relationship that needs to be troubled in environmental education.

³⁵ See, for example, the moral arguments launched against nuclear power plants being established in Australia, despite the positive effects this technology would have in reducing greenhouse gas emissions. The desire to “moralise” government can be seen in other areas as well: for example, the negative reaction to the French Government’s 2004 efforts to ban religious symbols in government buildings, or the political parties in Australia changing their policies in an effort to win the votes of Christian political parties and groups with a clearly moral agenda. The struggle to separate the Church and the State has been long and is not yet over.

³⁶ The development of “police” (understood as the science of populations) and the rise of the statistical sciences in the eighteenth century turned what had previously been considered as “the masses” into “populations” and made these populations knowable in more intimate detail than

specific problem populations, government is able to approach each problem as unique, and so develop for each problem its own particular, context-specific and context-suitable governmental response. Such governmental responses therefore have limited goals and powers: they do not seek, for example, the total moral transformation that many environmental educators do, but are instead specific responses to particular problems such as how to ensure citizens use less water or other scarce resources without resort to punitive measures. Governmental responses are thus limited in that they pursue quite specific and definite ends through a small number of means available to them, and limited in that they do so within the boundaries imposed by upholding the freedom of their citizens. It is in this sense that we are able to understand modern liberalism as a rationality of rule defined by practical concerns, limited capacities and no investment in overarching a priori. This is the first key insight informing the theoretical framework of this study.

PROPOSITION TWO: GOVERNMENT CAN BE UNDERSTOOD AS THE “CONDUCT OF CONDUCT”

In modern liberal modes of rule, the activity of government is not to govern through repression but through “conducting the conduct” of its subjects. The idea of rule as “the conduct of conduct” is designed to show the processes and orientations of modern liberal governments as more complex, practical, purposeful and “pastoral” than is habitually imagined. As Foucault states:

I don’t think that we should consider the “modern state” as an entity which was developed above individuals, ignoring what they are and even their very existence, but on the contrary as a very sophisticated structure, in which individuals can be integrated, under one condition: that this individuality would be shaped in a new form, and submitted to a set of very specific patterns. In a way, we can see the State as a modern matrix of individualization, or a new form of pastoral power. (1982: 214-15)

The notion that modern liberal governments seek to govern through conducting conduct offers a fruitful and positive way to redescribe environmental

they ever had been before (Osborne 1996). See also Hunter, on the technology of social statistics (1994: 43-9). Once populations became knowable, they became governable in new ways. Foucault’s studies identify the ways in which particular populations, such as the criminal and the insane, needed to become “knowable” before they could be “governable” (Foucault 1973a, 1977).

education's goal of empowering individuals to be environmentally active and informed citizens as an activity of government. In understanding the power of liberal government as productive, we can then understand governmental programmes that seek to empower not as a form of moral liberation and transformation but as a productive and pastoral governmental technique. Indeed, as Foucault's historical investigations of the human sciences (1971), medicine (1973b) and prisons (1977) show, "caring" techniques such as empowerment are complex and sophisticated means for "conducting conduct".

In order to understand government as the conduct of conduct, however, we need first to grasp how power, knowledge and the self are understood, and intersect, within liberal forms of government. The novelty here is to see that power is more dispersed, subtle, relational, positive and productive than previously imagined; that knowledge, the disciplines and their attendant experts and institutions are intertwined with governmental relations of power in unexpected ways; and that these power/knowledge relationships are productively engaged in the fashioning of a whole range of personas who have concerns, interests and capacities that enable them to willingly and freely govern their own conduct.

Understanding Governmentality: Power

In developing an understanding of government as an activity for conducting the conduct of populations, a new understanding of power is required. Foucault provides three challenges to traditional conceptions of power. These are that power is not the possession of the few; that power operates through complex relations of power; and that power does not repress subjects but produces them. These challenges to traditional conceptions allow for a new understanding of power as "dispersed", "relational" and "productive".

Dispersed power

[P]olitical theory has never ceased to be obsessed with the person of the sovereign. Such theories still continue today to busy themselves with the problem of sovereignty. What we need, however, is a political philosophy that isn't erected around the problem of sovereignty, nor therefore around the problems of law and prohibition. We need to cut

off the King's head: in political theory that has still to be done.
(Foucault 1980i: 121)

Foucault's first challenge is directed at a conception of power as housed solely in and spreading out from *the State* and its apparatuses (Foucault 1980e: 72-3).

³⁷ We have tended, in the West, to see power as solely held by an all-powerful sovereign state. *The State* is then viewed by its critics as a negative regime that exercises absolute power over subjects within its territory, using whatever means it has at its disposal to induce its subjects to its will. It has become 'almost automatic in the parlance of the times to define power as an organ of repression' (Foucault 1980j: 92). Indeed, as Dean argues, we have become accustomed 'to a certain set of received ways of thinking about questions of government. These ways of thinking have been largely derived from ideas clustered around the ubiquitous but difficult and somewhat obscure concept of "the state"' (Dean 1999: 9). According to Dean, we therefore see the State

either as a means to our secular salvation (found in glory of the nation, superiority of the race, the attainment of social justice and equality, etc.) or as a fact of brute domination repressing our genuine humanity (located in civil society, the private sphere, even the market, etc.) ... [or as] the focus of political struggles. (1999: 26)

In short, the State has been regarded as a *monstre froid* (Nietzsche in Foucault 1991a: 103), the culpable agent of a modern form of enslavement (Kelly in Kriegel 1995: vii).³⁸

This understanding of the State is related to the two ways in which power has been conceptualised. These are 'the contract-oppression schema, which is the juridical one, and the domination-repression or war-repression schema for which the pertinent opposition is not between legitimate and illegitimate, as in

³⁷ The term "apparatus" is used by Foucault to 'indicate the various institutional, physical and administrative mechanisms and knowledge structures, which enhance and maintain the exercise of power within the social body' (O'Farrell 2005: 129). An apparatus is thus 'a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid. Such are the elements of the apparatus. The apparatus itself is the system of relations that can be established between these elements' (Foucault 1980f: 194).

³⁸ According to Kelly, the state is 'a spectre [that] has been haunting European intellectuals in our century ... all the forces of ideology – right, left, liberal and uncommitted – have entered into an unholy alliance to protect this spectre' (in Kriegel 1995: vii).

the first schema, but between struggle and submission' (Foucault 1980j: 92). Both these understandings rest on the view that power 'operate[s] through the repression of the essential subjectivity of citizens and ... result[s] in their exclusion' (Cruikshank 1999: 34). The power accorded to the State is understood, then, in terms of whether or not its rule over us is legitimate, and in how we might resist its all-pervasiveness.³⁹

For Foucault, however, power is not so neatly dialectical. He rejects both the benign sociological model of power as the agency of social cohesion and normality, serving to assure the conditions of existence and survival of the community, and [the opposing view] ... of power as an instance of repression, violence and coercion, eminently represented in the State. (Gordon 1980: 234-5)

Rather, for Foucault,

the state, no more probably today than at any other time in its history, does not have this unity, this individuality, this rigorous functionality, nor, to speak frankly, this importance: maybe, after all, the State is no more than a composite reality and a mythicised abstraction, whose importance is a lot more limited than many of us think. (1991a: 103)

As Foucault indicates above, when it comes to how we understand power, even the power of liberal governments, we still need to 'cut off the King's head' (1980i: 121), that is, let go of our understanding of power as housed solely in the state. For Foucault,

[p]ower in the substantive sense, "*le*" *pouvoir*, doesn't exist. What I mean is this. The idea that there is either located at – or emanating from – a given point something which is "power" seems to me to be based on a misguided analysis, one which at all events fails to account for a considerable number of phenomena. In reality power means relations, a more-or-less organised, [more-or-less] hierarchical, [more-or-less] co-ordinated cluster of relations. (1980f: 198)

To understand how power operates within and through modern liberal modes of rule, we thus need to understand that the State is not unified and omnipotent, nor is it the sole source and possessor of power.

³⁹ Foucault does not deny that there are resistances to power. However, he sees resistance as necessary to the effective working of power, arguing that resistance 'forms the motivation for every new development of networks of power' (Foucault 1980c: 138). Acts of resistance, in a sense, "alert" mechanisms of power to a "flaw" that needs to be addressed if power is to continue working effectively.

Relational power

In reality power means relations, a more-or-less organised, [more-or-less] hierarchical, [more-or-less] co-ordinated cluster of relations. (Foucault 1980f: 198)

Foucault's second challenge to traditional conceptions of power is his claim that power is not held only by those who are *in* power but is rather dispersed and operates through *relations of power*. For Foucault, power cannot be reduced to 'an institution, a structure or a certain force with which people are endowed; [but is instead] the name given to a complex strategic relation in any given society' (Foucault in Gordon 1980: 236). Power here is 'quite different from and more complicated, dense and pervasive than a set of laws or a State apparatus' (Foucault 1980g: 158). Power relations are not simply unidirectional and linear, in the way that power exercised by "the State" over "the people", or the potential power of "civil society" over "the State", is conceived. Nor does power originate from a single source: it is not 'built up out of "wills" (individual or collective), nor is it derivable from interests' (Foucault 1980h: 188). While relations of power and their mechanisms may, over time, have developed an ever-increasing coherence, this coherence cannot be attributed to a single sovereign source who 'makes the law, pronouncing it in the form of "Thou shalt" and "Thou shalt not"' (Foucault 1980f: 204). Foucault's historical investigations lead him to argue instead that

these tactics were invented and organised from the starting points of local conditions and particular needs. They took place in a piecemeal fashion ... It should be noted that these ensembles don't consist in a homogenisation, but rather of a complex play of supports in mutual engagement, different mechanisms of power which retain all their specific character. (1980g: 159)

Contrary to what many environmentalists fear and believe, power is not simply that which emanates from the State or other organizations such as multinational corporations.⁴⁰ Indeed, environmentalists may themselves be engaged in these relations of power.

⁴⁰ Multi-national corporations are often deemed, in the environmental literature at least, to be the new holders of power who direct the decisions of government (see, for example, Beder 2002, 2006).

Importantly, Foucault argues that ‘power in its exercise goes much further, passes through much finer channels, and is much more ambiguous’ (1980e: 72) than those accounts which claim that power originates from a single source would have. Foucault’s account of power problematises traditional understandings which assume that power is held, or should be held, only in one place, be this the law, a sovereign monarchy or state, a class dictatorship (Marxism), a body of elected representatives (democracy) or a community of citizens (civil society) (Dean 1994, 1999).

If Foucault is correct, we all have access to a certain power, since power is a series of relations, ‘a more-or-less organised, [more-or-less] hierarchical, [more-or-less] co-ordinated cluster of relations’ (Foucault 1980f: 199). Such relations of power exist inside, outside and alongside the State. Foucault’s investigations demonstrate how relations of power and their concomitant mechanisms are dispersed through a range of governmental institutions and agencies, as well as through civil society’s organizations, bodies of knowledge and individuals thought to be *outside* the realm of the state.

For example, experts such as doctors, social workers, psychologists, lawyers, educators, and bodies of knowledge such as psychology, sociology, and philosophy are not normally thought of as being engaged in the task of exercising power or governing. Educators occupy an unusual position. They are “agents of the State” through their involvement in a State’s education systems while at the same time being seen as being able to work *against* the State by “educating” or “liberating” rather than “training” their charges, as we see in both liberal and critical theorisations of education and educators (see, for example, Apple 1993, 1995, 2000, 2004, Fien 1993b, Huckle and Sterling 1996, Stevenson 1986, 1993a, Symes and Preston 1997). However, by understanding power in terms of relations of power, we can come to see that non-governmental organizations, experts and expert knowledge play a pivotal role in “conducting our conduct” in so far as it is these bodies of knowledge and organizations that fashion our concerns, interests and capacities as citizens

living within modern liberal regimes (Rose 1989, 1996c). The point for the present thesis is to make clear the pivotal role that the discipline and expertise of environmental education – be it dispensed through schools, universities, governments, businesses or non-governmental organizations – play in governing environmental conduct.

It is important to remember, however, that Foucault did not claim that these relations of power and their mechanisms are unified in their intent or in their effects (Foucault 1980b). He illustrated instead, as noted earlier, the ways in which governmental modes of rule focus more on the resolution of specific problems within particular circumstances (of space, time and possibility) than on implementing some universal goal or norm. There is thus no standardised response to problems, as if according to a single master plan or a transcendental a priori principle. Foucault describes instead how complex and mutually engaging mechanisms of power are constructed through the establishment of ‘connections, cross-references, complementarities and demarcations between them which assume that each instance retains to some extent its own special modalities’ (Foucault 1980g: 159).

This complexity and mutual engagement is what enables power to have a ‘capillary form of existence’ (Foucault 1980d: 39). According to Foucault, power – like blood – is able to reach ‘into the very grain of individuals, [touch] their bodies and [insert itself] into their actions and attitudes, their discourses, learning processes and everyday lives’ (Foucault 1980d: 39). If Foucault is correct in claiming that power has a capillary form of existence then we should be able to see evidence of this in the mechanisms, strategies and techniques deployed through an environmental education that seeks to alter the “deepest” environmental values, attitudes and actions of individuals.

Relations of power do not exist in a vacuum, however, and the State still has a role to play. According to Foucault,

[t]he State is superstructural in relation to a whole series of power networks that invest the body, sexuality, the family, kinship, knowledge, technology and so forth. True, these networks stand in a

conditioning-conditioned relationship to a kind of ‘meta-power’ which is structured essentially round a certain number of great prohibition functions; but this meta-power with its prohibitions can only take hold and secure its footing where it is rooted in a whole series of multiple and indefinite power relations that supply the necessary basis for the great negative forms of power. (1980i: 122)

Relations of power are, therefore, in a “conditioning-conditioned” relationship with the prohibition functions of a State, that is, those functions of the State that seek to ensure – within modern liberal modes of rule, at least – the good for each and all. Given that the exercise of power within such modes of rule relies on the freedom of its subjects, power is only able to “take hold”, not because it represses, but because it translates itself into the desires and aspirations of the population. ‘Power is strong’ Foucault (1980a: 59) claims, because ‘it produces effects at the level of desire’.

It is because the relations and mechanisms of power are dispersed, and because power operates in a “capillary” fashion, that modern liberal governments are able to conduct the conduct of citizens largely without resort to repressive means, that is, “with a light hand”. The idea that there are relations of power that operate outside of the State – and that power operates in a capillary manner – furnishes a novel and useful way in which to redescribe the work of environmental educators, including those who hold to a conventional conception of power. What is more, in understanding environmental education as an apparatus of government, and in describing the practices of environmental education so that the minute and everyday workings of power are made visible, this thesis shows that environmental education is able to register success – albeit specific and limited. Indeed, I argue that this success is achievable because ‘the mechanisms and effects of power which don’t pass directly via the State apparatus ... often sustain the State more effectively than its own institutions, enlarging and maximising its effectiveness’ (Foucault 1980e: 73).

What Foucault’s studies offer to the debate on environmental education is a way to understand *how* power operates within modern liberal modes of rule. This entails, however, a need to let go of not only our understanding of power

as the exclusive domain of the few, but also our understanding of the exercise of power as repressive and linear.

Productive power

[Power] doesn't only weigh on us as a force that says no, ... it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. (Foucault 1980i: 118)

The third challenge Foucault provides to traditional conceptions of power is his claim that power is productive.⁴¹ By this Foucault means that power is not a tool for repression but is rather a *technical practice* through which certain effects – indeed certain forms of persona – are produced. The idea that power should be thought of as technical and productive, however, itself produces ‘a lurid and disagreeable ring in some ears’ (Gordon 1980: 238). That this is so, according to Gordon, constitutes a ‘testimony to the enduring strength of the humanist conviction that technology is intrinsically alien to the human sphere’ (1980: 238).⁴²

Despite this “disagreeable ring”, Foucault’s investigations led him to argue that ‘nothing is more material, physical, corporal than the exercise of power’ (1980a: 57-8). It is because of its materiality that power is able to produce, for example, quite particular types of personas, with concerns, interests and capacities that match governmental goals for the effective and efficient functioning of the country, without need for rule through repression. This is because mechanisms of power are able to identify and address very real “personal” and “social” needs and problems. For Foucault,

[w]hat makes power hold good, what makes it accepted, is simply the fact that it doesn't only weigh on us as a force that says no, but that it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. It needs to be considered as a productive network that runs through the whole social body, much more than as a negative instance whose function is repression. (1980i: 118)

⁴¹ Foucault contends that power can only be productive if it is able to ‘(rest) on the installation of ... a regime of truth’ (Gordon 1980: 237). How this occurs is discussed in the following subsections.

⁴² The strength of the humanist certainty regarding the “naturalness” of our own subjectivity is discussed in more detail later in this chapter.

It is through the successful linking of the goals of government to the desires and aspirations of populations, what Foucault refers to as the ‘irrigation by effects of power [of] the whole social body down to its smallest particles’ (1980g: 156), that modern liberal regimes are able to govern without resorting constantly to repressive means.

Foucault does not deny that initially the technical and strategic exercise of power within modern liberal modes of rule was ‘heavy, ponderous, meticulous and constant’ (1980a: 58), hence the corrective regimens implemented through schools, hospitals, prisons, and families. Despite this, these highly complex and regimented systems of management and habituation were productive in new and unexpected ways. For example, the corrective regimens of the school made children, and their bodies, not only the objects of power but also, more importantly, the bearers of totally new personas who were increasingly able to manage and govern their own conduct without resort to repressive means or religious injunctions. Thus, even though early attempts to “conduct conduct” were “heavy”, this exercise of power was nonetheless productive – producing from school children adults who had the concerns, interests and capacities to be self-regulating, self-governing citizens.

Power, according to Foucault, is thus dispersed, relational and productive. Foucault’s hypotheses regarding power are neatly summarised in the following quotation:

I would suggest rather ...:

- (i) that power is co-extensive with the social body; there are no spaces of primal liberty between the meshes of its network;
- (ii) that relations of power are interwoven with other kinds of relations (production, kinship, family, sexuality) for which they play at once a conditioning and conditioned role;
- (iii) that these relations don’t take the sole form of prohibition and punishment, but are of multiple forms;
- (iv) [that power] is organised into a more or less coherent and unitary strategic form; that power is dispersed and localised; [that localised relations and strategies of power are reinforced and modified by global strategies] hence one should not assume a massive and primal condition of domination, a binary structure with “dominators” on one side and “dominated” on the other, but rather a multiform production of relations

of domination which are partially susceptible of integration into overall strategies;

(v) that power relations do indeed “serve”, but not at all because they are “in the service of” an economic interest taken as primary, rather because they are capable of being utilised in strategies; [and]

(vi) that there are no relations of power without resistances ... like power, resistance is multiple and can be integrated into global strategies. (Foucault 1980c: 142).

Power is, therefore, not exercised through a repressive State but is dispersed through, outside and alongside governmental structures. Power is not a singular force but is made up of relations of power such as those that exist between parent/child and teacher/student. Power relations are productive of our subjectivity because they produce new forms of being, shape conduct, and instil new interests and relations to one’s self.

These understandings of, and insights into, the exercise of power underpin the second key idea in this chapter: that government in modern liberal modes of rule is an artful activity of “conducting conduct”. As well as illuminating the rhetoric of failure in environmental education, these new insights into power will cast environmental education’s goal of empowering individuals to be active and informed citizens in a new light. In particular, it will become clear that we can no longer treat empowerment as a transformative process of recovering some “primal liberty” of pre-formed and morally pure beings.

Understanding Governmentality: Power/Knowledge

Far from preventing knowledge, power produces it. (Foucault 1980a: 59)

[K]nowledge functions as a form of power and disseminates the effects of power. (Foucault 1980e: 69)

[T]ruth isn’t outside power, or lacking in power ... truth isn’t the reward of free spirits, the child of protracted solitude, nor the privilege of those who have succeeded in liberating themselves. Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. (Foucault 1980i: 131)

The second fundamental concept underpinning the key idea of government as the “conduct of conduct” is that knowledge – and truth – are ‘strategically

shaped and organised by exercises of power' (O'Farrell 2005: 87). Foucault's investigations were concerned with the relationship between power as it is exercised in liberal modes of rule and with bodies of knowledge (disciplines) (1971, 1972, 2003). These studies led Foucault to argue that power and knowledge – *pouvoir/savoir* – were not in opposition to, or separate from, one another as traditionally conceived. Rather, power and knowledge are interdependent. Foucault asserts that there is a

constant articulation ... of power on knowledge and knowledge on power. We should not be content to say that power has need for such-and-such a discovery, such-and-such a form of knowledge, but we should add that the exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information ... The exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power. (Foucault 1980d: 51-2)

This interdependence – the intersection of knowledge and power – is evident in Foucault's use of the term "discourse"⁴³ not to refer simply to the act of thinking, talking and writing, that is, to the 'material verbal traces left by history' (O'Farrell 2005: 133). "Discourse" refers also to how a body of knowledge comes to exist and how it is thought, spoken and written about, that is, to the conditions of existence and the disciplinary practices that work to order or "discipline" these bodies of knowledge. For Foucault, discourse is thus the 'location where power and knowledge intersect' (O'Farrell 2005: 133).

Foucault investigated the historical, geographical and cultural circumstances in which particular disciplines and discourses were made possible and accepted as legitimate. Foucault's investigations provide the insight that it is 'the formation of discourses and the genealogy of knowledge [that need] to be analysed, not in terms of types of consciousness, modes of perception and forms of ideology, but in terms of tactics and strategies of power' (1980e: 77). In order to understand how we govern and are governed, we need to examine the particular cultural and historical mechanisms, practices and techniques through which knowledge and truth are produced and organised.

⁴³ See Mills (2004) for a discussion of different understandings and uses of the term "discourse".

This is important to understand in a field such as environmental education, as discourses have effects, effects that, in this instance, I argue limit the possibilities for success to be acknowledged and appreciated in the field. By examining the specific circumstances and practices that serve to set the boundaries for environmental education – to discipline the discipline – I will illuminate particular power/knowledge relations, and their effects, within environmental education. These insights will be useful in helping to understand the ways in which particular discourses have come to be so established in environmental education that they have become orthodoxies. The challenge will be to apply the understanding of how power in modern liberal modes of rule is operationalised through knowledge and expertise to a field such as environmental education, with all its anti-statist, anti-institutional and egalitarian themes.

Two aspects of the power/knowledge relationship have particular relevance to the present study. The first is the critical place of science and scientific ways of knowing as a rationale for claims to validity and truth. The second is the role that institutions have in enabling the establishment, legitimation, distribution and maintenance of particular bodies of knowledge and of particular discourses. An examination of these two aspects will be helpful in understanding the pivotal role of science, the academy and the school in establishing, legitimising, distributing and maintaining environmental education knowledge, expertise and orthodoxies.

Establishing truth: The role of science

Truth is traditionally understood as singular, universal, absolute, essential and destined.⁴⁴ That is, what is true is firstly, static, and secondly, true for all of us, irrespective of our historical, geographical or cultural circumstances. In the

⁴⁴ Many Foucault scholars themselves show the deep-seated nature of our belief in essential truths when they seek a new truth from Foucault. For example, even Rose (1999), who follows the ethos of Foucault, still seems to be seeking from Foucault ways in which we can resist the impositions of government. Through a governmentality lens, however, such resistance is simply another of the many concerns and capacities of a self-governing citizen living within a modern liberal form of governance, rather than an essential attribute.

past, we came to know truth through faith and salvation; now we know truth through the application of scientific reason. According to Dean, we have known, since Max Weber, that

there is no single Reason or universal standard by which to judge all forms of thought and that what we call Reason is only the “specific and peculiar rationalism of the West” ... After Foucault, we know that even within the latter, there is a multiplicity of rationalities, of different ways of thinking in a fairly systematic manner, of making calculations, of defining purposes and employing knowledge. (1999: 11)

Investing a discourse with science, what Harré *et al.* (1999) refer to as “scientism”, has powerful truth effects. As Foucault asks:

What types of knowledge do you want to disqualify in the very instance of your demand: “Is it a science?” Which speaking, discoursing subjects – which subjects of experience and knowledge – do you want to “diminish” when you say: “I who conduct this discourse am conducting a scientific discourse, and I am a scientist”? Which theoretical-political *avant garde* do you want to enthrone in order to isolate it from all the discontinuous forms of knowledge that circulate about it? (1980j: 85)

The power of scientism, Foucault shows, ensures that some discourses become privileged while others do not. Such efforts to demarcate the scientific from the non-scientific still constitute, amongst us in the West, the main means by which knowledge is legitimised – or de-legitimised. For example, we can say that we are in the midst of an environmental crisis because scientific “fact” tells us it is so. Even though the source of scientific truths may be debated (see, for example, calls for “citizen science”, that is, greater involvement in the science community by civil society) and even though what is true is disputed within the scientific community (see, for example, the debate over global warming and climate change), *scientific reasoning* nonetheless remains the principal way to know *the* truth about a matter. Even efforts to understand the “truth” of our own social and cultural arrangements must apply scientific reason, that is, be a rigorous and objective *social science*, in order to be deemed valid and true.⁴⁵

⁴⁵ The debate that took place in the 1980s and 1990s in environmental education regarding the rigour and legitimacy of qualitative research methods is another example of our insistence on “scientific methods” if the truth about a situation is to be claimed. These debates are further outlined in Chapter Four.

Investing a discourse with science has truth effects – and such truth effects also have power effects. According to Foucault,

[t]here can be no possible exercise of power without a certain economy of discourses of truth which operates through and on the basis of this association. We are subjected to the production of truth through power and we cannot exercise power except through the production of truth. (1980j: 93)

Truth is therefore produced through a power-knowledge relation. This means that legitimised knowledge – what is deemed to be true – influences and is influenced by the relations of power of which such legitimised knowledge forms a part. Knowledge does not stand separate from power. Rather, it is in a conditioning-conditioned relationship with power. Disputes between “discourses of truth” are, therefore, able to be understood as struggles for dominance. If this is indeed the case, then the universalised truths on which environmental education is based can be understood as moves in a struggle for dominance. Indeed, when we take this conditioning relationship between power and knowledge seriously, the a priori view of environmental education begins to look far less certain.

Legitimising truth: The role of institutions

The second feature of the power/knowledge relationship is the institutionalisation of regimes of practices as the means through which the power of knowledge and the disciplines is both legitimised and exercised (Foucault 1991c). It is institutions that are the sites where power is equipped with the instruments or techniques for ‘material intervention’ on the bodies of the governed (Foucault 1980j: 96). The institutionalisation of knowledge thus has a double effect. It allows knowledge not only to be legitimised and made powerful, but also to be distributed through a specialised institutional mechanism (Foucault 1977). The two institutions of greatest interest to this study are the university and the school.

Mechanisms of power: The university

Universities are a major institution through which knowledge in the West is legitimised and invested with power. They form the principal sites for ensembles of intellectuals to gather to both legitimise their knowledge and to

acquire the credentials of “experts”. According to Foucault (1980b), in modern times, the “universal intellectual” – concerned with broad philosophical issues of justice and equity, for example – has given way to “specific intellectuals” or “experts”. His investigations demonstrate the ways in which such experts and their expert knowledge are crucial components in the ability of modern liberal governments to govern by conducting conduct. Rose⁴⁶ expands on this, arguing that expertise is important for three reasons:

First, the grounding of authority in a claim to scientificity and objectivity establishes in a unique way the distance between systems of self-regulation and the formal organs of political power that is necessary within liberal democratic rationalities of government. Second, expertise can mobilize and be mobilized within political argument in distinctive ways, producing a new relationship between knowledge and government. Expertise comes to be accorded a particular role in the formulation of programmes of government and in the technologies that seek to give them effect. Third, expertise operates through the particular relation that it has with the self-regulating capacities of subjects. [It is] the plausibility inherent in a claim to scientificity and rationalized efficacy [that] binds subjectivity to truth, and subjects to experts, in new and potent ways. (1996c: 156)

Rose points out that expertise plays an important role in not only formulating governmental programmes of reform and in defining the technologies to be used to implement these programmes of reform, but also in their implementation. He thus refers to experts as ‘engineers of human conduct’ (Rose 1999: 92). Experts here are a mechanism through which “government” is able to occur.

Within modern liberal forms of rule, experts are central to the thinking, intentions and calculations of government. As Dean notes, it is ‘expertise and knowledge that shape the field of visibility of who and what is to be governed and why’ (1999: 71). Expertise and knowledge work by identifying norms and then identifying those who are in need of reform because they do not match the norm. Examples of this are clear in education, where children who are seen to

⁴⁶ Nikolas Rose, more than any other Foucauldian scholar, has provided detailed descriptions of the role of expertise in modern liberal modes of rule. His studies have shown the ways in which the psy-sciences, for example, work to embed quite specific concerns about, and understandings of, our “private” selves. See, in particular, *Governing the soul: The shaping of the private self* (Rose 1989), *Inventing ourselves: Psychology, power and personhood* (Rose 1996c) and *Powers of freedom: Reframing political thought* (Rose 1999).

be struggling academically or who have “behavioural problems” become the target of specific programmes designed to intervene and normalise. Could it be that environmental educators are engaged in a similar task?

Expertise and expert knowledge are also critical within liberal rationalities of government because they allow for “government at a distance” (Rose 1999).⁴⁷ Expert knowledge is legitimate because it is scientific, and science sits at a distance from government. Experts help to manage the “how” and the “who” of governmental programmes of reform but they are able to do this as experts who stand “independent” from government. In this way, experts are like a “mediating valve” through which modern liberal governments are able to govern at a distance. Is it possible that environmental educators are also a mechanism through which governments are able to govern at a distance?

Interestingly, the status of independence accorded to experts exists despite their reliance on institutional supports such as schools and universities to validate and disseminate their particular truths. What is novel about Foucault’s examination of the relationship between power and knowledge is that it shows that expertise is powerful precisely because it is taken to be independent of the power of the state. Precisely because expertise has a unique capacity to link itself to truth – experts and expertise, not government, are the source and holders of truth – we tend to think of expertise as a counterbalance to the power of the state. However, as Foucault’s investigations have shown, truth and the experts who are the purveyors of these truths are anything but free of governmental considerations.

The relationship between experts and the “objects” of their expertise (who are also subjects of the state) is two-fold. On the one hand experts sit in a position “above” those on whom they pass judgement because they “know” *the* truth.

⁴⁷ The notion of “government at a distance” is a key component of modern liberal modes of rule. Indeed, it is because of the capacity to govern at a distance that the objectives of governments are able to be translated into the desires and aspirations of free individuals, desires and aspirations that are also rendered into new forms of conduct and self-governance of that conduct (Rose 1989: 47-51).

They tell us the right way to behave if we are to be an environmentalist or an environmental citizen. On the other hand they are ‘generous’ with their expertise (Rose 1996c: 58). They ‘shape from below’ by freely sharing their expert vocabulary and knowledge (Rose 1999: 89-93). It is through such “generosity of expertise”, Rose argues, that we are also able to become experts of ourselves. The surge in the pop-psychology movement, with its vast array of self-help texts and television shows such as *Dr Phil*, attests to this. Could it be possible that environmental educators are also generous experts, providing us with the skills and techniques to be able to govern our own environmental conduct, without constant direction from above?

Experts and their expertise thus act as conduits through which populations are exposed to and engage with governmental programmes of reform. According to Rose, modern liberal governments therefore no longer need to ‘set out norms of individual conduct [because they have instead] install[ed] and empower[ed] a variety of “professionals”, investing them with authority as experts’ (1996b: 40). These experts help governments to determine norms, make these norms desirable, and develop programmes to embed these norms in targeted populations. It is this unique relationship between governments and expertise – between power/knowledge – that enables modern liberal governments to govern with a light hand and at a distance. (Rose 1999).

The expertise of the various disciplines works, then, both to frame the goals of governmental programmes of reform, and to develop and link such programmes of reform to what we understand as our own concerns, interests and capacities to care for our bodies, our minds, our emotions and our environments. According to Rose, ‘the injunctions of the experts merge with our own projects for self-mastery and the enhancement of our lives’ (Rose 1996b: 61). The exercise of governmental power is, therefore, productive of new desires. It is also “capillary” because it operates not through a heavy-handed repression but through what we understand to be *our own* most intimate and unique desires and aspirations.

With this new understanding of expertise and experts, this thesis is able to explore the ways in which environmental education may also be in a conditioning-conditioned relationship with governments. What would this mean? By way of answer, the thesis examines the ways in which environmental education experts collaborate in both devising and distributing governmental programmes of reform – programmes that rely on governmental mechanisms such as schools and techniques such as empowerment – to reform the conduct of particular populations in a manner that enables them to be environmentally active and informed citizens. In doing so, this study seeks to understand whether, despite the anti-statist stance of most environmental education experts, they are nonetheless a crucial element – as collaborators, devisors and distributors – of governmental programmes of reform.

Mechanisms of power: The school

A key institution through which governmental programmes of reform are distributed in the West is, of course, the school. Interestingly, almost all contemporary accounts of the school and schooling – both critical and liberal – see it as a “lost opportunity”, as the failure to reach some a priori vision of “true education”. Ian Hunter (1994) argues, exceptionally, that such accounts ignore the historical actuality of the formation and function of schools and schooling. It is because contemporary accounts of the school ignore its history that they can only see it as a failure or a lost opportunity, he claims.

Hunter’s genealogy of the modern school describes ‘the contingent circumstances in which the [English] school system came into being, and the available cultural techniques, institutions and modes of reflection from which it was assembled’ (1994: xvii). These circumstances included, for example, western European states needing to undertake “social training” of their populations. As Rose notes, ‘[c]hildren came to the attention of the social authorities as delinquents threatening property and security, [and] as future workers requiring moralization and skills’ (1989: 123). Education here was not the expression of a higher principle – government did not seek to “liberate” children through education – but was rather a governmental response to a quite

particular problem. The modern school thus developed as a mechanism through which governments could fashion personas capable of obeying civil codes and of being effective members of the city, that is, as citizens.

The expertise and cultural technologies available for such fashioning of subjects into citizens were “rare”⁴⁸, that is, limited to the ‘scarce means our culture has at its disposal for imagining and conducting “education”’ (Hunter 1994: xviii). While the available expertise, institutions and cultural techniques on which to model such social training were the Church and the Christian pastoral,⁴⁹ Hunter shows that it was only the *technologies* of the Christian pastoral that were adopted for use in the newly formed institution of the state-run school, not the doctrines or principles of the Church. The theological and moral aims of the Church – its higher-order principles – did not match the more mundane – and morally abstemious – goals of liberal government. While the Church sought to transform individuals into souls capable of salvation in heaven, governments sought to fashion citizens capable of living in what counted as a civilised manner on earth.

Hunter’s genealogy of the modern school allows us to see that

[i]n rethinking the school today, we need to regard it as a system composed by a plurality of ethical domains. This is why it cannot be expected to realize the higher principles of any one ethos (those of critical intellectualism, for example), and why it is not a necessary expression of “all that we might become”. It is, however, “one of the contingencies that make us what we are”. (Morris, in Hunter 1994: vii)

The modern school in this account is not the expression of a pure principle. Rather, it is a hybrid pastoral-bureaucratic institution that unites the needs of

⁴⁸ Foucault’s lesson on the “rarity” of the means available to us is an important one in a world in which we want to think that there are limitless possibilities and options, even to the point of thinking that there are infinitely variable forms of life which can be equated with individual existences.

⁴⁹ The Christian pastoral refers to those spiritual techniques and disciplines that the churches promoted in order ‘to enable their lay members to concern themselves with their own spiritual well-being. ... It was the historical intensification of Christian pastoral pedagogy that equipped lay individuals with the special practices through which they could problematize themselves, relate to themselves as beings in need of ethical labour, and hence begin that “work of the self on the self” that we recognise as the reflective person’ (Hunter 1994: 34).

government for a well-trained, self-governing population with the techniques of the Christian pastoral for forming moral subjects. In this school we thus see

an amalgam of bureaucratic governance, with its concern for the population and the worldly welfare of citizens, and the subject-forming techniques of pastoral pedagogy with its arts of self-examination and its care of individual souls. These ways of life are irreducible to each other; they have quite distinct genealogies, social objectives and ethical aims. (Morris, in Hunter 1994: vii)

The legacy of the Church in the modern school is thus not that of a moral code but that of an expert knowledge regarding techniques for both *concerning oneself* with a moral code and for *conducting oneself* in accordance with a moral code. It is the techniques and mechanisms of the Christian pastoral that are deployed through the institution of the school to fashion self-reflective and self-regulating – that is, freely self-governing – personas. This is how the ‘liberal comportment of the self-reflective person could be seen emerging from the illiberal disciplining and training of the citizen’ (Hunter 1994: 175). However, as Hunter argues, ‘the self-reflective personality was not a principle on which the school might be founded. It was a moral deportment – a way of conducting oneself – that the school was designed to form’ (1994: 11). Hunter’s genealogy shows us *how* such techniques and practices actually fashion children into personas capable of acting with reference to a conscience rather than as a result of coercion. However, this does not mean that such personas are the reflection of higher principles. Rather, such personas are an historical consequence of the merging of the pastoral pedagogies of the Church with the needs of the State for a population with the concerns, interests and capacities to be responsible citizens. Indeed, for Hunter,

[f]ar from being a temporary alienation of the democratic community’s capacity for self-determination, the bureaucratic character of state schooling is the instrument and the effect of that positive and irreversible transformation that separated the worldly government of the population from the spiritual politics of conscience. (1994: 59)

According to Hunter, the modern school – because of its hybrid pastoral-bureaucratic genealogy – has a unique capacity ‘to join things that modern theory likes to segregate: surveillance and self-activity, obedience and spontaneity, the “middle-class” desire for a governable population and the

“radical” wish for a self-governing one’ (1994: xiv). This odd mix is also evident in the expertise accorded to the teacher in the modern school, where the teacher is both teacher and “facilitator”. Hunter discerns the technologies of the Church here too, in ‘Christianity’s “shepherd-flock game” ... that continues to provide the core moral technology of the school, long after its original doctrinal supports have fallen away’ (1994: xxi).

After Foucault, we are able to understand that it is the expertise of the teacher, be they teacher or facilitator, which translates and invests the goals of governmental programmes of reform into the bodies and beings of individuals as concerns, interests and capacities. It is experts with their highly specialised knowledge who enable the ‘irrigation ... [of] the whole social body down to its smallest particles’ (Foucault 1980g: 156). It is precisely because of these ‘new and potent ways’ (Rose 1996c: 156) in which power and expertise work together, that ‘power, even when faced with ruling a multiplicity of men, [can] be as efficacious as if it were being exercised over a single one’ (Foucault 1980g: 152).

An understanding of the power/knowledge relationship and its connection with and dependence on institutions, is, therefore, the second fundamental concept underpinning Foucault’s perception that modern liberal forms of rule govern through “conducting conduct”. This new understanding of the relationship between knowledge and power also promises novel insights into environmental education. If expertise is indeed integral to the efforts of liberal governments – integral to equipping populations with the concerns, interests and capacities to govern their own conduct and obey civil codes – are environmental educators with their specialised body of knowledge also engaged in a governmental programme for reforming environmental conduct? Few would see themselves in such terms. Yet, this perspective may offer us a completely different way of understanding and describing the work of environmental educators as a success rather than as a failure.

Understanding Governmentality: The Self

The image of the individual as an entirely free, independent being, a “closed personality” who is “inwardly” quite self-sufficient and separate from all other people, has behind it a long tradition in the development of European societies. (Elias 1978: 247)

One has to dispense with the constituent subject, to get rid of the subject itself, that’s to say, to arrive at an analysis which can account for the constitution of the subject within a historical framework. (Foucault 1980i: 117)

[W]e should try to discover how it is that subjects are gradually, progressively, really and materially constituted through a multiplicity of organisms, forces, energies, materials, desires, thoughts, etc. We should try to grasp subjection in its material instance as a constitution of subjects. (Foucault 1980j: 97)

[T]here exists an education in walking, too. (Mauss 1979b: 100)

There are three fundamental concepts underpinning an understanding of government as “the conduct of conduct”. The first of these is an understanding of power as dispersed, relational and productive; the second is an understanding of the ways in which power is in a conditioning-conditioned relationship with knowledge and expertise; and the third is an historical understanding of self. As Foucault noted, within liberal approaches to government, there is a uniquely interwoven relation between power, knowledge and the self. Modern liberal modes of rule are concerned, as we have seen, with governing the conduct of each and every body in a “capillary” manner. To do so, government has to be ‘crucially concerned to modify a certain space marked out by entities such as the individual, its selfhood or personage, or the personality, character, capacities, levels of self-esteem and motivation the individual possesses’ (Dean 1999: 12). In this way, modern liberal ‘government entails not only relations of power and authority but also issues of self and identity’ (Dean 1999: 18). In order to understand how modern government works in this way, however, we need to jettison the humanist understanding of the self as essential, individual, “true”. Instead, we need to understand the self as a historical construct.

The self is commonly conceptualised as a being with an essential nature and essential attributes. As du Gay *et al.* (2000) note, our identity has traditionally

been understood as essential, true and transcendent of social and cultural contexts. Indeed, our self is understood ‘as an individual subject, ... as a given entity, the author of its own acts and centred in a unitary, reflexive and directive consciousness’ (Du Gay *et al.* 2000: 2). The self is either presented as ‘transcendental in relation to the field of events or runs in its empty sameness through the course of history’ (Foucault 1980i: 117).

This understanding of our selves – of our identity – has been remarkably resilient, as I show in my description of environmental education in Chapters Four and Five. So embedded is this sense of “our” self that we have no problem in thinking of ourselves as, for example, psychologised beings who need to work on “getting in touch” with our “true” selves (Rose 1989, 1996c, 1999) or as essentially “environmental” beings who need to reconnect with the natural world that culture has supposedly alienated us from. Our true selves are understood to be innate and, like truth, beyond the reach of our historical, geographical, cultural or political circumstances. However, as Foucault indicates, in order to understand government as the conduct of conduct, ‘[o]ne has to dispense with the constituent subject, to get rid of the subject itself, that’s to say, to arrive at an analysis which can account for the *constitution* of the subject within a historical framework’ (1980i: 117) (My emphasis).

There are moves being made in this direction. In the last century, for example, a critique of the integral, self-sustaining subject assumed to lie at the heart of post-Cartesian Western metaphysics has been comprehensively advanced ... However, while there appears to be considerable interdisciplinary agreement concerning the fictional status of the claim that, ontologically speaking, human beings are “free agents”, directed by a sovereign and integral consciousness, there is also extensive and intensive controversy about how “identity” should be conceptualised in the wake of the various anti-foundational critiques to which it has been subject. (Du Gay *et al.* 2000: 2)

Three broad theoretical debates have challenged our understanding of the self as an individualised, unified, reflexive and purposeful subject. They are what du Gay *et al.* (2000) term the social theoretical ‘subject-of-language’ account; the

psychoanalytic ‘individual’ account; and the historical ‘persons’ account of identity.⁵⁰

The social theoretical ‘subject-of-language’ account of identity ‘shift(s) away from a notion of identity as the property of a purposeful human agent to a notion of the subject as an effect of language’ (Redman 2000: 11). It is presumed that there is a “thin” human material on which this subject is built. The argument put forward here is that our identity can only be ‘constituted or “performatively” enacted in and through the subject positions made available in language and wider cultural codes’ (Redman 2000: 10).

The psychoanalytic ‘individual’ account of identity finds the subject-of-language account problematic as the relationship between the subject and language ‘leads to an omission of the dimension of feelings, the defences of the unconscious and the dynamics of intersubjectivity’ (Du Gay *et al.* 2000: 3). Thus, the psychoanalytic account presumes that there is a “thick” human material – an individualised ‘entity which has evolved over time and has a structural depth’ (Evans 2000: 122) through and on which identity is destroyed or created.

The historical ‘persons’ account of identity differs markedly from the previous two accounts not least because it presumes a very “weak”, almost insignificant human material as the basis of identity. The historical or genealogical readings used to provide this account of identity ‘aim at dispensing with psychoanalysis as a method of explanation as well as with theories of representation’ (Du Gay *et al.* 2000: 4). Thus, the historical persons account

involves a distinct movement away from (and problematization of) the concerns and assumptions of both the “subject-of-language” approach ... and the psychoanalytic accounts ... towards a “thin”, historically and contextually informed understanding of the limited and specific forms of personhood that individuals acquire in their passage through social institutions. (Du Gay *et al.* 2000: 4)

⁵⁰ For additional accounts of the various ways in which the self has been understood, see Hall (2004), Mansfield (2000) and Pile and Thrift (1995).

It is this understanding of identity that informs the theoretical framework being developed in this chapter. An historical understanding of the self may allow us to see the techniques used by environmental educators as quite successful means for the fashioning of new personas. This section thus presents some historical accounts of self and identity presented in studies undertaken by Max Weber (1930/1958), Norbert Elias (1939/2000), Marcel Mauss (1950/1979b), Michel Foucault (1978/1985), and Nikolas Rose (1989). Now classic studies by these social and cultural anthropologists provide a range of accounts of how we have come to be made up – to be fashioned – as various sorts of personas. These historical and anthropological studies allow us to question humanist understandings of the self by providing insights that suggest that our selves are *constituted artefacts* of particular cultural, political and temporal circumstances.

The ‘genealogies of subjectification’ (Du Gay *et al.* 2000: 4) presented below, though different, all share a common concern with describing ‘the social relations, techniques and forms of training and practice through which human beings have acquired definite capacities and attributes for social existence as particular sorts of persons’ (Du Gay *et al.* 2000: 4). This proposition – that even what we consider to be the very essence of our selves is historically and culturally cultivated and circumstantial – is a crucial element of the theoretical framework I am developing in this chapter.

The accounts of the ways in which personas are fashioned provided by this body of classic scholarship allows for an historical understanding of the self to be established for this study. These studies allow us to see that our personas are not purely biological, social or psychological but are rather the *product* of quite particular organizations of our biological capacities and quite particular ensembles of cultural beliefs and practices. Rather than having natural – in our case pre-ordained sinful – selves, our personas may instead be inseparable from their historical circumstances and cultural relations. These studies show that personas are *ascribed* through very specific social and governmental techniques and practices.

Such an understanding of our subjectivity helps to substantiate my claim that environmental educators are engaged in governing conduct by teaching their students how to fashion for themselves new environmental personas. As I show in Chapter Five in particular, environmental education programmes teach students how they are able to achieve a sustainable lifestyle by constantly reflecting on their obligations to the environment and by overcoming and mastering certain desires, such as the desire to consume beyond their needs or the planet's capacity. Students are taught how to *be* environmental by learning how to constantly check and modify their own conduct against the conduct of other, more pure, environmentalists. It is through constant alertness to, and care for, their conduct that they are able to become environmental persons.

Fashioning the self: Religious orders of living

Max Weber's *The protestant ethic and the spirit of capitalism* (1958) is a celebrated historical and sociological explanation of the ways in which radical Protestantism (Calvinism) in the sixteenth and seventeenth centuries provided conditions that assisted the development of a capitalist economy. However, the focus of Weber's study was not on the composition of the particular doctrines or codes of radical Protestantism but rather on the quite unique *orders of living* that accompanied these doctrines. That is, he was interested in the *effects* of the relationship between particular religious doctrines and the conduct of the individual. Importantly, his study shows not 'how much religious and cultural values influence behaviour and society, [but rather] *how* they influence them' (Parsons 1958: xvii).

Weber's study shows that the shaping of the self has a history by outlining the ways in which the ethical regimen that arose with Protestantism resulted in a particular kind of persona. Weber found that there were material conditions 'originating in religious belief and the practice of religion [that] gave a direction to practical conduct and held the individual to it' (1958: 97). No longer did the Church and the sacraments (of Catholicism) provide the path to salvation. Instead, for radical Protestants, it was conduct – the habitual practices and routines or orders of living – that helped shape a self that was able to bear, for

example, the Protestant code of pre-destination. While good works alone would not ensure a passage into heaven for Protestants, good works that ‘rested on a power within [themselves] working for the glory of God; that is not only willed of God but rather done by God [would ensure that Protestants] attained the highest good towards which this religion strove, the certainty of salvation’ (Weber 1958: 114-15). For Protestants, one could never know whether or not one was pre-destined to get into heaven. All one could do, was to pay constant attention to how one was living one’s life.

The ethical regimen of Protestantism thus employed a range of persona-forming techniques for keeping track of one’s activities, thoughts and progress on the path to salvation. Techniques that supported self-reflection, such as diary keeping, religious account books, timetables of one’s daily activities and daily Bible reading, ensured that ‘[t]he moral conduct of the average man was ... deprived of its planless and unsystematic character and subjected to a consistent method for conduct as a whole’ (Weber 1958: 117). So thorough was this, that Weber notes that ‘[i]t is no accident that the name of Methodists stuck to the participants in the last great revival of Puritan ideas in the eighteenth century just as the term Precisians, which has the same meaning, was applied to their spiritual ancestors in the seventeenth century’ (Weber 1958: 117), given their very methodical and ordered approach to conducting their lives. These techniques ordered lives through *shaping* the self in quite particular ways.

Weber’s study thus shows how a profoundly “other-worldly” doctrine, that of pre-destination, came to be *lived* through quite worldly activities and a range of habits of judicious, systematic and reasoned discipline and planning of ‘the whole of one’s life according to God’s will’ (Weber 1958: 153). Such orders of living resulted in personas not only able to live according to the doctrines of radical Protestantism but also, quite unintentionally, personas who were well suited to the emerging economic system of capitalism. The pursuit of wealth and the living of an ordered, routinised life was now a sign that one was fulfilling one’s duty to God (Weber 1958: 2). For Protestants, ‘[I]labour must ... be performed as if it were an absolute end in itself, a calling’ (Weber 1958: 62).

The attributes Protestants held up as evidence of their pre-destined fate – hard work, individual responsibility, consistency of conduct, a conscience, and an inward orientation – were also, quite coincidentally, useful attributes for the successful establishment and functioning of a capitalist economy.

What is important to grasp here is that these sorts of well-ordered, hard-working, committed personas with their peculiar habits and ‘attitude of mind’ (Weber 1958: 64-5) were neither innate nor inevitable, but were instead able to develop because of the contingent circumstances of a particular time and place. Weber’s study thus allows us to see that “who we are” – as environmentalists, for example – is neither inherent nor the same for all time but is rather the result of quite specific ensembles of temporal and cultural techniques and practices for governing our own conduct. Weber’s study allows us to ask whether it is possible that environmental educators are engaged in shaping new personas by encouraging new orders of living in their students. Perhaps the techniques used by environmental educators work to govern conduct through constituting new personas, just as the techniques used by Protestants did.

Fashioning the self: The civilised self

Norbert Elias’ *The civilising process* (2000) provides a further account of the historically and culturally variable forms in which we have been constituted as persons in the West. While Elias’ argument that there is an evolutionary destiny – that there are basic instincts that are “tamed” through the process of civilisation – is not one that is adopted in this thesis, his study of the ways in which certain “civilised” behaviours have become “physical” and “embodied” in the West since the Middle Ages nonetheless provides us with another indication that our selves are not necessarily innate nor unique.⁵¹ Elias’ study sought to understand how we come to be “civilised”, that is, how we come to be “self-conscious” beings who are willing and able to adopt new manners or what Weber terms “orders of living”. For Elias, civilisation is a concept that ‘expresses the self-consciousness of the West’ (2000: 5). That is, civilisation is

⁵¹ For a discussion of the complementarity between Eliasian and Foucauldian perspectives, see Smith (2001).

a concept that makes us aware of – or conscious of – our selves and our conduct in new ways.

In coming to this conclusion, Elias examines the differing manners we have had in the West in relation to, among other things, eating, blowing our noses and sex, as well as ways of thinking and speaking, as examples of how even things we think of as innate are socially instilled. Elias' examples show that what was once considered unobjectionable behaviour, such as eating with one's fingers or blowing one's nose with one's fingers, was a practice of a particular temporal and cultural setting. He also shows how such behaviour became objectionable. Elias argues, for example, that in the eighteenth century we can clearly see how 'people moulded themselves and others more deliberately' (2000: 68). This occurred through the accumulation of many minor changes in thoughts and habits along with 'the constraint exerted on people by one another ... [and] the demand for "good behaviour"' (Elias 2000: 68). Elias argues that this produces new thresholds such as embarrassment or guilt. It is these thresholds that then come to act as constraints on our conduct and "teach" us new ways of behaving and "being". For Elias, it is not an "internal" or "true" virtue that civilises conduct but rather the need to *cultivate* a quite particular persona who is able to live without breaching the thresholds of the day. He argues that as '(t)he standard of what is socially demanded and prohibited changes; ... the threshold of socially instilled displeasure and fear moves' (Elias 2000: x-xi), and so does what is considered to be "good manners".

Manners understood in this way are thus quite specific and very sophisticated techniques for governing conduct. One of the principal contributions of Elias' study is that it helps us to understand manners not as the curtailment of our true being but rather as the cultivation of a particular self. Manners can be understood, therefore, not as the expression or repression of some universal truth about humans but rather as the expression of particular social arrangements.⁵² Elias' descriptions thus provide another illustration that our

⁵² For a more current account of manners as a technique for governing conduct, see Smith's (1998) *Bad habits or bad conscience: Sexual harassment in the Australian Defence Force*.

selves may be circumstantial rather than innate or inevitable and that “who we are” as environmentally active and informed citizens may reflect nothing more than the embodiment of a particular social and mental order of living – or a set of manners – from a particular temporal, political and cultural setting.

Fashioning the self: The cultural self

Although writing in a quite different anthropological register, Marcel Mauss’ 1934 lectures/essays on *A category of the human mind: The notion of person, the notion of “self”* and on *Body techniques* (1979b) also help to support the claim advanced in this thesis that our subjectivity is constituted, not essential.⁵³ Mauss explained in his lectures that even physical skills that we think of as natural or innate, such as walking, running, coughing or spitting, are historically and culturally variable “techniques of the body”. The following two examples from Mauss serve to demonstrate this point:

Coughing and spitting technique. Here is a personal observation. A little girl did not know how to spit and this made every cold she had much worse. I made enquiries. In her father’s village and in her father’s family in particular, in Berry, people do not know how to spit. I taught her to spit. I gave her four *sous* per spit. As she was saving for a bicycle she learnt to spit. She is the first person in her family who knows how to spit. (1979b: 118)

A kind of revelation came to me in hospital. I was ill in New York. I wondered where previously I had seen girls walking as my nurses walked. I had the time to think about it. At last I realized that it was at the cinema. Returning to France, I noticed how common this gait was, especially in Paris; the girls were French and they too were walking in this way. In fact, American walking fashions had begun to arrive over here, thanks to the cinema. (1979b: 100)

The point Mauss is making is that seemingly natural or spontaneous functions of the body such as spitting and walking are, in fact, *cultural attributes*. Mauss famously argued that ‘there exists an education in walking, too’ (1979b: 100) after noticing the American “walking fashions” in France. He thus argued that ‘the positions of the arms and hands while walking form a social idiosyncrasy, they are not simply a product of some purely individual, almost completely physical, arrangements and mechanisms’ (Mauss 1979b: 100).

⁵³ For a similar anthropological study, see Bourdieu’s (2003) *The Berber House*.

Even how we walk then is a culturally learnt attribute. Attributes are acquired, according to Mauss, through “prestigious imitation”:

The child, the adult, imitates actions which have succeeded and which he has seen successfully performed by people in whom he has confidence and who have authority over him. The action is imposed from without, from above, even if it is an exclusively biological action, involving his body. The individual borrows the series of movements which constitute it from the action executed in front of him or with him by others. (1979b: 101-2)

Mauss’ studies thus show that there is an ‘education’ in acquiring even seemingly natural bodily techniques and that this education is intimately bound to cultural practices, social order, and the relationships through which such an education takes place.

Just as ‘body techniques’ exhibit cultural, political and temporal variations, so too do personas. Mauss also examines the different forms the persona has taken such as the legal persona, the moral persona, the Christian persona and the psychologised persona. He thus makes a distinction between the individual – seen as the “raw material” of the biological human being – and the persona – seen as the specialised product of social organization and cultural institutions (Hunter and Saunders 1995: 71). This distinction is also used in the theoretical framework being developed in this chapter.

Mauss’ investigations deeply disturb humanist conceptions of self by showing firstly that our selves are complex historical-cultural arrangements that involve biological-psychological-sociological organizations of the self. Secondly, he argues that our body techniques are not purely individual characteristics but rather series of assembled actions that are historical-cultural-institutional in character. Finally, he argues that our body techniques are established and maintained through both formal and non-formal education, but always through focussed forms of training and practice. Mauss’ studies thus offer a way to question whether a technique such as empowerment is a means for reconnecting oneself to a pre-existent inner self, or can instead be understood as a technical means through which one comes to fashion a particular persona for oneself.

Fashioning the self: The ethical self

Foucault's (1985) description of the ethical regimes of classical Greece provides another illustration of the ways in which particular techniques and practices work to govern conduct and fashion personas, such as, in this example, ethical personas. While Weber's study identified a code according to which conduct came to be fashioned, Foucault argues that the process of forming an ethical persona in classical Greece cannot be easily reduced to an ethical code. Instead, he outlines four techniques that he argues were central to the formation of an ethical persona in this particular setting. These are the determination of one's ethical substance, a mode of subjection, ascetic practices of the self, and a moral teleology (Foucault 1985).

The first technique, the *determination of one's ethical substance*, is where 'the individual has to constitute this or that part of himself as the prime material of his moral conduct' (Foucault 1985: 26). In this way, specific domains of one's own self and one's conduct come to be understood as areas of concern and in need of attention.

The second technique is the *mode of subjection* through which 'the individual establishes his relation to the rule and recognises himself as obliged to put it into practice' (Foucault 1985: 27). Here, a problem is identified because of a rule or practice the individual relates to. The individual sees himself or herself as needing to live according to this rule and be part of a group that accepts this rule as custom (for example, for spiritual or environmental reasons).

The third technique outlined by Foucault is that of *ascetic practices of the self*. This is the work 'that one performs on oneself, not only in order to bring one's conduct into compliance with a given rule, but to attempt to transform oneself into the ethical subject of one's own behaviour' (Foucault 1985: 27). That is, one is attempting to both comply with a given rule and also to fashion oneself as an ethical being using specific techniques and practices. Here one comes to understand oneself as a *subject* to be worked on.

The fourth technique is *moral teleology* through which an action is not only seen as ‘moral in itself, in its singularity; it is also moral in its circumstantial integration and by virtue of the place it occupies in a pattern of conduct’ (Foucault 1985: 27-8). Thus, while an action may be seen as moral in itself, it also commits one to other actions that conform to this code. Moral teleology refers to both the regularity of an individual's moral responses and to the creation of a particular type of persona to which an individual's actions are increasingly oriented.

Thus, in an environmental sense, one may be able to achieve a sustainable lifestyle if one strictly observes certain obligations and masters certain desires. To live sustainably you will need to identify yourself as an environmentalist who is willing and able to, for example, live lightly on the earth. One becomes an environmentalist by constantly checking and modifying one's own conduct against the measure of a “true” environmentalist, that is, by monitoring and modifying one's own conduct in accordance with a particular code. Through this constant vigilance, one comes to both recognise oneself as an environmentalist and to commit oneself to being an environmentalist.

Foucault's study is useful here because it also describes a range of techniques for fashioning a persona. It further allows for an understanding of how “rare”, that is, how few, the mechanisms and techniques are that we have available to us by allowing us to recognise that techniques used in classical Greece are still being used by us today. Indeed, this thesis illustrates this point by showing that the mechanisms and techniques relied on in environmental education are not “innovative” but have instead a history. While Foucault was writing about classical Greece, this thesis demonstrates that these very old techniques are still used now to guide and shape – to fashion – personas who are able to conduct their lives as ethical beings called “environmentally active and informed citizens”.

Fashioning the self: The psychologised self

Rose's studies such as *Governing the soul: The shaping of the private self* (1989) and *Inventing our selves: Psychology, power and personhood* (1996c) provide a more recent historical account of the now common ways in which our selves are fashioned – using “therapeutic” techniques – into “psychologised” personas through the power and knowledge of the “psy-disciplines”. According to Rose, psychological techniques or “psy-techniques” have played a pivotal role in constructing us as individual subjects who not only have capacities for concerning ourselves with ourselves and governing our own conduct but who also – most importantly for liberal modes of rule – have the capacity to be governed through a sense of freedom (Rose 1989, 1996c). It is the psy-techniques, Rose argues, that have provided the ‘complex emotional, interpersonal and organisational techniques by which the practices of everyday life can be organised according to the ethic of autonomous selfhood’ (1989: 90). These psy-techniques produce the ‘know-how of the autonomous individual striving for self-realization’ by enabling

a certain rationality for rendering experience into thought in a way that makes it practical, amenable to having things done to it. The psychotherapeutic territory is made up of all those practices in which one problematizes one's existence in terms of an interpretation of its inner psychological and psychodynamic meanings and determinants, acts upon one's dilemmas in terms of psychological interpretations of their implications, and intervenes upon oneself (alone or with the assistance of others) in terms of psychological norms and techniques – through self-inspection, self-problematization, self-monitoring and self-transformation. (Rose 1989: 90)

These psy-techniques are used to construct our selves as subjects in need of therapeutic work, and as subjects who have the concerns and capacities to undertake this work. In modern liberal modes of rule such as ours, the techniques of the psy-disciplines – techniques for fashioning personas with particular concerns, interests and capacities – are a means through which the activity of government is able to occur without impinging on the freedom, autonomy and choice of the individual (Rose 1989: 93). This is because the psy-techniques, connected as they are to the power/knowledge of the psy-disciplines, act as ‘indirect mechanisms that can translate the goals of political, social and economic authorities into the choices and commitments of

individuals’ (Rose 1996c: 58). In this way, the conduct of whole populations – even environmental conduct – is able to be regulated through individuals’ desires to ‘govern their own conduct freely in the service of the maximisation of a version of their happiness and fulfilment that they take to be their own’ (Rose 1996c: 58-9). This is evident in the range of psy-techniques deployed through the environmental education programmes examined in Chapter Five.

The seminal work of the five scholars discussed above provides challenging new ways of understanding our selves – our identity and our subjectivity – not as innate or even purely biological, psychological or social, but as the product of objectives and programmes for governing conduct, be these programmes governmental, cultural or religious. These classic studies show that personas are *cultivated, constituted* and *ascribed* through very specific techniques and practices and for quite definite purposes, even in our own time. These studies all support, therefore, a ‘less philosophical and more technical, less universal and more contextualised approach to questions of “identity”’ (Du Gay *et al.* 2000: 4). Indeed, as the genealogies of the self discussed above show, even what we now believe – indeed *feel* – to be true, can be ‘treated as an historical instance and not as a given’ (Du Gay *et al.* 2000: 4).

The genealogical accounts presented above have described various historically contextualised accounts in which ‘the social relations, techniques and forms of training and practice through which human beings have acquired definite capacities and attributes for social existence as particular sorts of person’ (Du Gay *et al.* 2000: 4) are able to be clearly seen. Rather than drawing a unified theory of our subjectivity from these accounts however, we need, as du Gay reminds us, to understand that

[w]ith this particularizing and contextualizing emphasis comes recognition of the historical contingency and plurality of personae and the necessity of not abstracting the properties of particular forms of personhood from the specific cultural milieux in which they are formed. (2000: 4)

These studies do, however, offer a fertile course for understanding firstly that our subjectivity is acquired, and secondly, precisely *how* quite particular orders

of living are currently deployed through environmental education programmes – orders of living that work to cultivate beings who are active and informed environmental citizens. While these studies do not offer us a new totalising theory of human subjectivity, they do invite a new way of comprehending strategies of social change favoured by environmental educators, such as empowerment. One of the tasks of this thesis is to provide a description of the fashioning of a particular type of persona in a particular context: “the active and informed environmental citizen” so sought after by contemporary environmental education in the West.

The final fundamental concept underpinning an understanding of government as the “conduct of conduct” then, is a resolutely non-humanist and historical understanding of the self, of our personhood. Together with the previous two fundamental concepts – a new understanding of power as dispersed, relational and productive; and a new understanding of how power is in a conditioning-condition relationship with knowledge – the rethinking of our subjectivity offered by these studies allows us to better understand *how* modern liberal modes of rule are able to govern in a non-repressive way – that is, in a pastoral and productive way. The new understanding we now have of these three fundamental concepts, and the two key ideas they underpin – that liberal modes of rule are morally abstemious, practically engaged and have limited capacities, and that government occurs through “the conduct of conduct” – allows us to move now to a discussion of Foucault’s notion of “governmentality”.

GOVERNMENTALITY: A NEW UNDERSTANDING OF GOVERNMENT

[Government is] any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through our desires, aspirations, interests and beliefs, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes. (Dean 1999: 11)

The term “governmentality”⁵⁴ connotes the distinctive means and mechanisms through which populations are governed in modern liberal modes of rule. The term grapples with the open question of how the two great themes that Foucault sets out, that is, the government of large populations (the masses) and the use of the elite aesthetic of self cultivation (the governance of the self) are not easily made to cohere. While governmentality is a notion most often associated with Foucault, he in fact wrote very little about it. However, Foucault’s thinking about the relationship between these two themes has been greatly expanded on by Anglo-Foucauldian scholars such as Dean and Rose. I will utilise this body of commentary on governmentality to better understand the actual means, that is, the techniques of self-cultivation through which environmental educators seek to resolve the problem of environmental conduct, and to understand whether environmental education can be understood as an apparatus through which modern liberal governments are able to govern the environmental conduct of their subjects.

Governmentality refers to ‘the emergence of political rationalities, or mentalities of rule, where rule becomes a matter of the calculated management of the affairs of each and all in order to achieve certain desirable objectives’ (Rose 1996b: 29). As I have argued in this chapter, mentalities of rule are ‘a kind of intellectual machinery or apparatus for rendering reality thinkable in such a way that it is amenable to political programming’ (Rose 1996b: 42). Mentalities of rule should not simply be equated with ideologies, however. Political rationalities are ‘more than just ideologies, they constitute a part of the fabric of our ways of thinking about and acting upon one another and ourselves’ (Barry *et al.* 1996: 7). Indeed, these rationalities of rule are so much a part of the fabric of our collective thought that they are difficult for us grasp: ‘the idea

⁵⁴ While proposing governmentality as a framework for providing a new reading of environmental education, I am not proposing another totalising theory, as many sociological and theoretical explanations of government are. Foucault did not want, as he clearly stated, to be ‘the sort of philosopher who conducts or wants to conduct a discourse of truth on some science or other’ (1980e: 64). While Foucault acknowledged that he too was in the process of constructing a discourse, he wanted his work understood as just that, a possibility, not an essential truth. The governmentality framework I propose here provides another perspective on environmental education, one that is partial and incomplete and does not provide universal answers.

of mentalities of government, then, emphasizes the way in which the thought involved in practices of government is collective and relatively taken for granted, i.e., not usually open to questioning by its practitioners' (Dean 1999: 16).

Foucault used the term governmentality to denote 'the emergence of a distinctively new way of thinking about and exercising power' (1991a: 102-3) – a way of thinking or mentality that was concerned with “the economy” and “the population” in ways it had not been before. Foucault points out that '[i]n the seventeenth and eighteenth centuries a new form of power comes into being that begins to exercise itself through social production and social service. It becomes a matter of obtaining productive service from individuals in their concrete lives' (1980i: 125). This new form of governing 'takes as its object “the population” and is coincident with the emergence of political economy (and its successor, economics)' (Dean 1999: 19). The register of the economy now comes to be the means through which the 'health, welfare, prosperity and happiness of the population' (Dean 1999: 19) is to be both measured and attained. Here the population is newly understood not simply as an object of governmental concern but as a body of subjects with capacities and 'resources to be fostered, to be used and to be optimized' (Dean 1999: 19-20). This new form of governing was seeking not to repress the population but rather to maximise its potential in assisting government to achieve health, prosperity and happiness for all.

Foucault's historicized accounts of the strategies, mechanisms and techniques of modern liberal modes of rule alert us to the ways in which governments now seek to do two seemingly disparate things: to govern the population as a whole, and to attempt to do this through the far more intimate, and individualised, fashioning of new personas. This is no easy task, the governance of the masses, using self-fashioning techniques utilized, historically, only by elites. How these

two tasks come to be brought together, for us now, is the subject of ongoing investigation, most notably in the work of scholars such as Rose and Bennett.⁵⁵

Governmentality is thus the “shorthand” used in this thesis to draw together these threads concerning the mentalities – or rationalities – of modern liberal modes of rule. These rationalities seek to both “macro-manage” territories and populations and “micro-manage” the conduct of individuals, not through repressive top-down means but through the fashioning of the concerns, interests and capacities of the population to be governed. There is thus a quite remarkable art to modern liberal government evident in its capacity to make links between the management of territories and whole populations and the management of conduct in specific individuals (Rose 1999: 5-6).

Foucault initially referred to the technologies of power used by governments to manage their populations in these ways as “biopower” (O’Farrell 2005: 105-6). However, biopower did not allow for an understanding of power as ‘productive’ and ‘pastoral’ (Foucault 1982: 214-15). Modern liberal modes of rule are pastoral and productive because they seek to direct conscience and fashion from the population – in a caring rather than repressive manner – citizens who are civilised, self-reflective, self-governing persons. This is why Foucault refers to the “govern-mentality” of modern liberal modes of rule as the “conduct of conduct”. For Foucault, ‘the equivocal nature of the term *conduct* is one of the best aids for coming to terms with the specificity of power relations. For to “conduct” is at the same time to “lead” others ... and a way of behaving within a more or less open field of possibilities’ (Foucault 1982: 220-1).

The challenge for modern liberal modes of rule thus became finding ‘a real and effective “incorporation” of power ... in the sense that power had to be able to gain access to the bodies of individuals, to their acts, attitudes and modes of everyday behaviour’ (Foucault 1980i: 125). Thus, government had to

⁵⁵ See, for example Rose (1985, 1988, 1989, 1996a, 1996b, 1996c, 1996d, 1999, 2000a, 2000b, 2003, 2006) and Bennett (1989, 1992, 1995, 1998, 2002).

find means by which individuals may be made responsible through their individual choices for themselves and those to whom they owe allegiance, through the shaping of a lifestyle according to the grammars of living that are widely disseminated, yet do not depend upon the political calculations and strategies for their rationales or for their techniques. (Rose 1996b: 57)

As Hirst and Woolley note, a means had to be found to '[motivate] people to behave in altruistic and considerate, dignified, and conscientious ways without transcendental goals' (1982: 138). This new mentality of rule thus seeks to "embody" power by 'producing effects at the level of desire' (Foucault 1980a: 59), that is, by translating governmental objectives into the desires, aspirations, ambitions and judgements of the population (Rose 1999: 47-51). It is this translation that facilitates the transition of governmental objectives 'from a political centre – a cabinet office, a government department – to a multitude of workplaces, hospital wards, classrooms, child guidance centres or homes' (Rose 1999: 51).

Managing populations at both the macro and micro levels thus requires complex techniques and quite subtle apparatuses that are capable of working with 'a delicate and complex web of affiliations between the thousands of habits of which [the lives of] human beings are composed – movements, gestures, combinations, associations, passions, satisfactions, exhaustions, aspirations, contemplations' (Rose 1999: 6). The regimes of practices employed by liberal governments are distinctive because they are 'deliberate attempts to shape conduct in certain ways in relation to certain objectives' (Rose 1999: 4). An understanding of the *how* of such regimes of practices helps to make visible, for example, the ways in which empowerment can be understood as a technology of citizenship.

Various regimes of practices – working through a range of apparatuses and with a range of techniques – are therefore employed to give effect to, that is, to make practical, governmental thought and reason. This does not mean that there is an all-powerful "driver"; rather, regimes of practice 'possess a logic that is irreducible to the explicit intentions of any one actor but yet evinces an orientation toward a particular matrix of ends and purposes' (Dean 1999: 22). It

is through the configurations of apparatuses, mechanisms and techniques – through regimes of practice – that governments are able to act on individuals in order to ‘shape, guide, correct and modify the ways in which they conduct themselves’ (Burchell 1996: 19), and in this way manage at the same time to govern the population as a whole.

The notion of governmentality thus allows us to understand government as an activity undertaken by a multiplicity of agents and agencies, using a variety of knowledge, strategies and techniques, in order to shape the conduct of individuals. This is not, as has been outlined above, a situation of “false consciousness” nor a process of imposing governmental objectives but rather a process that seeks to conduct conduct by ‘[acting] on the governed as a locus of action and freedom’ (Dean 1999: 15). Indeed, our freedom is central to governmental efforts to shape us, and to have us shape ourselves, as self-governing citizens. As Dean argues, a characteristic of modern liberal government is that it ‘work(s) through the freedoms and capacities of the governed’ (1999: 15). Rose concurs with Dean’s assessment by arguing that freedom is a ‘structuring theme of contemporary government’ and that freedom can best be understood ‘not simply as an abstract ideal but as material, technical, practical and governmental’ (1999: 63). The view that we are governed *through* our freedom has, however, its ‘disagreeable ring’, precisely because we commonly think of our freedom as an innate capacity through which we are able to resist the power of the State. However, if Weber, Elias, Foucault, Rose and Mauss are correct in arguing that who we are is historical and cultural, then surely our freedom is no less “anthropological” also.

Rose’s (1999) genealogy of freedom points to this as well. His study shows, for example, that in the early nineteenth century, freedom was experienced through and in relation to codes of civility, reason and orderliness (Rose 1999: 69-78), codes that – we know from Weber – often had a religious affiliation. From the late-nineteenth century, however, freedom came to be understood through the social and the individual’s place within the social (Rose 1999: 78-83). Since the mid-twentieth century, freedom has been understood through its relationship to

the persona of the individual. Freedom is now understood to be both housed in the individual and as providing autonomy for the individual (Rose 1999: 90). What we take for freedom today, and in the name of which we are governed, has a history.⁵⁶

Rose's study shows that only a certain kind of liberty – a certain way of understanding and exercising freedom, of relating to ourselves individually and collectively as subjects of freedom – is compatible with liberal arts of rule. Our mentality of freedom has a history that is closely linked to the pastoral mentality of modern liberal government. Such an understanding of freedom raises interesting questions. For example, if our freedom is an acquired resource or an artefact of government (Barry *et al.* 1996: 8), then perhaps freedom is not an innate right but an attribute – a carefully put together, laboriously acquired ensemble of habits, practices and techniques which are operationalised through the multitudinous networks through which we are governed within liberal forms of rule. If this is the case, then Rose is correct in claiming that freedom is 'not simply an abstract ideal, but [is] material, technical, practical and governmental' (Rose 1999: 63).

The issue for modern liberal modes of rule – particularly those that have sought to tie democracy, with its rhetoric of "free choice", to liberalism – is how the individual can be persuaded to freely embrace concerns and interests that match broader governmental objectives and responsibilities for governing whole populations. According to Rose (1999: 63), this is achieved through calls on our freedom, and to maintain our freedom. For this reason, liberal governments seek to encourage freedom, not repress or hinder it.

In conclusion, modern liberal modes of rule in the West have a history that shows that they are not a mode of rule bound by principle; a history that shows that they are capable of multiple and complex responses to problems through numerous and sometimes interrelated agents, institutions and instrumentalities;

⁵⁶ Rose (1999) makes it clear, however, that this does not mean that the freedom we feel today is an illusion, or not real, for us.

that they have limited capacities, that is, their arrangements are contextual not universal and their outcomes are partial not comprehensive; and that they produce human capacities, not repress them. It is the complexity and pervasiveness of this form of government in our time that Foucault has encapsulated in the term “governmentality”.

Problematizing Empowerment

Citizens are not born; they are made. (Cruikshank 1999: 3)

Liberal governments, as I have argued, seek to address a range of “problems” by calling on individuals to be “responsible and self-governing citizens”. Indeed, citizenship and self-governance are ‘tirelessly put forward as solutions to poverty, political apathy, powerlessness, crime, and innumerable other problems’ (Cruikshank 1999: 1) within liberal forms of rule. We see this in environmental educators’ desire to empower individuals to be active and informed environmental citizens as well.

There are a range of “technologies of citizenship” that are deployed to fashion these new personas: ‘discourses, programs, and other tactics aimed at making individuals politically active and capable of self-government’ (Cruikshank 1999: 1). Such technologies, ‘however well intentioned, [are nonetheless] modes of constituting and regulating citizens: that is, strategies for governing the very subjects whose problems [governments] seek to redress’ (Cruikshank 1999: 2).

The concern for this thesis is how this is achieved, that is, ‘by what means ... the capacity, power, consciousness, or subjectivity proper to ... self-government [is] infused into citizens’ (Cruikshank 1999: 3). In environmental education it is, I argue, through the “will to empower”. Empowerment can properly be considered the principal (and principled) technique relied on in environmental education to bring active and informed environmental citizens into being. In seeking to shape individuals as citizens, it is a strategy of government.

This is not, however, how empowerment is traditionally comprehended in environmental education. Instead, empowerment is understood as a means for reconnecting an individual to their innate, presumed to be powerful, self. The idea of empowerment as liberation from the arbitrary constraints artificially imposed by culture and/or those “in power” has been so influential that many have taken it upon themselves to provide every opportunity for such pre-empowered souls to become conscious of their sense of powerlessness, to understand the causes of their powerlessness, and to learn to want to do something about it.⁵⁷ According to Dean,

[t]he notion that victims of social inequalities and discrimination, economic deprivation and political subordination be “empowered” to cast off their status as victims and actively participate in the transformation of their condition has been, since the 1960s, remarkably compelling for thinkers, activists and reformers in liberal-democratic countries. (1999: 67)

Advocates of empowerment, ‘the professional reformer cum radical activist’ (Dean 1999: 68) are of course no longer simply confined to the religious realm. Cruikshank’s (1999) *The will to empower: Democratic citizens and other subjects* outlines how this technology of citizenship has been widely used by a range of social reformers over the past 200 years. Environmental educators, with their desire to transform society through empowering individuals to become active and informed environmental citizens, also rank among their number.

Current conceptions of empowerment in environmental education rely on an understanding of power different from that offered by Foucault. Indeed, the rationale for empowerment is an assumed gap between the powerful and the powerless. The term “empowerment” implies that there are powerless individuals who need to find or be given power. Empowerment is here understood as a ‘simple quantitative increase in the amount of power possessed by an individual’ (Cruikshank 1999: 71). This is not simply a matter of “giving

⁵⁷ Cruikshank (1999) notes that a sense of “powerlessness” has to be first acknowledged, before a technology of citizenship such as empowerment can be applied. That is, the problem first has to be invented and recognised before it can be addressed and resolved. Chapter Five examines some of the techniques used in environmental education to encourage individuals to “recognize” their state of powerlessness.

power”. Rather than power *over*, advocates of empowerment argue that there is a need instead for power *with* (Kreisberg 1992, 1993). Such a conceptualisation implies that those seeking to empower others are not imposing their power over the powerless but rather *facilitating* the process of empowerment – *with* or alongside the powerless. We have seen, however, that such dichotomous understandings of power limit our capacity to understand the *actual means* through which power relations succeed in governing us and enabling us to govern ourselves. Empowerment does not stand outside of power: it is a relation of power.

In fact, empowerment can be better understood precisely as a strategy of government because

[f]irst, empowerment is a relationship established by expertise, although expertise is constantly contested. Not only the expertise of the “experts” but also the expertise of [for example] the poor as the “real” experts on poverty, as well as the authority of representatives of subordinated groups – all are contested, routinely consulted, and documented. Second, [empowerment is an] unaccountable exercise of power in that the relationship is typically initiated by one party seeking to empower another. Third, it is dependent upon knowledge of those to be empowered, typically found in social scientific models of power or powerlessness and often gained through the self-description and self-disclosure of the subject to be empowered. The will to empower ourselves and others has spread across academic disciplines, social services, neighborhood agencies, social movements, and political groups, forging new relationships of power alongside new conceptualizations of power. Fourth, relations of empowerment are simultaneously voluntary *and* coercive. (Cruikshank 1999: 72)

Empowerment does not function outside of power relations, therefore, but is part of the relations of power that seek to fashion new sorts of personas that enable individuals to *be* responsible and self-governing, or active and informed, citizens.

The strategy of empowerment (and its techniques) are ‘a logically hybrid (and sometimes elusive) function which integrates the production of effects with the utilisation of those effects’ (Gordon 1980: 252). Empowerment thus produces effects through which government – by others and by the self – is then able to take place. Rather than a means for “getting in touch” with one’s innate self,

empowerment is part of a ‘technology of citizenship, a strategy or technique for [transformation] ... from powerlessness to active citizenship’ (Dean 1999: 67).

While empowerment is commonly understood as an increase in capacity, that is, as an increase in one’s power, understanding empowerment as a governmental technique allows us to see the ways in which discourses and programmes of empowerment work in modern liberal modes of rule to fashion the specific persona of an active and informed citizen. Programmes that seek to empower are thus ‘particularly clear examples of those contemporary liberal rationalities of government that endeavour to operationalize the self-governing capacities of the governed in pursuit of governmental objectives’ (Dean 1999: 67). I argue that programmes of empowerment in environmental education could be seen as a means to achieve success – not at reconnecting individuals to some pure and innate form of power, but at fashioning the concerns, interests and capacities of persons who are able to be environmentally active and informed citizens.

GOVERNMENTALITY: A NEW UNDERSTANDING OF ENVIRONMENTAL EDUCATION

As has been shown in this chapter, the notion of governmentality furnishes a particular framework for description and analysis of the ways in which ‘effective government in contemporary liberal democracies comes to depend on the actions of self-determining individuals and groups’ (Dean 1999: 71). It is the ability of the notion of governmentality to illuminate this link – between the practices of governments and the self-governing capacities of individuals and groups – that makes this notion the one that best captures the ethos and goals of the present inquiry.

Governmentality provides a new framework for looking at and describing the practices of environmental education, a framework that stands in stark contrast

to the sociological and theoretical approaches currently employed in the field.⁵⁸ Indeed, the notion of governmentality allows for a shift in analysis to occur from the traditional ‘study of the relationship between ideology and social structure’ (Dean 1999: 65). A governmentality approach also promises an alternative to the field’s habitual rhetoric of failure. For example, the key idea that liberalism as a mode of rule has practical concerns, limited capacities and no investment in overarching a priori, will be particularly useful in evaluating whether or not the goal of moral transformation that resounds in environmental education is achievable or feasible *in this world*. Indeed, a governmentality framework allows me to argue against environmental education’s anti-statist stance, the hyper-morality of a rhetoric of failure, and the desire to transform behaviour according to particular moral a priori assumptions.

Employing governmentality as a framework for understanding environmental education also allows me to describe the ways in which the seemingly mundane practices of environmental educators – practices that seek to constitute individuals as environmentally active and informed citizens – are productive of new types of personas. Governmentality permits an argument to be made that environmental educators who seek to empower individuals to be environmentally active and informed citizens are engaged not in liberating innately free subjects or empowering civil society but rather in successfully fashioning personas who are equipped with new orders of living that enable them to govern their own environmental conduct. Such activity is an example of how liberal governments are able to ‘operationalize the self-governing capacities of the governed in pursuit of governmental objectives’ (Dean 1999: 67).

The notion of governmentality – with its account of the ways in which the exercise of authority and the management of populations are thought about in modern liberal modes of rule – thus enables a new description of environmental education to be presented. While theories of political rule are not a usual source

⁵⁸ There are exceptions to these forms of analysis in environmental education, most notably in the work of Gough (1998b, 1999b, 2006b), Lotz (2001), O’Donoghue (2002, 2005, 2004) and Payne (1997, 2000, 2002, 2003, 2005).

of insight into environmental education, it is my contention that a governmentality framework facilitates the presentation of a new and productive reading of environmental education as a successful mechanism through which environmental conduct can be governed. This redescription allows success to be seen, not in individual or social transformation, but rather in the ability of government in the broader sense to fashion new – in this instance, environmentally better mannered – citizens out of “free” beings through the calculated, limited and specific management of particular problem populations and problem behaviours.

CONCLUSION

The description of governmentality – and its underpinnings – that I have presented in this chapter demonstrates that modern liberal modes of rule are “morally abstemious” and thus have no interest in delivering a form of heaven – or hell – on earth. Rather, they seek to conduct conduct in a “caring” fashion, like a shepherd does his flock, using very sophisticated, complex, capillary, pastoral, practical and purposeful processes. Using governmentality as a framework for examining environmental education provides a working assemblage of ideas that allow me to argue that it is the limited – that is, non-transformative – ambitions of liberal governance that allow for a certain success to be claimed for environmental education, despite the critics who see failure in the field’s inability to totally transform individuals and society to match a vision of ecotopia.

CHAPTER THREE

AN ANALYTICS OF THE GOVERNMENTAL IN ENVIRONMENTAL EDUCATION

The work of an intellectual is not to shape others' political will: it is, through the analyses that he carries out in his own field, to question over and over again what is postulated as self-evident, to disturb people's mental habits, the way they think things, to dissipate what is familiar and accepted, to re-examine the rules and institutions and on the basis of this reproblematicization ... to participate in the formation of a political will. (Foucault 1988b: 265)

[T]he present calls for a style of investigation that is more modest than that adopted by sociological philosophers of history. It encourages an attention to the humble, the mundane, the little shifts in our ways of thinking and understanding, the small and contingent struggles, tensions and negotiations that give rise to something new and unexpected ... Things happen through the lines of force that form when a multitude of small shifts, often contingent and independent from one another, get connected up. (Rose 1999: 11)

The function of any diagnosis concerning the nature of the present ... does not consist in a simple characterization of what we are but, instead – by following the lines of fragility in the present – in managing to grasp why and how that-which-is might no longer be that-which-is. (Foucault 1988a: 36)

A FOUCAULDIAN APPROACH TO RESEARCH

Writing a “methodology chapter” for a study of governmentality needs to be undertaken with a certain degree of caution. As Dean observes, ‘to speak of following “Foucault’s methods” is as paradoxical as speaking of ascending stairs or cascading waterfalls in the graphic work of M.C. Escher’ (1994: 2). Foucault only spoke retrospectively of methodological issues and did not articulate a “method” for his work. Perhaps this is because Foucault’s concepts, such as governmentality, carry within them both analysis and method. The methodological approach is the analysis and the analytical approach is the method. It is for this reason that I spoke in Chapter One of an artificial separation being made in my presentation of a theoretical framework, in Chapter Two, and a methodological framework, in Chapter Three, for this study.

Despite Foucault not having articulated a methodology, studies seeking to examine the “history of the present” are indebted to Foucault for showing that “that-which-is” may no longer be “that-which-is”. This does not mean that studies of governmentality slavishly follow a series of methodological moves or rely on particular methods as promulgated by “the master”. As Gordon states: ‘[w]hat Foucault may have to offer is a set of possible tools, tools for the identification of the conditions of possibility which operate through the obviousness and enigmas of our present, tools perhaps also for the eventual modification of those conditions’ (1980: 258).

While studies of governmentality do not fall neatly together into a neo-discipline, it is nonetheless possible to identify a common approach and a common set of concerns to such studies. To this end, this chapter provides an overview of the orientation and methodological concerns of studies that follow the ethos of Foucault’s investigations, that is, studies that seek to understand the history of our present circumstances, in particular, how we think about and enact government. From this emerges a quasi-methodological framework, referred to as “an analytics of government”. This chapter describes this framework, examines other studies that have used this framework, and discusses how and why this framework is employed in the present study.

This chapter begins with a discussion of what is meant by undertaking investigations that seek to illuminate the “history of the present”. This is followed by a brief discussion of the two methodological approaches Foucault used, archaeology and genealogy. The four characteristic concerns of Foucault’s studies are outlined, along with five methodological precautions Foucault raised for studies seeking to understand how we have come to think about and enact government in the ways we have. The influence of these concerns and precautions on the present study is also discussed.

STUDYING THE “HISTORY OF THE PRESENT”

Foucault’s historical investigations are “histories of the present”. This does not mean that they see the present as the apogee of human development but rather as

the form of a particular kind of domain of rationality ... a “regime of truth” composed of a field of problems, questions and responses determined by the continuity and discontinuity, clarity or obscurity of the administered ensemble of relations which constitute the partition between the present and the past. (Gordon 1980: 242)

It is then a matter of employing history to ‘interrogate the “rationality” of the present’ (Gordon 1980: 242).

Neither do Foucault’s investigations seek to reduce history to particular causal principles, such as modes of production or class. They seek instead to examine ‘phenomena or object-events whose conditions of possibility are at the same time their conditions of existence’ (Gordon 1980: 243). Such investigations show the contingent, rather than the necessary or pre-destined nature of our present that many historical accounts provide.

Nor are Foucault’s investigations hermeneutic. They do not seek to decode, interpret or explain. They are instead diagnostic, and seek to discriminate and differentiate, rather than “know” (Rose 1999: 56-8). Foucault sought to describe – rather than interpret or analyse – as he argued that interpretation and analysis always occur with reference to a globalizing theory. For Foucault, such theories, while possibly providing useful methodological tools, were most often ‘a hindrance to research’ (1980j: 81) because they require thinking in terms of a totality. Foucault argued that what was required, methodologically, was not ‘a solid and homogeneous theoretical terrain ... nor to descend ... from on high with some kind of halo of theory that would unite’ (1980j: 87). It is not through grand theories, he argued, but through attention to the multiplicity of ‘down to earth and concrete’ facts offered by our present that we can most productively examine the ways in which we are governed and in which we govern ourselves (Foucault 1980j: 93).

Foucault's histories of the present also sought to describe the relations of power – that is, the mechanisms and means of government through which power functions – in order to understand the ways in which we think about and enact government in modern liberal modes of rule. Indeed, he argued that 'the archaeology of the human sciences has to be established through studying the mechanisms of power [because they] have invested bodies, acts and forms of behaviour' (Foucault 1980a: 61). According to Foucault, '[p]ower is constructed and functions on the basis of particular powers, myriad issues, myriad effects of power' (1980e: 70). In order to fully describe *how* relations of power function, however, the ways in which knowledge informs, directs and is informed by relations of power has to be rethought. Foucault's investigations thus sought to describe both the ways in which we "know" and the practices of governing – the "doing" – associated with these ways of knowing.

Histories of the present thus seek to use history to question our established ways of knowing and ways of doing, by showing that they are contingent and variable, not pre-destined. It is an approach that allows for the minute, the down-to-earth, the mundane, indeed the normal to be described in such a way that the relations of power through which we are governed, and through which we govern ourselves, are made visible. It is my contention that without such an understanding of how we have come to be what we are now, we will not be able to bring about the changes to our own, and others ways of "knowing" and ways of "doing" through environmental education. While histories of the present may be criticised for not "providing answers", I consider they offer something more: an understanding of how we have come to be what we are where we are, and therefore an understanding of how we might become something other than what we are, now and in the future.

My study, in describing the relations and effects of power in environmental education, redescribes the mechanisms of power that normalise mental habits, beliefs and truths within the field and explains how this leads to orthodox thinking and practice. In this way, the relations of power evident in environmental education discourses and practices are "unearthed". In

examining the history of environmental education, I will be “lowering” the level of analysis by illuminating the technical conditions and mundane circumstances out of which our current beliefs in environmental education – our accepted ways of knowing and ways of doing – have emerged.

FOUCAULT’S HISTORICAL INVESTIGATIONS

Foucault’s historical investigations of our ways of thinking about how we govern were of two types: archaeologies and genealogies. His archaeological methods – as elaborated in *The archaeology of knowledge* (Foucault 1972) – aimed both to rethink the conventions of historical investigations (Foucault 1972: 7-15) and to understand the ways in which the power/knowledge nexus both forms and limits discourses of “truth” and bodies of knowledge in liberal modes of rule (Foucault 1991b: 59-60). His archaeological investigations examined the ‘archives of discourse’ (Kendall and Wickham 1999: 25), that is, a range of statements through which a discourse is established, legitimised, distributed and maintained. Archaeological investigations, therefore, describe ‘the networks of what is said, and what can be seen in a set of social arrangements [and the ways in which] statements and visibilities *mutually condition* each other’ (Kendall and Wickham 1999: 25).

While Foucault outlined his archaeological methods, he did not articulate a methodological framework for his genealogical investigations. These were wide-ranging and did not all rely on the same methodological techniques or descriptive tools. According to Kendall and Wickham,

[g]enealogy (the term itself is borrowed from Nietzsche, though Foucault’s methodological development is different from Nietzsche’s) was often promoted by Foucault as a kind of successor to archaeology. Despite this, genealogy maintains many of the essential ingredients of archaeology, including, paradoxically, the examination of bodies of statements in the archive. However, Foucault added to it a new concern with the analysis of power, a concern which manifests itself in the “history of the present”. (1999: 29)

Genealogical investigations thus

entertain the claims to attention of local, discontinuous, disqualified, illegitimate knowledges against the claims of a unitary body of theory that would filter, hierarchise and order them in the name of some true

knowledge and some arbitrary idea of what constitutes a science and its objects. Genealogies are therefore not positivistic returns to a more careful or exact form of science. They are precisely anti-sciences. Not that they vindicate a lyrical right to ignorance or non-knowledge: it is not that they are concerned to deny knowledge or that they esteem the virtues of direct cognition and base their practice upon an immediate experience that escapes encapsulation in knowledge. (Foucault 1980j: 83-4)

Instead, genealogies attempt to ‘render [historical knowledges] ... capable of opposition and of struggle against the coercion of a theoretical, unitary, formal and scientific discourse’ (Foucault 1980j: 85). However, as Kendall and Wickham point out, a genealogical investigation does not seek to make a judgement about what is true or what is not, but is rather

a methodological device with the same effect as a precocious child at a dinner party: genealogy makes the older guests at the table of intellectual analysis feel decidedly uncomfortable by pointing out things about their origins and functions that they would rather remain hidden. (1999: 29)

This is nowhere more clear – and nowhere more difficult for us to grasp – than in Foucault’s argument that genealogies are

a form of history which can account for the constitution of knowledges, discourses, domains of objects, etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness through the course of history. (1980i: 117)

We are well trained in wanting to see knowledge – and power – as emanating from a single source. However, as Foucault reminds us, the history of our present is not so simple and clear-cut.

This does not mean that “the subject” is not of interest or is ignored in genealogical investigations. Quite the contrary: the effects of power on the body and the being of individuals formed a core focus of Foucault’s historical investigations. It was more important, he argued, to study the effects of power on the body than it was to address questions of ideology. Indeed, he was concerned by ‘analyses which prioritise ideology [because] there is always presupposed a human subject on the lines of the model provided by classical

philosophy, endowed with a consciousness which power is then thought to seize on' (Foucault 1980a: 58). Genealogies are instead interested in the 'diversity of strategies and tactics of subjectification' (Rose 2000c: 311) that have been used in different times and places to fashion, classify and differentiate persons. Foucault's analyses of the effects of power on the body and the human subject – on the materiality of power – encourage an important focus for the present study: a description of the ways in which certain discourses work to fashion new types of environmental persons, that is, to make visible the effects of power in environmental education. To this end, two areas of investigation are necessary. The first involves identifying and examining the rationalities or mentalities of rule, that is, describing how orthodoxies in the field of environmental education have developed and work to govern thinking and practice in the field. The second involves an examination of the particular strategies and techniques used by environmental educators to alter the environmental conduct of individuals.

The Foucauldian methodological perspective I am bringing to the field of environmental education means that the present study will examine a range of statements. Since practices of government are commonly 'formally rationalized in programmatic statements, policy documents, pamphlets and speeches' (Rose 1999: 4), a range of theoretical texts, policy documents and curriculum materials from the field of environmental education will be examined. Among the texts examined are those that provide a history of environmental education;⁵⁹ government policy documents;⁶⁰ key theoretical texts;⁶¹ and two environmental education programmes.⁶² The point of the examination is to establish how the transformation-oriented goal of education *for* the environment has become orthodox in environmental education in Australia and now governs how environmental conduct comes to be shaped by environmental educators.

⁵⁹ Gough, A. (1997a, 1997b).

⁶⁰ Australian Government (2006); Australian Government and Curriculum Corporation (2005); Department of Education Queensland (1992, 1993, 1989); Environment Australia (2000); and Queensland School Curriculum Council (2000).

⁶¹ Fien (1993b, 2000); Huckle (1999); Hungerford and Volk (1990); Jensen and Schnack (1994, 1997); Jickling and Spork (1998); and Sauvé (1999b).

⁶² Thomashow (1995, 2002); van Matre (1974, 1979, 1989, 1990); van Matre and Johnson (1997); van Matre and Institute for Earth Education (1987).

By paying attention to an ‘empiricism of the surface [that identifies] ... the differences in what is said, how it is said, and what allows it to be said and have an effectivity’ (Rose 1999: 57), this study offers the possibility for a radically new reading of the practices of environmental educators.

Methodological Concerns

Four characteristic concerns can be identified in Foucault’s investigations. The first of these is a concern with genealogy, that is, with the ways in which understanding the past can help us to understand the peculiar ways our seemingly objective truths, rationales and assumptions have come to *order* the present (Gordon 1980: 258). It is such ‘enquiries into our past [that make] intelligible the “objective conditions” of our social present’ (Gordon 1980: 233). The second concern is with archaeology, that is, with the ways in which quite particular material and historical conditions have legitimised – ordered, appropriated, excluded – some discourses and not others (Gordon 1980). The third concern is with an “ethical” dimension: the ‘kind of relations ... [that] the role and activity of the intellectual [can] establish between theoretical research, specialised knowledge and political struggles’ (Gordon 1980: 233). The final concern is one that seeks to understand ‘the proper use to be made of the concept of power, and of the mutual enwrapping, interaction and interdependence of power and knowledge’ (Gordon 1980: 233).

The present study has similar concerns. It seeks to understand how the present “objective truths” or “obviousness” of environmental education, such as the belief that individuals need to be empowered so that they can transform themselves and society, have come to be. Here it will be a matter of examining the settings and the practices that have permitted the establishment of these truths. Various intellectual struggles will be examined as evidence of the unique intersections of power, knowledge and the self within modern liberal modes of rule that facilitate the fashioning of self-governing “environmental” personas. What is offered here is a more positive account of environmental education, one that recognises success.

Methodological Precautions

Foucault outlined five “methodological precautions” for his studies, precautions I have observed in defining the focus of this study. The first of these is that power should be understood through its *effects*, that is, ‘at its extremities, in its ultimate destinations, with those points where it becomes capillary ... in its more regional and local forms and institutions’ (Foucault 1980j: 96). Secondly, power should be examined ‘at the point where it is in direct and immediate relationship with that which we can provisionally call its object, its target, its field of application, there – that is to say – where it installs itself and produces real effects’ (Foucault 1980j: 97). Thirdly, the self needs to be understood as ‘an effect of [relations of] power, and at the same time, or precisely to the extent to which it is that effect, it is the element of its articulation. The individual which power has constituted is at the same time its vehicle’ (Foucault 1980j: 98). Fourthly, in order to understand how mechanisms of power come into being, and continue to take hold, power must be examined not from the “top down” but from ‘its infinitesimal mechanisms’ (Foucault 1980j: 99). Attention must, therefore, be paid to ‘the humble, the mundane, the little shifts in our ways of thinking and understanding, the small and contingent struggles, tensions and negotiations’ (Rose 1999: 11). For Foucault, both our past and our present are made more visible to us through an examination at the “molecular” level rather than at the level of “historically significant events”. Foucault’s final methodological precaution is that we need to keep in mind that power is not ideological. He argues that power is

both much more and much less than ideology. It is the production of effective instruments for the formation and accumulation of knowledge – methods of observation, techniques of registration, procedures for investigation and research, apparatuses of control. All this means that power, when it is exercised through these subtle mechanisms, cannot but evolve, organise and put into circulation a knowledge, or rather apparatuses of knowledge, which are not ideological constructs. (1980j: 102)

According to Foucault,

it is only if we grasp these techniques of power and demonstrate the economic advantages or political utility that derives from them in a given context for specific reasons, that we can understand how these mechanisms come to be effectively incorporated into the social whole. (1980j: 101)

Such is the purpose of a thesis that seeks to examine the political utility of empowered, active and informed environmental citizens within a liberal mode of rule. As Foucault has noted, we can only understand both the production and the use of techniques of power by examining power through its effects on its target. This is the reason to examine the particular mechanisms, strategies and techniques used in environmental education at the level of the individual, which are, in this instance, strategies that seek to empower. My examination of these strategies is at the points where they become capillary, that is, at the points where they are “freely taken on” by the individual to fashion a new persona.

AN ANALYTICS OF GOVERNMENT

Governmentality – the notion that there are specific mentalities or rationalities to modern modes of rule, such as governing in a pastoral and productive manner – serves as a descriptive protocol for this thesis. Foucault’s initial ideas about how to undertake studies of our “governmentalities” have underpinned efforts by Foucault scholars – in particular the Anglo-Foucauldians – to develop a methodological framework for examining governmentality “in action”. This is referred to as an ‘analytics of government’ (Dean 1994, 1999, Kendall and Wickham 1999, Rose 1999).

An analytics of government, though, remains quasi-methodological. In Dean’s words,

[t]here is no one governmentality paradigm. There is no one common way of using the intellectual tools being produced by workers in the area. There are no prescribed limits to the intellectual formations of which studies of governmentality can be a part or to the empirical areas in which they can be developed ... In short, there is no single volume that surveys this literature, presenting its major concepts, providing an overview of its historical perspectives, or making intelligible its contribution to the analysis of present styles of government. (1999: 3)⁶³

Nonetheless, an analytics of government is justified in so far as it provides ‘a [quite specific] purchase for critical thought upon particular problems in the

⁶³ It should be noted that while Foucauldian scholars such as Dean and Rose are concerned about the normativity implied by methodological frameworks and claim to be merely “opening things up to critical thought”, in doing so they might let a quasi-normative “openness” back in.

present' (Rose 1999: 9). It is a means for investigating the practices that direct conduct, and for investigating the forms of thought or mentalities that guide such practices (Dean 1999: 36-40). An analytics of government seeks to ask certain sorts of questions – troubling questions – of those aspects of our present that seem most self-evident and natural to us, specifically in the present inquiry, the orthodoxy of transformation through empowerment.

An analytics of government encourages a certain disposition towards the field of inquiry. This disposition seeks 'to connect questions of government, politics and administration to the space of bodies, lives, selves and persons' (Dean 1999: 12). To understand government, according to Dean, we must 'analyse those practices that try to shape, sculpt, mobilize and work through the choices, desires, aspirations, needs, wants and lifestyles of individuals and groups' (1999: 12). In this way, an analytics of government diagnoses the present, in order to make the familiar and self-evident both visible and historical.

If government is understood as a process through which definite but limited improvements rather than utopian transformations are possible, it is appropriate that an analytics of government does not search for ultimate (normative) goals or transcendent principles that should or should not direct the ways in which we govern and are governed. Instead, an analytics of government is concerned with understanding how we govern and how we are governed. An analytics of government aims to gain a purchase on these governmental regimes by clarifying their forms of thought – their mentalities – and by examining the effects of these at their point of application:

Foucault thus implied that, rather than framing investigations in terms of state or politics, it might be more productive to investigate the formation and transformation of theories, proposals, strategies and technologies for the "conduct of conduct". Such studies of government would address the dimension of our history composed by the invention, contestation, operationalization and transformation of more or less rationalized schemes, programmes, techniques and devices which seek to shape conduct so as to achieve certain ends. (Rose 1999: 3)

Analytics of government are, in this sense, empirical. They engage in an 'empiricism of the surface', however, allowing for a description of 'the

differences in what is said, how it is said, and what it allows to be said' (Rose 1999: 57). Studies undertaking an analytics of government therefore begin by identifying and examining the specific situations in which particular activities come to be understood as problematic. They then ask "how" questions such as "how do we think about how we govern?" and "how are we governed?". Such studies do not see the practices of government as utopian expressions of pure principles or a priori but rather as complex regimes of practices. That is, the practices of government are not reduced to the expression of values. Rather, values are examined for the part they play in the rationality and rhetoric of government. Such studies are distinctive, therefore, in that they turn away from globalizing positions that see government as either good or bad (Dean 1999: 27-36).

The *how questions* of an analytics of government display a quite particular perspective on relations of power, knowledge and the self (Dean 1999: 27-38, Rose 1999: 4-60). They ask:

- How does a particular state of affairs, such as environmental conduct, become problematized?
- How are particular governmental strategies or modes of governing developed and deployed to address problems?
- How are these modes of governing able to appear in certain times and places, that is, how are they influenced by their setting?
- How do these modes of governing constitute us as subjects who are both governable and self-governing?

These questions, when asked of environmental education, will allow me to step outside of the orthodoxy of education *for* the environment with its desire for transformation and its assertions of profound failure. Indeed, in examining the discourse of education *for* the environment in this light, I am able to make a new assessment of, and offer new insights into, environmental education. Most importantly, given the principled nature of the goal of transformation, an analytics of government allows me to give an "unprincipled" account of the field. Offering an unprincipled account also allows me to see "government" in a positive and productive, rather than repressive, light.

The characteristic concerns and *how* questions of an analytics of government have thus been used to shape the focus of the present study. My principal concerns are with the effects of ways of thinking, in particular, how ways of thinking shape what can be thought and what can be done in environmental education. In seeking to examine whether environmental education can be evaluated as successful, this study raises a range of “inconvenient questions” about environmental education’s goals of transforming individuals and so entire populations to act *for* the environment, as well as the strategies for personal and collective empowerment that are promoted as the principal means to achieve this end.

TOWARDS A GOVERNMENTAL UNDERSTANDING OF ENVIRONMENTAL EDUCATION

There have been an extraordinary number of studies undertaken that adopt Foucault’s ethos of inquiry in relation to government. A simple Google search of the terms “Foucault” and “governmentality” returns around 130 000 sites, with the same search of academic texts on Google Scholar returning close to 1000. Despite this, there is a paucity of empirically focussed research,⁶⁴ with most effort being directed at understanding and expanding on Foucault’s “theories”. The purpose of this thesis is to add to the body of empirically focussed research that seeks to “operationalise” rather than “theorise” Foucault’s ideas.

Many studies that expand our understanding of Foucault’s ideas do, however, provide key insights that are of relevance to this study of environmental education. For example, Ian Hunter’s (1994) rethinking of the school provides an assessment of this institution that is quite different from those traditionally put forward in the environmental education literature. His notion of the “pastoral school”, in illustrating the uncomfortable merging of the concerns of the Church and the state, may help to explain the role of the school in environmental education in a new light, that is, one that is caring and productive, not one that is uncaring and repressive.

⁶⁴ For one of the few collections of empirical studies, see Dean and Hindess (1998).

Barbara Cruikshank's (1999) investigation of the use of empowerment to build the self-esteem of, among others, the poor, provides a range of insights into the technological and governmental disposition of empowerment. Her insights help to clarify the disjunction between the rationality of empowerment – that is, that it is liberatory – and the logic of the strategy and technique of empowerment that can be known through its effects. Her descriptions of empowerment as a technique for enhancing self-governing capacities enriches my discussion of environmental education's goal of bringing environmentally active and informed citizens into being by empowering them.

Nikolas Rose's (1985, 1988, 1989, 1996c, 1999) investigations of the psych-disciplines also offer fertile possibilities for rethinking environmental education. His studies, in showing the ways in which we have been made up as psychological beings with a conscience, provide a way for us to rethink exactly *how* we come to fashion new personas for ourselves, and how this may be related to how we are governed.

Paul Rutherford's (2000) study addresses the problematic relationship between nature and social theory and describes the ways in which this relationship has provided a range of technologies that have enabled a new form of regulation and intervention that he refers to as "ecological governmentality". Rutherford's study is useful in helping us to understand the ways in which the problem of nature has driven the development of a variety of governmental programmes, including those we see in environmental education.

There has been much grappling with the insights Foucault's work offers in the field of environmentalism, environmental philosophy, and education.⁶⁵ However, the new insights Foucault's work offers have rarely been applied in environmental education. Some environmental education scholars have

⁶⁵ See, for example, Soper (1995), Darier (1998), Baker and Heyning (2004), Ball (1990), Hunter (1988), Olssen (1999), Peters (1998), Popkewitz (1991, 1997), Popkewitz and Brennan (1998), and Popkewitz *et al.* (2001).

undertaken studies that are informed by the ideas of “post-structuralism”.⁶⁶ However, none of these employ Foucault’s concept of governmentality to describe environmental education as a governmental mechanism through which environmental conduct comes to be fashioned.⁶⁷

Only one study, presented as a conference paper at the 2005 American Educational Research Association (AERA) conference by Amy Sloane, begins to address how the concept of sustainability “governs” what can be thought and practised in environmental education (Sloane 2005). Her examination of the “rationality of rule” in environmental education in the USA complements the concerns of this thesis and points to the beginnings of an emerging area of interest in environmental education. There are, however, no studies in environmental education that follow Foucault’s ethos of inquiry in order to understand how the notion of empowering individuals to become environmentally active and informed environmental citizens has become an orthodoxy, nor any that see the practice of environmental education as successful because of its ability to fashion new personas.

The present study therefore makes three significant and original contributions to the field of environmental education. Firstly, it offers a new understanding of environmental education by employing an analytics of government to describe the field. Secondly, it offers a new framework and new language for understanding the field. Finally, it offers a way to sidestep the discourses of transformation and failure that permeate the field.

In order to clarify how environmental education is a mechanism for governing environmental conduct, this study asks a range of questions that seek to

⁶⁶ See, for example, Barrett (2005), Blewitt (2005), Ferreira (1999/2000), Gough, A. (1999a), Gough, A. and Whitehouse (2003), Gough, N. (1991, 1992, 1997d, 1997e, 1999b, 2006b), McKenzie (2004, 2005), O’Donoghue and Lotz-Sisitka (2005), O’Donoghue and Russo (2004), Payne (1997, 2000, 2002, 2003, 2005), Price (2005), Russell (2005, 2006), Russell and Bell (1996), and Stables (1996, 1997, 2001).

⁶⁷ While Blewitt (2005) uses the concept of governmentality to describe power relations, he does so in a dualistic way, seeing only one discourse as constraining, the other as resistant. It is my contention that all discourse works to “govern”, even those discourses that claim to be resisting or liberating.

illuminate the actual techniques – the micro-practices – in which environmental educators engage, be this at the level of constructing discourse or at the level of embedding new “orders of living” in their students. Specific questions are therefore asked of the histories, theories and practices of contemporary environmental education. The four broad questions analytics of government pose, inform the questions to be asked of environmental education:

- How did environmental conduct come to be understood as a problem?
- How does the setting in which environmental education emerges frame the responses to the problem of environmental conduct that are developed?
- How do these responses govern the field, both in their development and their deployment?
- How do these responses work to fashion new forms of conduct, indeed, new personas?

These questions signal a key concern of this study: whether or not it is possible to claim success for the activity of fashioning self-governing beings if these beings have not also been totally morally transformed. The questions also ask what it might mean for environmental educators if their efforts to empower individuals to become environmentally active and informed citizens are finally recognised as a governmental technique for equipping individuals with an ensemble of culturally acceptable practices that enable them to live their lives in an environmentally sustainable manner.

Such questions are designed to illuminate what Dean (1999: 40) refers to as ‘inconvenient facts’. In environmental education, such inconvenient facts include an understanding of how struggles to define the nature and purpose of environmental education may be nothing more than a struggle for the right to claim “truth”. Such questions also address the possibility that today’s rhetoric of failure in environmental education bears some relationship with older clashes between religious and secular orders of living. Finally, such questions clarify the ways in which techniques such as empowerment – that are traditionally thought of as a means for liberating repressed subjects – may be more

accurately defined as governmental techniques for conducting the conduct of citizens.

CONCLUSION

An analytics of government provides a fitting methodological framework for the present study, allowing new questions to be asked of environmental education. To answer these questions will involve approaching environmental education as a body of knowledge in and through which governmental relations of power operate. At stake are three principal issues: how the discourse of transformation has come to be so deeply embedded in environmental education; how techniques such as empowerment might be more productively understood as governmental; and how success may be able to be seen for environmental education. This is the work of the final three chapters of this thesis.

CHAPTER FOUR

MAPPING THE RISE OF AN ORTHODOXY IN ENVIRONMENTAL EDUCATION

Environmental education for sustainability is a concept encompassing a vision of education that seeks to empower people of all ages to assume responsibility for creating a sustainable future. (UNESCO 2004: 1)

As we work towards achieving the goals of the Decade, schools will be important in preparing and empowering students to assume responsibility for creating and enjoying a sustainable future. Such a vision for school education is transformative. (Australian Government and Curriculum Corporation 2005: 3)

Environmental education for sustainability involves ... developing the kinds of civic values and skills that empower all citizens to be leaders in the transition to a sustainable future. (Australian Government and Curriculum Corporation 2005: 8)

At the end of the [United Nations] Decade [of Education for Sustainable Development] the Australian community will have the understanding, knowledge, skills and capacity to contribute to sustainable development and will embrace the intrinsic value of sustainability as a national aspiration. Our ultimate vision is a sustainable Australia. (Australian Government 2006: 3)

EXPLORING RATIONALITIES OF RULE

In 2006, both in Australia and internationally, environmental educators were being called on to empower individuals to create a sustainable world. This call is clearly articulated in the Australian Government and UNESCO documents cited above. Given that liberalism as a mode of rule is “morally abstemious” (Geuss 2002), this chapter will explore how we have come to be in the remarkable situation where a national government is calling for school education to be transformative, for its citizens to be empowered and for all to adopt the value of sustainability.

The present chapter will therefore describe two particular dispositions that have acquired the status of orthodoxies in environmental education, so much so that even governments have come to have faith in them. The first is that for environmental education to be successful, some sort of action *for* the environment and towards a sustainable society must be taken. A second is that

individuals must be empowered so that they are willing and able to take the actions needed to transform themselves into environmental citizens and their society or country into a sustainable one (Australian Government 2006: 3). These two dispositions thus both seek to transform: to transform the individual through empowerment and to transform society through taking action. I argue that these dispositions have become so “everyday” that they are orthodoxies that now act as rationalities that govern what can be thought and what can be done in environmental education in Australia.

As argued in Chapter Three, to understand our present circumstances we need to ‘interrogate the “rationality” of the present’ (Gordon 1980: 242). It is only through illuminating these rationalities – the reasons we use for what we think and do – that we are able to understand their effects. Such an understanding does not present an “anti-governmental” (or “pro-governmental”) solution for the field. As Foucault recognised,

[t]he work of an intellectual is not to shape others’ political will; it is, through the analyses that he carries out in his own field, to question over and over again what is postulated as self-evident, to disturb people’s mental habits, the way they do and think things, to dissipate what is familiar and accepted, to reexamine rules and institutions and on the basis of this reproblematisation (in which he carries out his specific task as an intellectual) to participate in the formation of a political will (in which he has his role as citizen to play). (1988b: 265)

The two rationalities that rule, or mentalities-that-govern, environmental education – to empower individuals and to take action *for* the environment – produce new sets of mental habits. They thus have their *effect* in how the field thinks – about problems, solutions, failures and successes – and on how the field acts – the strategies for change promoted and those excluded. If such mentalities or discourses are so powerful that they become orthodox, it can be the case that they are almost never brought into question. Indeed, for the most part, they remain invisible. They become part of the everyday – what Foucault refers to as ‘that-which-is’ (1988a: 36). In describing the rationalities that rule contemporary environmental education, I aim to show ‘how that-which-is might no longer be that-which-is’ (Foucault 1988a: 36). That is, I aim to show that certain accepted and unquestioned orthodoxies of environmental education have

a history of establishment. They are not universal truths that we have no reason to question. Through describing the rise of these rationalities of rule, I make visible the productive effects of power within environmental education thought and practice. It will then be possible to show how this exercise of power can be understood as governmental. It also points to a certain success: success at establishing transformation as the unmistakable goal for the field of environmental education.

The purpose of the next two chapters is, therefore, to open to examination a power/knowledge/self relationship that current orthodoxy in environmental education has failed to recognise. The point is to demonstrate that environmental education can be understood as a governmental exercise of power. In this chapter, I examine the establishment of the transformation agenda through the lens provided by the notion of governmentality, and discuss its effects on the field of environmental education. The present chapter thus identifies and examines the specific situations in which behaviour that impacts negatively on the health of the natural environment came to be problematised. It examines how the setting in which this activity becomes problematised both allows the activity to be identified as a problem and affects the modes of governing – empowerment in this instance – that are chosen to address the problem. The chapter then outlines how a particular rationality – in this instance empowering individuals to transform society – becomes established, legitimised, distributed and maintained as orthodoxy. This chapter concludes by focussing on one key effect that the orthodoxy of empowering individuals to transform society has on the field, that is, the embedding of a conviction that only environmental education that is transformative, though a process of empowerment, can register as successful. As I have argued previously, one of the principal effects of this conviction is a sense of failure in the field.

In Chapter Five, I identify and examine the ways in which environmental education, through a governmental exercise of empowerment, could successfully constitute individuals as active and informed environmental citizens, individuals who are not necessarily transformed through empowerment

but who do have new, and less environmentally damaging, orders of living or daily practical mechanisms of conduct. In this way, an argument is put forward for a certain success to be recognised for environmental education, not by transforming whole beings ready for a world beyond this one, but practical and accessible success at fashioning new personas, personas that allow individuals to conduct their lives in a less environmentally damaging fashion.

ENVIRONMENTAL EDUCATION EMERGES

An understanding of the setting in which contemporary environmental education in the West emerged places thinking about environmental education not in the realm of universal truths but within a quite particular context – a context that allowed for and supported the emergence of the particular orthodoxy of today’s environmental education. An acknowledgement of this setting is important in allowing us to better understand how the desire for individuals to be transformed into active and informed environmental citizens was able to appear at a particular time (the 1960s and 1970s) and in a particular place (the West).

Mobilising Environmental Education: “The Environmental Crisis”

The emergence of contemporary environmental education in the West is inextricably linked to the notion of an environmental crisis. Indeed, the environmental crisis *is* the *raison d’être* for environmental education. It was the sense of an impending environmental crisis in the early 1960s that led to both the identification of human behaviour as the principal cause, and to the identification of strategies such as legislation and education as measures to avert the looming crisis. This new concern with preventing an environmental crisis grew so rapidly that by 1969 environmental education had emerged in its own right as a specialised field of educational endeavour, with research in the area reported in its own academic journal.⁶⁸ The emergence and growth of contemporary environmental education are clearly linked to the growth of the notion of an environmental crisis.

⁶⁸ The North American *Journal of Environmental Education* was first published in 1969.

The conviction that we are in the midst of an environmental crisis – the like of which has not been seen before – has been growing steadily over the last 45 years. Most notably, Rachel Carson's *Silent spring* (1962), Harold Barnett and Chandler Morse's *Scarcity and growth: The economics of natural resource availability* (1963), Kenneth Boulding's *The economics of the coming spaceship earth* (1966), Lynn White, jr.'s *The historical roots of our ecological crisis* (1967), Paul Ehrlich's *The population bomb* (1968), Garrett Hardin's *The tragedy of the commons* (1968), Barry Commoner's *The closing circle: Nature, man and technology* (1971), Barbara Ward and René Dubos' *Only one earth* (1972), the Club of Rome's *The limits to growth* (Meadows, Meadows *et al.* 1972), Ernest Friedrich (E.F.) Schumacher's *Small is beautiful* (1973), and James Lovelock's *Gaia: A new look at life on earth* (1979)⁶⁹ presented an ecological discourse which maintained that we are wholly dependent on the natural environment for our survival and that our lifestyles have an increasingly negative impact on the natural environment.⁷⁰ A central voice in this ecological crisis discourse was Carson, who emotively described the impact of human practices on the natural environment in *Silent spring*:

The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers, and sea with dangerous and even lethal materials. This pollution is for the most part irrecoverable; the chain of evil it initiates not only in the world that must support life but in living tissues is for the most part irreversible. In this now universal contamination of the environment, chemicals are the sinister and little-recognized partners of radiation in changing the very nature of the world – the very nature of its life. (1962: 23)

This sense of cataclysmic damage to the natural environment also found expression in Ward and Dubos' *Only one earth*:

[T]here is a growing sense that something fundamental and possibly irrevocable is happening to man's relations with both his worlds

⁶⁹ These texts influenced not only the general public's view of the environment but also policy makers. For example, Carson's *Silent spring* (1962) is seen as the primary reason for the banning of the use of DDT in the USA, Canada, Japan, and Western European countries in 1976 (<http://pops.gpa.unep.org/04histo.htm> - Accessed 11 November 2005). They also led to their authors being viewed almost as prophets (see, for example, Lear 1997).

⁷⁰ These claims themselves have a history. For example, Thomas Malthus, in his 1798 *An essay on the principle of population*, proposed that human population, if left unchecked, would outstrip food supply, as population increases at a geometric rate (2, 4, 8, etc.), whereas food supply increases at an arithmetic rate (1, 2, 3, etc.) (Malthus 1798). Similar "neo-Malthusian" arguments have been made in texts such as *The population bomb* and *The limits to growth*.

[natural/environmental and social/cultural]. In the last two hundred years, and with staggering acceleration in the last twenty-five, the power, extent and depth of man's interventions in the natural order seem to presage a revolutionary new epoch in human history, perhaps the most revolutionary which the mind can conceive. (1972: 37)

Schumacher (1973 p. 17) makes a similar claim in *Small is beautiful*:

In other words, the changes of the last twenty-five years, both in the quantity and in the quality of man's industrial processes, have produced an entirely new situation – a situation resulting not from our failures but from what we thought were our greatest successes. And this has come so suddenly that we hardly noticed the fact that we were very rapidly using up a certain kind of irreplaceable capital asset, namely the tolerance margins which benign nature always provides. (1973: 17)

The environmental models developed by the Massachusetts Institute of Technology for the Club of Rome led to claims that

[i]f the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next 100 years. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity. (Meadows *et al.* 1972: 1)

The message from these doomsayers was clear: we are using up finite natural resources – and damaging the natural environment – at a rate impossible to sustain and in a manner impossible to reverse. So influential were these early texts in establishing a conviction that we are facing an environmental crisis that their titles – *Only one earth*, *Small is beautiful* – have become catch-cries for the environment movement, regularly appearing on t-shirts and banners.

One of the principal strengths of these claims of crisis is their link to “scientific fact”. Scientific knowledge about the deteriorating state of the world's natural environment allowed – and continues to allow – us to “know” that we are facing an environmental crisis. The discourse of crisis turns on a few key metaphors, one of which is the metaphor of “life support systems”. The “threat to life support systems” metaphor is used by scientists – and environmentalists – to mobilise the environmental cause. The metaphor is evident in statements

such as the warning from 1700 of the world's leading⁷¹ scientists that we are currently facing an environmental crisis that threatens the life support systems on which everything on this planet depends for survival. In 1992, in a document titled *Warning to humanity*, the Union of Concerned Scientists stated that

[h]uman beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at serious risk the future that we wish for human society and the plant and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about. (1992)

These scientists estimated that we have no more than one or a few decades before the damage done will be irreversible and our chances of survival severely diminished (Union of Concerned Scientists 1992). They reiterated this claim in 1997, lamenting the fact that since their 1992 statement, progress has been woefully inadequate (Union of Concerned Scientists 1997). Stories of environmental decline are now commonplace: the media reports almost daily on species extinction, overpopulation, pollution, water shortages, polar ice cap melts, and changes in climatic conditions that will forever alter life as we know it.⁷²

At the time of this writing, the claims to crisis are still being made, with the Al Gore documentary, *An inconvenient truth*, telling sell-out audiences that climate change is about to bring civilisation as we know it to an end:

Humanity is sitting on a ticking time bomb. If the vast majority of the world's scientists are right, we have just ten years to avert a major catastrophe that could send our entire planet into a tail-spin of epic destruction involving extreme weather, floods, droughts, epidemics and killer heat waves beyond anything we have ever experienced. (Gore 2006)

Not all scientists agree that we are facing an environmental crisis. Some have resisted the dominant crisis message by providing counter-stories and counter-

⁷¹ More than half of all living Nobel laureates in the sciences signed this document.

⁷² A cursory trawl through any newspapers or television and radio news reports can confirm this.

readings of current scientific facts. The most notable critics of the crisis conviction in recent years are Julian Simon (1981, 1994, 1984) and Bjorn Lomborg (2001, 2006). Other critics have also been heard in series such as the BBC's *Against Nature* (1997). Simon argues that there is no looming crisis because there is no shortage of human ingenuity to deal with any resource and energy shortages we may face. Lomborg, who considers himself an environmentalist, does not deny that we may be facing an environmental crisis. However, for him this is neither inevitable nor imminent. Indeed, he argues that environmental quality over the last 100 years has improved in a number of areas, such as, for example, air and water quality. For Lomborg, social issues such as poverty and a lack of access to clean water are far more pressing concerns for the future sustainability of the planet and well-being of its inhabitants than climate change.

Simon and Lomborg are treated as heretics by those who support the mainstream environmental crisis position, as are other environmentalists who challenge this orthodox view. Lovelock (2006) for example, once a darling of the environment movement, has recently begun to argue against the conformist environmental view of a benign nature (Gaia as Mother Earth) by claiming that the planet is instead at war with humans and is using its self-defence mechanisms to attempt to make humans extinct. Other outcasts include Shellenberger and Nordhaus (2004) and Moore (2005b), who argue that the environmental movement does more harm than good by continuing to use outdated strategies such as confrontation, sensationalism and zero-tolerance.

Such dissenting views are dismissed by environmentalists and scientists for being based on "poor science" and/or for being part of the "dominant technocentric paradigm" or the "dominant social paradigm" that more orthodox environmentalists claim as the cause of the looming environmental crisis (see for example, the www.anti-lomborg.com website, Rennie 2002, Whelan 2002, World Resources Institute and World Wildlife Fund n.d.). The reactions against these perceived heresies have been relentless. For example, Lomborg, who wrote *The skeptical environmentalist: Measuring the real state of the world*

(2001), has endured a vocal and very public attack, not only against the ideas put forth in this text but also against his person. These include being “pie-d” by an academic at an Oxford book-signing; being maligned in the pages of *Scientific American* and being threatened with legal action by *Scientific American* for posting a rebuttal – which they declined to publish – on his website because it included copyrighted excerpts from the magazine; and being found guilty in 2002 by the Danish Committee on Scientific Dishonesty (DCSD) of being ‘objectively dishonest’ and ‘clearly contrary to the standards of good scientific practice’ in *The skeptical environmentalist*, a claim which they later withdrew (Lomborg 2004: 1).⁷³ Lomborg’s (2006) response to the *Stern review on the economics of climate change* report (Stern 2006) has also drawn heated criticism.

For this thesis, however, the debate over which scientific version of the world is “true” is not of primary importance. As Thomas Kuhn (1970, 1984), Bruno Latour and Michel Callon (Callon 1986, Callon and Latour 1981a, b, Latour 1986, 1987, 1993) have shown, science – or more particularly, scientific knowledge – is a representation of reality, rather than, as Karl Popper (1959, 1963) saw it, reality itself. For example, Callon and Latour’s (1981a, 1981b) work on actor networks shows that what is considered to be legitimate scientific knowledge is not necessarily that which is the most “accurate” reflection of reality but that which is the winner of a struggle for supremacy. Kuhn (1977) classifies these struggles as pre-paradigmatic (where there are many competing schools of thought) and post-paradigmatic (where one school of thought prevails until it is overthrown by another). In an analytics of government perspective, as adopted in this thesis, what is important is not to identify a single, homogeneous body of knowledge as “the truth” but rather to ‘expose and specify the issue at stake in this opposition, this struggle, this insurrection of knowledges against the institutions and against the effects of the knowledge and power that invests scientific discourse’ (Foucault 1980j: 87). It is *how* scientific knowledge governs the way we think about – and act in – the world

⁷³ The DCSD finding was rejected in December 2003 by the Danish Ministry of Science, Technology and Innovation, the government department responsible for the DCSD, and in March 2004 the DCSD announced they would not re-open the case.

that is of interest here. It is how particular claims in environmental education *work* as truths, rather than if they are true or not, that is of present concern.

However, despite arguments such as Callon and Latour's that challenge the truth of scientific ways of knowing, science and scientific knowledge continue to hold a relatively unchallenged position in the Western world. The truth provided by science has, since the eighteenth century, been central to shaping our understanding of what is real. It is scientific knowledge that mediates our understanding of reality. For us, the environmental crisis is real, because science has provided us with evidence that it is so.⁷⁴ Scientific knowledge also mediates what we take to be legitimate solutions to our problems – even social and political problems – where we depend on the “social *sciences*” and the “political *sciences*” to provide us with the most accurate or truthful understandings of and solutions to our problems.

This is no less the case in environmental education. While there has been criticism of the “dominant scientific paradigm” (Fien 1993b, Huckle 1990, Huckle and Sterling 1996, Robottom and Hart 1993b), the *raison d'être* for the existence of the field of environmental education is the conviction that we *are* facing an environmental crisis – an environmental crisis brought to our attention and legitimised by science and scientists. Environmental education enlists the crisis conviction to propose that we will not survive unless we are able to bring about a radical transformation of both individuals and social structures through structural change, better education and personal empowerment. Indeed, it was within this setting of a scientifically provable crisis that contemporary environmental education emerged, with its discourses of transformation and empowerment. The transformation agenda in environmental education can be understood as a response to the apocalyptic crisis model. The setting in which environmental education developed its quite

⁷⁴ In stating this I do not wish to claim that the environmental crisis is not a real prospect. The point to be made is simply that our understanding of this reality comes to us via a scientific way of knowing the world and that this scientific understanding is itself constructed and contested rather than necessarily and absolutely true.

particular approaches and rationalities of rule thus played no small part in the field's development.⁷⁵

Indeed, it would have been difficult if not impossible to conceive of environmental education in its present form had it not been for this particular and strategic configuration of social, political and cultural relations that shaped the concept of "an environmental crisis". This thesis seeks to trouble these relationships, showing them to be something other than they first appear. Having explored the emergence of the environmental crisis, the next step is to explore how human behaviour comes to be problematised, and how education comes to be seen as the most logical solution to this problem.

Environmental Behaviour: Constructing a Problem

While scientific knowledge provides a basis for the sense of an impending environmental crisis, for government to be able to respond, the cause of the problem has to become "known". As shown in Chapter Two, knowing a population and identifying specific problems are essential to a governmentality that works by conducting conduct. While the natural environment is seen to contribute to the environmental crisis through the "nightmares of nature" such as volcanic eruptions, droughts, hurricanes and so on, no one claims that the environmental crisis is being caused by such naturally occurring events. Instead, as current arguments show, it is claimed that severe hurricanes such as Katrina, which recently hit the USA, or the current drought conditions in Australia, are occurring because of changing climatic conditions brought about by human activities (Holland 2005, Kerr 2005, Rahmstorf, Mann *et al.* 2005, Stipp 2005). Thus human conduct is deemed to be the principal cause of the environmental crisis we face – through either our over-population (that is, population beyond the carrying capacity of the planet) or our over-consumption (of natural resources).⁷⁶ It is humans' environmental conduct that has come to

⁷⁵ Indeed, health education demonstrates similar concerns about a need to move beyond individualist to structuralist approaches. See, for example, Talbot and Verrinder (2005) and Colquhoun and Robottom (1990, 1991). Interestingly, these concerns also emerged in the field of health education in the late 1960s.

⁷⁶ See, for example, Ehrlich (1968); Hardin (1968); Catton (1994); Rees (2003); and the Intergovernmental Panel on Climate Change (2007).

be seen as in need of understanding and modification or, as Foucault (1991a) would say, in need of being calculated, constituted and corrected by government.

Environmental Education: Constructing a Solution

Our ways of knowing are also limited by their context. Contemporary environmental education emerged in the 1960s and 1970s, a period of massive political, cultural and social upheaval and change. There were, for example, multiple challenges to conventional theoretical wisdoms (Hunter 2006). In addition, there was an increasing liberalisation of government, an increasing interest in democracy, in incorporating transformative learning into education systems, and a move in the psychological sciences away from behaviourist to humanistic, person-centred and cognitive approaches (Brammer, Abrego *et al.* 1993, Sharf 2000).

Since the focus on human conduct as the principal cause of the environmental crisis emerged in the 1960s, various strategies have been put forward to address the problem of environmental conduct. These have been of two main types: legislation and education. Over the past 45 years, governments have developed legislation, regulations and incentives that seek to govern the environmental conduct of both individuals and corporations. We have seen government-driven public awareness campaigns that seek to alter conduct through increasing knowledge about environmental problems, government support for programmes and strategies that develop a desire for living sustainably and education programmes for schools and the general community that target the environmental conduct of particular groups of individuals. In addition to these government strategies, the period since the 1960s has seen the rise of environmental movements, the formation of green political parties, and the greening of populations identified as “corporations” and “consumers”. There are thus a number of strategies in operation at any one time, all seeking the same goal of altering environmental conduct. For example, we may find ourselves subject to laws that prevent us from dumping our rubbish in rivers, community programmes offered by non-government organizations that exhort

us to recycle in the home, and programmes in schools that seek to empower students to live sustainably, both now and in the future.⁷⁷

Palmer notes that '[a]s the significance of the threats to the Earth's resources, natural systems and populace has become apparent, so too has the need for widescale education relating to our responsibilities towards the environment' (Palmer 1998: 35). Indeed, since the late 1960s, educators anxious about the environmental crisis have been engaged in attempts to define the scope, purpose and nature of environmental education and, more recently, education for sustainability.⁷⁸ The changing political, cultural and social settings in which contemporary environmental education took shape also saw major challenges to and rethinking of, among other things, the nature of human subjectivity, raising issues as to the most ethical approaches to take when attempting to affect human behaviour. This more multi-faceted view of subjectivity and behaviour led environmental educators to interrogate the range of factors that could influence human behaviour. We thus see a growing concern in environmental education from the 1970s onwards with values and attitudes and with how to imbue a sense of stewardship as a way to bring about behaviour change (O'Donoghue 1995). It is in this climate that debate arose in environmental education between the "behaviourists" with their conditioning strategies for changing behaviour, and the "humanists", with their desire to change behaviour using the strategy of empowerment. I return to the specifics of this intractable debate in environmental education later in this chapter.

The changing understanding of the nature of the school and schooling also affected the approaches environmental educators began to use. As approaches

⁷⁷ These strategies (and definitions of particular populations such as consumers as problems) would not necessarily have been possible in other times and places. Despite this array of strategies, the available expertise, institutions and cultural techniques on which to model social training are, as Hunter (1994) noted, 'rare'. We do not have limitless possibilities and options available to us. Rather, we are limited by what is available within our particular temporal, cultural and political settings.

⁷⁸ See, for example, Fensham (1978), Fien (1988, 1993a, 1993b), Gough, A. (1997a), Gough and Whitehouse (2003), Gough, N. (1987, 1990), Hopkins and McKeown (2001), Huckle (1983a, 2001), Hungerford (1995), Hungerford *et al.* (1983), Hungerford and Volk (1990), Jickling (1991a, 1992, 2003, 2006), Linke (1980), Lucas (1979), O'Donoghue (1993), Robottom (1987a, 1995), Roth (1970), Stapp *et al.* (1969), Tilbury (1995), Tilbury and Cooke (2005), Tilbury *et al.* (2002), and van Matre (1990).

to government become more liberal, so too do the strategies that are used in schools. The techniques of the Christian pastoral – techniques such as empowerment – are now increasingly put to governmental use as techniques of citizenship, that is, techniques to fashion self-governing citizens.

Thus, an understanding of the settings in which environmental education emerges is important in making visible what Gordon refers to as ‘lines of investigation and critique [that emerge] on the intellectual scene in a relationship of mutual stimulation with new modes of political struggle conducted at a multiplicity of distinct sites within society’ (1980: ix). Contemporary environmental education – in its current shape and form – would not have been able to take shape if this setting, with these particular ‘lines of investigation and critique’, had not existed. Contemporary environmental education is thus born out of the intersection and overlap of changes in scientific knowledge about the health of the natural environment, more humanistic approaches being adopted in psychology and education, and the rise of democratising and liberalising of forms of rule. What an analytics of government makes visible is that fields of endeavour such as environmental education – even if they claim the moral high ground – do not exist in isolation from their circumstances. The ways we think about environmental education have less to do with pre-ordained truths and more to do with a particular temporal, cultural and political setting.

RATIONALITIES OF RULE IN ENVIRONMENTAL EDUCATION

[T]he transformation of personal values must be accompanied by a transformation of social and economic structures. (Fien 1993b: 34)

It should be a form of social education cast in ... the liberatory mould. This seeks to empower pupils so that they can democratically transform society. ... by allowing pupils and teachers to reflectively construct and reconstruct their social world, [critical education *for* the environment] develops the critical and active citizens who are capable of bringing about the transition to sustainable development. (Huckle 1991: 54)

Concepts are more important for what they do than for what they mean. (Rose 1999: 9)

Contemporary liberal governments are able to govern the conduct of their populations with a light hand because of the relationship that exists between power, knowledge and the self within this form of rule. But can the field of environmental education be described as an active mechanism through which environmental conduct is governed with a light hand, a governmental shaping of a civilised population of environmental citizens?

In answering this question, I begin by making visible ‘how that-which-is might no longer be that-which-is’ (Foucault 1988a: 36), that is, by exposing the norms that govern contemporary environmental education, particularly in Australia, and by unsettling their position as “that-which-is”. I describe two particular rationalities of rule in environmental education that, as I shall argue, have become orthodoxies that govern what it is possible to think and what it is possible to do in environmental education. This description illuminates the power/knowledge relationship and demonstrates how in liberal systems of rule, power is more closely aligned to knowledge than it is to truth. My description of the establishment, legitimisation, distribution and maintenance of these orthodoxies also illustrates how power can be understood as productive relations of power. In environmental education, it is through the exercise of this productive power that two particular discourses have become orthodox rationalities that govern what it is conceivable to think and do in environmental education. The first of these rationalities is that for environmental education to be successful, some sort of action *for* the environment must be taken; the second is that such action must both empower individuals and transform social structures. I begin by describing the norms that govern the field and then explain how they have become established as rationalities that rule the field. This description is undertaken in order to show that such rationalities have effects, effects that I argue lead many in the field of environmental education to experience a ubiquitous sense of failure. In addition, I ask whether this rationality is suitable only for elites in the academies, rather than for every child, in every school.

Education for the Environment: Discourse Parameters

Environmental education's aim has remained steadfast for the past 35 years. As outlined in Chapter One, the aim is clear: to alter conduct so that it is less environmentally damaging. This aim is articulated in intergovernmental, governmental and academic documents in the field. Even where altering conduct is not an explicit aim, the intent remains the same. For example, much environmental education seeks to "clarify values" or find ways of "making ethics an everyday activity".⁷⁹ What is the purpose of such activity? Clearly, to make students aware of their values and the ways in which these affect how they conduct themselves. Even when environmental education is focussed on doing something for the environment, this doing always also involves some change in the ways in which one relates to and conducts oneself, whether this conduct is in one's relationship with oneself, with others or with the natural environment. One does not replant a creek, or lobby a government, simply to take part in an "action". Rather, one takes part in these actions both to help the environment and in order to shape oneself as an environmentally ethical being. Altering one's conduct – indeed transforming one's being – is thus a key theme that organises thinking in the field of environmental education.

There have been multiple efforts to determine what the most effective approach is for environmental education to take in order to meet this goal of altering environmental conduct. Lucie Sauvé, for example, has noted fifteen 'currents of intervention' (2005: 11) in environmental education. While each of these 'adopt widely differing discourses on environmental education, and propose diverse ways of practising educative activity in this field', there are nonetheless 'zones of overlap' between them (Sauvé 2005: 11-12). This overlap is no doubt the reason why Arthur Lucas (1979) was able to develop a simpler, and now more commonly used, classification.⁸⁰ He categorised the array of environmental education activities into three broad approaches: education *about* the environment, education *in* the environment, and education *for* the environment.

⁷⁹ See, for example, the range of papers in Volume 9 (2004) of the *Canadian Journal of Environmental Education* on "Making Ethics an Everyday Activity".

⁸⁰ While Sauvé's classification appears 26 years after Lucas', only one of her currents, the sustainable development / sustainability current, would not have been known to Lucas.

Education *about* the environment refers to those activities that are focussed on increasing ecological and scientific knowledge of the environment. It ‘provides an understanding of how natural systems work; provides understanding of the impact of human activities upon them; [and] develops environmental investigation and thinking skills’ (Fien 1996c: 2.18). This type of environmental education teaches new knowledge (in the form of scientific and ecological concepts) and skills for investigating the physical world. Early efforts in environmental education often adopted this approach, believing that more knowledge about environmental problems would affect attitudes and a change in these would, in turn, affect behaviour (see, for example, Roth, R 1970).

Education *in* the environment⁸¹ refers to those activities that seek to build an affective connection with the environment through experiences *in* the environment. As the name suggests, education *in* the environment ‘gives reality, relevance and practical experience to learning through direct contact with the environment; [develops] important skills for data gathering and field investigations; [develops] appreciation; [and] fosters environmental awareness and concern’ (Fien 1996c: 2.18). This approach teaches fieldwork skills but, more importantly for this study, its advocates claim that it allows students’ appreciation of the natural environment to be “awakened” through their experiences *in* the environment. The sense that there is an already pre-formed, “inner” environmental being that has been subsumed by the rigours of culture and is simply waiting to be awakened is common in environmental education. Advocates of this approach thus have a humanistic understanding of the self, one that is free of worldly political, cultural and/or historical contexts.

The final approach identified by Lucas is education *for* the environment. This refers to those activities that explicitly seek to do something *for* the environment. Education *for* the environment:

⁸¹ Sometimes also referred to as education *through, from* or *with* the environment.

builds on education *in* and *about* the environment; develops an informed concern and sense of responsibility for the environment; develops an environmental ethic; develops the motivation and skills to participate in environmental improvement; [and] promotes a willingness and ability to adopt lifestyles compatible with the wise use of environmental resources. (Fien 1996c: 2.18)

Education *for* the environment subsumes the other two approaches – they are here seen as important components but on their own are “not enough”:

Education *for* the environment seeks to engage students in the active resolution of environmental questions, issues and problems. This involves a wide range of knowledge, skills, values and participation objectives which are not addressed by teaching environmental facts and concepts (‘education *about* the environment’) or by experiential learning in nature (‘education *through* the environment’). (Fien 1993b: 5)

This statement by Fien is an illustration of the way in which Foucault argues power works: not as a binary opposition between the powerful and the powerless, but as relations of power where some approaches become susceptible to integration into other approaches (Foucault 1980c).

Palmer identifies the goals of education *for* the environment thus:

- to develop critical thinking and enable problem-solving
- to examine ideologies that underlie human-environment relationships
- to criticise conventional wisdom
- to explore material and ideological bases of conventional wisdom
- to analyse power relationships within a particular society
- to engage students in cultural criticism and reconstruction
- to foster political literacy
- to focus on real-world problems and participate in real issues
- to open students’ minds to alternative world views
- to work and live cooperatively
- to realise that humans can act collectively to shape society. (1998: 235-6)

Education *for* the environment thus adds concerns such as problem solving, addressing controversial issues, clarifying values, politics and economics to the education *about* and education *in* approaches (Fien 1993b). A great deal is assumed about the learner here. For example, the limitation on achieving these

goals, especially with young students who may not be economically and politically literate, is not addressed.

Perhaps these goals are to be achieved through the focus in education *for* the environment on developing both the desires and the skills to do something *for* the environment:⁸²

The programmes of education *for* the environment aim to assist the preservation or improvement of the environment for a particular purpose ... Typical programmes *for* the environment will attempt to inculcate attitudes of concern for the features of the environment that enhance the chances of continued human life, which enhance the quality of man's life or which are claimed to have value in and of themselves. (Lucas 1979: 52)

The method that advocates of education *for* the environment propose for facilitating this change is to empower students to become critical thinkers. This is considered essential to being able to undertake a key form of work proposed by advocates of education *for* the environment: identifying the ideologies underpinning environmental decisions so that the social and political interests "served" can be "exposed". Critical thinking means, according to Robottom and Hart,

exposing one's ideological bases, penetrating one's ideological assumptions, through critique ... it can also mean developing a conception of reality that ties ideas, thought and language to social and historical conditions; that is, social criticism based on notions of power and control ... becoming critical means developing an analytic posture towards arguments, procedures and language using a lens related to issues of power and control in relationships, and developing an action-oriented commitment to common welfare ... critical theory has an emancipatory action-constitutive interest (improving the quality of human existence). (1993b: 11)

It is this action-orientation that differentiates education *for* the environment. As Wals argues,

⁸² This view is supported by, amongst others, Fien (1993b, 2000, 2006), Gough, A. (1997a, Gough, A. and Robottom 1993), Huckle (1983a, 1986b, 1991, 2001, Huckle and Sterling 1996), Robottom (1984, 1987b, 2005), and Tilbury (1995, 2006, Tilbury and Cooke 2005, Tilbury *et al.* 2002).

being informed about the environment and having a positive attitude towards the environment are, although essential, not sufficient in resolving environmental problems. In order for people to be able to act upon their knowledge and awareness they need to become acquainted with a variety of *action skills*. ... EE is of fundamental importance in facilitating the development of a global citizenry that is capable and willing to act on existing environmental problems and to prevent new ones. (1990: 6) (Author's emphasis)

The action orientation and the focus on empowerment and transformation are what distinguish education *for* the environment from education *about* and *in* the environment. Central to this approach then, is for individuals to learn how to empower themselves so that they are able to take action to transform their own conduct and that of society as a whole.

A fundamental element of the discourse: Personal transformation

Education *for* the environment provides an opportunity for students to engage in

the intellectual tasks of critical appraisal of environmental (and political) situations and the formulation of a moral code concerning such issues, as well as the development of a commitment to act on one's values by providing opportunities to participate actively in environmental improvement. (Stevenson 1987: 69)

Education *for* the environment thus seeks to transform individuals by empowering them to be active and informed environmental citizens. The concern is thus with more than mere external behaviour change – the whole person must be transformed. Transformation is one of the strategies that it is difficult to argue against in our contemporary cultural and political setting. Indeed, even those who are not advocates of education *for* the environment see personal transformation as the key to success for environmental education, with Jickling arguing, for example, that 'ethics needs to become an everyday activity' (2004: 15), and Weston claiming this transformation involves a process of reconnection:

We must rediscover ourselves in connection with the rest of Earth. We must re-acknowledge ourselves as animals, come to *feel* ourselves as parts of larger living systems after all. The task of environmental education, then, very broadly speaking, is to address our disconnection,

reverse it, to re-situate us, to welcome us home. To make all this an everyday practice is an urgent agenda. (2004: 33) (Author's emphasis)

The fashioning of active and informed citizens is also a governmental concern. However, liberal governments are less concerned with moral transformation and more concerned with ensuring that the development of particular concerns, interests and capacities are put to work to reverse the negative impacts of human behaviour on the natural environment. There is no sense of transformation through reconnection here, only the acquisition of new sets of habits. As Hirst and Woolley noted, '[t]his is not a matter of "ideals" or "morals" but of a daily mechanism of conduct, keyed-in to practices and institutions' (1982: 138). However, empowerment might still be the means governments use to fashion these new types of personas. As Hunter emphasises in his genealogy of the modern school, the means available to governments are rare. They may thus use pastoral techniques such as empowerment but their understanding of empowerment is as an ancillary technique – less transformational and more governmental than its religious uses (Cruikshank 1999).

A fundamental element of the discourse: Structural transformation

For advocates of education *for* the environment, it is not just individuals who have to transform themselves. The focus on broader structural change is one of the features that differentiates education *for* the environment from rival approaches. In fact, the desire for social transformation is a central commitment for socio-critical environmental educators (see, for example, Fien 1993a, b, 1998, 2003, 2006, Fien and Trainer 1993, Huckle 1991, 1995a, b, Robottom 1987b, Robottom and Colquhoun 1992, Robottom and Hart 1993a, Wals 1993).

This focus on social and structural change rests on the belief that 'socially and ecologically sustainable relationships between people and nature require the "Dominant Social Paradigm" of twentieth century industrial societies to be replaced by a "New Environmental Paradigm"' (Fien 1993b: 4). According to Fien,

[c]ritical environmental educators attach great significance to the extrinsic political purposes of environmental education. They argue that critical education *for* the environment has an important role to play in helping to transform the processes of society that uncritically support the Dominant Social Paradigm. (1993b: 48)

Despite its transformative vision, education *for* the environment is nonetheless concerned with developing environmental citizens. This is clear in statements by advocates such as Palmer who see the purpose of ‘environmental education (formal as well as informal) [as building] the motivation, skills and understanding on which environmental citizenship may be based’ (1998: 275). A concern with citizenship then is not only a concern that governments have, but also one that most environmental educators have, be they located within an institution of the State such as schools, or in non-government organizations and community groups. The fact that environmental educators have taken on this concern with citizenship is yet another indication that modern liberal government operates through a range of mechanisms, and not just those traditionally associated with the governmental sphere.

When environmental educators talk about the need for structural change, they often begin, not surprisingly, with the structure of the school. The school is viewed as an institution that ‘play[s] a major role in reproducing the socially and ecologically unsustainable values of “industrial, affluent, consumer society”’ (Fien 1993b: 8). The school, though, is seen as a limit: ‘the role which environmental education can play in the processes of personal and social change is dependent upon a recognition that education cannot be neutral or disinterested, as claimed by liberal educators’ (Fien 1993b: 49). Two types of change are called for in the school (Greenall Gough 1989, 1991). The first is change to the curriculum, both actual and “hidden”. The actual curriculum needs to change to have a more political, values-oriented and critical approach, as does the hidden curriculum, that is, what students are learning through the way in which the school is structured, the rules and regulations, teaching and learning strategies, approaches to assessment, and so on. Changing the hidden curriculum is considered vital if education *for* the environment is to act as a ‘counter-hegemonic activity [and] challenge the roles of schools as agencies for

economic and cultural reproduction’ (Fien 1993b: 9). The second change needed is to the teacher, who needs to become a ‘transformative intellectual’ (Fien 1993b: 98), capable of developing and delivering critical teaching and learning experiences for themselves and their students. Only if these changes occur, advocates argue, will the school be transformed from an institution that “reproduces” socially and ecologically unsustainable values, to one that liberates individuals and empowers them to be agents of transformative change.

Education *for* the environment: A roadmap to transformation

There are a range of defining characteristics underpinning education *for* the environment that its proponents argue will lead to the empowerment of individuals and the transformation of social structures. According to Fien, these are:

- the development of a critical environmental consciousness;
- the use of critical thinking and problem solving skills;
- the development of an environmental ethic;
- the development of political literacy; and
- “critical praxis”, that is, teaching strategies that are consistent with the goals of education *for* the environment. (1993b: 12, 50-75)⁸³

These characteristics display a commitment to identifying and recognising underlying ideological stances and to adopting a new ideology. Advocates of education *for* the environment argue that identifying underlying ideologies helps establish a vision of education *for* the environment (by identifying what it is and what it is not) and provides a means for developing a framework to elaborate ‘characteristics by which environmental education programmes can be scrutinised for their counter-hegemonic potential’ (Fien 1993b: 11).

Adopting a new critical ideology

shapes its adherents’ sense of personal and group identity through their perceptions of, and relationships to, social, political, economic and educational systems. Second, an ideology provides a view of what the world should be like and how such a state can be attained. In so doing,

⁸³ Huckle (1986a) has identified eight characteristics, Jickling and Spork (1998) eleven. These tend to “unpack” rather than “extend” those identified by Fien.

ideology provides a set of criteria or moral rules by which social processes and events can be evaluated. Third, the moral rules and approved behaviours which are embodied in the values and practices of an ideology act as a guide to, and control upon, the actions of individuals and groups that subscribe to it. (Fien 1993b: 16-17)

It is clear from this statement that adopting the new ideology (through empowerment) is understood as a means for changing conduct (through transformation). Implicit in this view, although not overtly recognised by socio-critical environmental educators, is the notion of the governance of conduct.

Education *for* the environment is underpinned by a socially critical educational ideology and eco-socialist environmental ideology that views education as an institution for creating a just and democratic world (Fien 1993b: 22). A socially critical educational ideology ‘values the personal development and achievement objectives of liberal/progressive education’ but is also ‘committed to active pedagogical initiatives aimed at promoting social justice, equality and democracy’ (Fien 1993b: 22). Education *for* the environment programmes thus encourage a questioning of the ideological underpinnings of students’ and others’ beliefs, so that students become ‘conscious of the inequalities and other problems created by unequal power relations in society, and willing and empowered to think and act in the interests of social justice and democratic principles’ (Fien 1993b: 19). An eco-socialist environmental ideology thus encourages social change through personal and social/structural transformation (Fien 1993b: 29).

Four key beliefs underpin an eco-socialist environmental ideology: first, there is a belief that ‘the environment must be viewed as the interacting and interdependent totality of natural and social systems’ (Fien 1993b: 30); second, a belief that politics is not ‘the realm of governments and politicians [but] the practice of power over the production, distribution and use of resources and thus, as a process in which all sectors and members of society participate’ (Fien 1993b: 31); third, that ‘environmental problems are social problems and that their root causes lie in the nature of the social systems in which they are found’ (Fien 1993b: 32); and finally, that ‘[r]adical approaches involv[ing]

fundamental, rapid and simultaneous (i.e. revolutionary) changes to the capitalist mode of production, social institutions, and personal values and behaviour' (Fien 1993b: 33) are needed to bring about social change. According to its advocates, these four beliefs, when underpinning education *for* the environment programmes, allow students to

develop a critical consciousness based upon an understanding of the root causes of environmental problems in the global political economy ... develop critical thinking skills for deconstructing simplistic explanations which blame the individual or nature for environmental problems, and for identifying the interests that are served by such explanations, [and] provide a framework for enquiry which can conscientise people to the nature of environmental politics and their place in it. (Fien 1993b: 36)

Education *for* the environment represents the merging of the socially critical educational ideology and the eco-socialist environmental ideology. The result is that '[t]he objectives of critical education *for* the environment include the development of moral and political awareness as well as the knowledge, commitment and skills to analyse issues and participate in an informed and democratic way in environmental decision making and problem solving' (Fien 1993b: 43). The focus here is on developing a moral stance that can underpin participation in structural change. Together, the socially critical educational ideology and eco-socialist environmental ideology provide 'both a rationale and a strategy for a critical pedagogy of environmental education' (Fien 1993b: 51). A critical pedagogy seeks to 'not only empower students by giving them the knowledge and skills they will need to be able to function in the larger society as critical agents, but also educate them for transformative action ... in the interest of creating a truly democratic society' (Giroux 1988: xxxiii).

According to Fien, one of the most committed advocates of education *for* the environment, a critical pedagogy that 'seeks to promote the power of personal autonomy in students through the development of a critical or discursive environmental consciousness' (1993b: 60) best suits education *for* the environment:

The political or social transformation goals of education for the environment demand a critical approach to pedagogy based upon the development of a critical environmental consciousness, critical thinking

and problem-solving skills, an environmental ethic based upon the values of social and ecological sustainability, the knowledge, skills and values of political literacy, and critical praxis. (Fien 1993b: 75)

It is from these ideological underpinnings that the five defining characteristics of education *for* the environment discussed below have been developed.

Defining characteristic: The development of a critical environmental consciousness

For advocates of education *for* the environment, '[c]ritical pedagogy in environmental education seeks to promote the power of personal autonomy in students through the development of a critical or discursive⁸⁴ environmental consciousness' (Fien 1993b: 60). The development of a critical consciousness rests on a holistic view of the environment, an understanding of underlying causes and effects of environmental problems, and an understanding of ideology (Fien 1993b: 12). Exponents of education *for* the environment therefore argue that students will be empowered to develop a critical environmental consciousness when they gain insights and skills that help them to understand that

1. The environment is a social construction. It is the pattern of interdependent natural and social systems which results from the social use of nature to satisfy human needs and wants in societies based upon different political economies.
2. The root causes of environmental problems are to be found in the processes and institutions of dominant economic systems and in the ideologies and hegemonic processes in the superstructure that are used to maintain them.
3. The solution to environmental problems lies in complementary changes in both the economic base and the ideological and institutional superstructure of society and not only in changes to personal values and lifestyles that are reflected in the ideological superstructure alone.
4. Environmental politics involve contestation over access to resources and the uses to which they will be put. This is a process in which all citizens in a democracy have a right and responsibility to participate. (Fien 1993b: 60)

⁸⁴ Fien explains this critical or discursive consciousness as 'the reflective knowledge which people are able to express at the level of discourse' (1993b: 60). He argues that such a consciousness provides both 'a degree of "discursive penetration" (Giddens 1979, p.5) of the power relationships in social systems and the capacity to resist the hegemonic influences of dominant ideologies' (Fien 1993b: 60).

Gaining these skills and insights will, it is argued, lead to the development of a critical environmental consciousness, and this in turn will empower individuals to transform themselves and their world.

Defining characteristic: The use of critical thinking and problem solving skills

Gaining insights and skills to support a critical environmental consciousness is dependent on the development of critical thinking and problem solving skills, however. Advocates of education *for* the environment argue that these skills are important because critical thinking is “emancipatory” in that it leads to ‘an ideological penetration of the dominant environmental beliefs and to “the possibility of self-determination with some degree of freedom from blind psychological, political or economic compulsions” (Van Manen 1975, p. 17)’ (Fien 1993b: 61). Education *for* the environment develops these skills, advocates argue, through ‘a variety of practical and interdisciplinary learning experiences which focus on real-world problems and involve the study of a wide range of sources and types of information’ (Fien 1993b: 12). In particular, the focus is on competing values in a range of environmental issues, in order to be able to identify the underlying assumptions and interests served by various value positions.

Defining characteristic: The development of an environmental ethic

The purpose of the focus on values in education *for* the environment is to encourage students to develop an environmental ethic: ‘critical education *for* the environment has the additional⁸⁵ affective objective of consciously seeking to help students to develop a strong and enduring environmental ethic’ (Fien 1993b: 63). The values that comprise a critical environmental ethic relate to both human relationships with and responsibilities to the natural world as well as human relationships and responsibilities to each other. This means that

⁸⁵ Additional to the objectives of a liberal approach to environmental education, that is. These objectives are ‘the development of self esteem, the clarification of one’s personal environmental attitudes and values, and the development of cognitive skills of values analysis [such as] analysing alternative viewpoints on environmental issues, recognising the values that underlie them, and evaluating the consequences of alternative solutions to environmental problems’ (Fien 1993b: 63).

political values such as justice, equity and democracy are deemed to be as important as environmental values such as sensitivity, stewardship, compassion and concern for the environment. Education *for* the environment thus has an explicit agenda of values education and social transformation that prioritises social justice and equity issues (see, in particular, Fien 1993b, Gough, A. 1997a, Huckle 1998, Huckle and Sterling 1996, Robottom 1995, Robottom and Hart 1995).

There is debate within the field over the issue of values and whether it is the role of the school to teach particular values.⁸⁶ For advocates of education *for* the environment, specific social justice and environmental values should be directly and explicitly taught (Fien 1993b, 1996b, 1999/2000, 2003, Huckle 1983b, 1999, Huckle and Sterling 1996, van Rossen 1995). Advocates view criticisms of this approach – criticisms that call for a wider range of values to be taught, with opportunities for students to consider and clarify their own value position – as emanating from a “liberal” orientation to education and to the environment. Such an approach is problematic, it is claimed, because

[t]he liberal orientation does not appreciate that school curricula and practices reflect dominant patterns of power and control in society or that the ideological function of the curriculum (both hidden and overt) means that schools and courses cannot avoid inculcating particular values. (Fien 1993b: 65)

Teaching for particular values is, therefore, not seen as problematic. This is because, according to Pepper, these values are those children already know and believe:

It probably is not largely a matter of “teaching” the “correct” values ... Education is about drawing out what is likely already to be there – not inculcation or indoctrination. If pupils are enabled to analyse the values behind their present socially-learned behaviour patterns they will conclude for themselves that different behaviours require different values – and these will probably be values that they believe in at heart, because at heart most kids *are* decent and nice. What pupils need above all is to know how behaviour patterns can change, and such knowledge cannot be complete without some understandings of the relations of

⁸⁶ See, for example, Caduto (1983a, 1983b, 1984-85), Fien (1993b, 1996b, 1999/2000, 2003), Huckle (1983b, 1999), Huckle and Sterling (1996), Iozzi (1989a, 1989b), Jickling (1991a, 1991b, 1992, 2003), Jickling and Spork (1996), Knapp (1983).

production that stem from our economics, relationships which substantially contribute to our behaviour patterns in the first place. (Pepper 1987: 12-13) (Author's emphasis)

The role of environmental education, therefore, is to empower individuals so that they are able to recognise 'what they believe in at heart', and to use this experience to change their environmentally damaging behaviour.

Defining characteristic: The development of political literacy

Political literacy is highly valued by advocates of education *for* the environment. They often present environmental education as overcoming the individualised 'liberal approaches to values education [that] provide a naïve view of political decision making and a "false confidence in the rationality and moral efficacy of the political process which is only likely to lead to disillusionment" (Huckle 1983c, p.60)' (Fien 1993b: 68). Rather, educators *for* the environment seek to enable students to participate in political life because, they argue, 'political literacy provides students with the knowledge, skills and commitment they require in order to play an informed and active role in the political systems of power and decision making in which they live' (Fien 1993b: 69). This involvement extends from 'personal lifestyle adjustments to active participation as an informed and responsible citizen' (Fien 1993b: 70). Political literacy is thus developed to effect personal and structural transformation.

Defining characteristic: Critical praxis

"Critical praxis", that is, the integration of reflection and action, is the final characteristic of education *for* the environment. Critical praxis is a pedagogical process developed by Paulo Freire (1972) to conscientise or 'raise the consciousness of learners to the ideological interests served by the present construction of their environment and to empower them to engage in reflective action (praxis) to transform it' (Fien 1993b: 73). The attraction of critical praxis as an educational strategy for education *for* the environment is the centrality of the notion of empowerment. As Fien argues, 'the purpose of the focus on empowerment is to assist students to participate in a transfer of power in society

so that more people may be able to embrace the possibilities of action' (1993b: 73) and thus bring about both personal and social transformation.

According to Fien, these five defining characteristics of education for the environment will

contribute to the three forms of student empowerment that Giroux (1989, p. 81) outlined as the goals of critical pedagogy: empowerment through personal autonomy; the empowerment of reason; and empowerment to "create the possibility for transforming wider social and political structures". (1993b: 55)

What is clear here is that education *for* the environment has two key components that seek to empower individuals to transform themselves and society:

The first involves the development of a personal environmental ethic based on an appreciation of the impact of the currently dominant economic and social processes upon people and ecosystems. This is the values education agenda of education *for* the environment ... The second involves the development of the understandings and skills of political literacy to enable students to participate, individually and collectively, in the transformation of social, economic and political life. (Fien 1993b: 37)

Education *for* the environment: An orthodoxy

While the three approaches to environmental education – education *about*, *in* and *for* the environment – have undergone critique from environmental educators,⁸⁷ they have nonetheless proven remarkably durable, particularly in Australia. Indeed, the most recent statement on environmental education from the Australian Government – the *National Environmental Education Statement for Schools* (Australian Government and Curriculum Corporation 2005) – uses these descriptors without even referencing them to their source, an indication of how common and unquestioned their use now is. However, education *about* and education *in* the environment are terms that risk disappearing from environmental education debates. This has been particularly noticeable since the rise in use of the term "education for sustainability/sustainable

⁸⁷ See, for example, Fien (1988, 1991, 1993a, 1993b, 2000), Huckle (1983a, 1991, 1999, 2001), Jickling and Spork (1996), Payne (1997), Robottom (1984, 1987a, 1987b), Robottom and Hart (1993b), and Sauvé (1996, 1999a, 1999b).

development”. Indeed, education *for* the environment/sustainability is now so unquestioned in the field that the overall approach and the preposition “for” remained intact, even when the spotlight shifted in the 1990s from the “environment” to “sustainability” (Hopkins *et al.* 1996, Hopkins and McKeown 2001, Padilla 2001). While the ultimate aim shifted, the means – that is, transformation through empowerment – remained the same.

How has education *for* the environment/sustainable development/sustainability managed to become the most commonly used term, and most commonly promoted approach, in environmental education in Australia? How is it that it has become “hegemonic”? Could it be because education *for* the environment is so much more than education *about* and *in* the environment? After all, as Fien argues, ‘[e]ducation *about* and *through* the environment are valuable only in so far as they are used to provide skills and knowledge to support the transformative intentions of education *for* the environment’ (1993b: 16). Its advocates also claim that it is the only “good” approach to environmental education: ‘only education *for* the environment offers teachers the theory and practice with which to make a genuine contribution to environmental well-being’ (Huckle 1983a: 100); ‘it is only when the overt intention of a programme is education *for* the environment that effective environmental education is actually taking place’ (Fien 1993b: 16); ‘education *for* the environment is considered the form of environmental education most appropriate to the challenge of the global environmental crisis’ (Fien 1993b: 39-40). It is argued that this is because of its transformative intent which ‘uncovers the social processes that create and maintain social problems and provides strategies by which they may be challenged’ (Fien 1993b: 6).

Two points demand attention here. The first is the ways in which education *about* and education *in* the environment are subsumed by education *for*, with education *for* clearly placed at the apex. Surprisingly, it seems a hierarchy exists, even though the education *for* the environment approach is steeped in the rhetoric of equality. Indeed, it is this overriding commitment to equality that means that nonsensical statements such as ‘[e]nvironmental education for

sustainability involves ... developing the kinds of civic values and skills that empower *all citizens to be leaders* in the transition to a sustainable future' (Australian Government and Curriculum Corporation 2005: 8) (My emphasis) are made without challenge. However, when it comes to approaches to environmental education, it is clear that there is only able to be one leader: 'it is only when the overt intention of a programme is education *for* the environment that effective environmental education is actually taking place' (Fien 1993b: 16).

The second point to note is the claim that the intentions of education *for* the environment are profoundly transformative. The aim is to assist in 'transforming values and empowering people to participate in environmental improvement and protection' (Fien 1993b: 4). Two things need to be transformed: individuals, who need to transform their values and their selves through empowerment, and social structures, which need to be transformed through political action, taken by these newly empowered individuals. As Fien clearly states, '[e]ducation *for* the environment seeks to contribute to the processes of social change through educational activities which promote both personal and structural transformation' (Fien 1993b: 29).

The history of environmental education outlined above – its progression from education *about* to *in* and then *for* the environment – is canonical. It shows an evolution towards a truth for environmental education – that good environmental education is and can only be education *for* the environment. Is it possible that there is a counter-history? The unorthodox history offered in this chapter is one such attempt. As I show below, in undertaking an analytics of government, we might better understand the rise to pre-eminence of education *for* the environment not as the realisation of the truth but as the success of one discourse in a struggle with others for the status of "the truth". A range of these struggles and the means through which this discourse has come to be established, legitimised, maintained and distributed as orthodoxy are discussed in the following section.

Education for the Environment: Becoming Orthodox

The quotes at the head of this chapter show that the discourse of education *for* the environment, with its vision of empowering individuals to transform society, has become the unquestioned “that-which-is” in environmental education in Australia. My argument is that environmental education exerts a governmental exercise of power through the generation of discourses that are, through a process of internal struggle within the field, viewed as truths or orthodoxies. These orthodoxies, I argue, work as rationalities of rule for the field. They govern how things can be thought and how things can be done. This is because such orthodoxies carry with them a range of semi-normative prescriptions that work to include, exclude and govern what it is acceptable (possible) to think, and what it is acceptable (possible) to do, in environmental education. This section examines how this discourse of education *for* the environment has established, legitimised, distributed and maintained itself as orthodoxy in and for the field of environmental education.

In so doing, I begin to ‘interrogate the “rationality” of the present’ (Gordon 1980: 242) so as to better understand how we have come to, and continue to, see education *for* the environment as the only legitimate approach to environmental education in Australia. By describing how a discourse has come to be the tenet, we are better able to see the ways in which – in modern liberal modes of governing – the disciplines and technical expertise work to institute and preserve orthodoxies via governmental institutions and mechanisms, and the effects that such orthodoxies, acting as they do as rationalities of rule, have on how a field of endeavour understands what it is possible to think and do, and what it is possible to regard as a success. The description of the establishment, legitimisation, distribution and maintenance of an education *for* the environment as orthodoxy that follows shows that this discourse has a history of establishment, a history that makes clear how education *for* the environment can be understood as a rationality of rule that has effects.

Establishing an orthodoxy

One of the ways in which to make visible the establishment of a discourse as orthodoxy is through an examination of “discourse struggles” within a field of

endeavour. There have been many such struggles in environmental education. For example, there has been debate over the teaching of values and whether or not this is indoctrination,⁸⁸ and over whether qualitative research methods are more appropriate for environmental education than quantitative methods.⁸⁹ In illustrating how education *for* the environment came to be accepted as orthodoxy, this section describes three discourse struggles that have taken place in environmental education: first, whether environmental education should be *for* anything; second, if it is, whether it should be *for* sustainability or *for* sustainable development; and third, whether it should seek to change behaviour or empower individuals.

Discourse struggle: Contesting environmental education's purpose

The debate over whether or not environmental education should be *for* something has occurred largely between those who are deemed to hold “critical” and “liberal” philosophical positions on education. The critical view – that education should be *for* something, in this case, *for* the environment – has been remarkably successful in establishing itself, almost unquestioned, as not only the principal approach in environmental education but also the most principled approach. How was this status achieved?

The Canadian scholar, Bob Jickling, has for the most part been a lone voice in challenging the notion that education more generally, and environmental education in particular, should be *for* something. In two pivotal papers – ‘Environmental education and environmental advocacy: The need for a proper distinction’ (Jickling 1991a) and ‘Why I don’t want my children to be educated for sustainable development’ (Jickling 1992) – Jickling argues that education *for* the environment is more activism than education, with its purposive focus

⁸⁸ See, for example, Ballantyne *et al.* (1994), Caduto (1983a, 1983b, 1984-85), Clacherty (1993), Emmons (1995), Fien (1992, 1996b, 2000, 2003, 2006), Fien and Slater (1981), Huckle (1983b, 1986b), Iozzi (1989a, 1989b), Jickling (1991a), Knapp (1983), Miles (n.d.), Orr (1992), Papadakis (2000), Scott and Gough (2003b), Simmons (Fien 2000, 1988), Stevenson (1993a), and Uzzell, *et al.* (1993: 180).

⁸⁹ See, for example, Bakshi and Naveh (1980), Breiting (1997), Connell (1997), Fien (1996a), Gough, A. (1997c), Gough, S. and Reid (2000), Hart (1993, 1996, 2000), Jensen (1995b), Jickling (1993), Malone (1999), Robotom (2005), and Robotom and Hart (1993a, 1993b, 1995).

on educating towards a particular mindset and set of values. He would disagree, no doubt, with Palmer's view that the goal of environmental education is to 'design and implement educational programmes aimed at *producing* an informed population of citizens who care about the future of the planet and engage in appropriate pro-environmental behaviours' (Palmer 1998: 35) (My emphasis). This, for Jickling, is training for something, not education. As he argues, 'we do not apply the term education to the achievement of some particular end' and 'education ... transcends immediate instrumental values such as the advocacy of a particular sort of behaviour' (Jickling 1991a: 172). Therefore, he argues, 'while it may be important for citizens to promote changes in attitudes and behaviours, this must not be confused with our work as educators' (Jickling 1991a: 171). Education is something other than – and more than – simply training people to take on a particular point of view or particular sets of practices. In the critiques of Jickling's thinking, the predictable charge has been that his view of education is too liberal and insufficiently critical (see for example, Fien 2000, van Rossen 1995).

The most representative instance of this debate is a paper by Bob Jickling and Helen Spork and a rebuttal from John Fien. In 1996, Jickling and Spork presented a paper at the American Educational Research Association (AERA) annual conference in New York titled 'Environmental education for the environment: Retained or retired?' (Jickling and Spork 1996). In a revised version of this paper, published in 1998, they argue that the term education *for* the environment needs to be retired as it has become a slogan (Jickling and Spork 1998).⁹⁰ In this paper they also write that there has been very little critique in environmental education of Lucas' categorisations of environmental education as education *about*, *in* or *for* the environment, to the point where these have now become mere slogans. These slogans, and the sloganistic use of

⁹⁰ They were not the first to lay the charge of "slogan", however. Noel Gough, in 1987, made a similar point, albeit from a different point of principle, when he argued that '[a]part from being somewhat patronising and anthropocentric (who are we to say what is "good for" the environment, and which environment is "*the* environment", anyway?), this slogan maintains the sorts of distinctions that tend to work against a deeply ecological world view – distinctions between subject and object, education and environment, learner and teacher.' (1987: 50)

education *for* the environment in particular, they argue, lack clarity, impose a particular moral viewpoint, and discourage and confine discussion within the field. They argue that the term “education *for* the environment” needs to be “retired”, not only because it has become a slogan but also because its language reflects the values and predilections of activists, not educators. For them, ‘continued popular use of the term runs the risk of encouraging non-educative activities and alienating those whose vested interests are most obviously threatened’ (Jickling and Spork 1998: 323).

Nonetheless, Jickling and Spork acknowledge that education *for* the environment has been useful in drawing attention to the social and political aspects of environmental problems, and as a framework for those seeking to empower themselves and/or their students to act for the environment:

On the positive side, it is important to recognise that activities labelled “education for the environment” have helped to place, and keep, the political dimension of issues on the environmental education agenda. As thinking about the term has developed, the socially critical dimension of environmental education has been illuminated and has thus helped to give life to this field in the face of conservative influences. The term and its various stipulations has also been a useful tool for teachers and other practitioners for discovering overlooked dimensions of their work. A critique such as ours must acknowledge and value these contributions. (1998: 323)

It is finally their contention, however, that these positive features are outweighed by the negative impacts of the sloganistic use of the term. In particular, they argue that the sloganistic use means that the term is used uncritically, that is, ‘interpreted literally’ (Jickling and Spork 1998: 311). The problem here is that such terms can then ‘acquire different meanings and serve new purposes’ (Jickling and Spork 1998: 311). In supporting this claim, they use as an example the shift that has occurred since the initial use of the term by Lucas – as a ‘descriptive’ protocol to distinguish it from education *about* and *in* the environment – to its current use by advocates such as Fien as an ‘analytical standard’ or evaluative protocol (Jickling and Spork 1998: 312). The effect of the term being used as an analytical standard troubles Jickling and Spork. They argue that ‘[c]ontinued analytical use (see for example Fien, 1993a) can lead to exclusiveness and serve to entrench [the] perception’ that only education for the

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environment is “correct” environmental education (Jickling and Spork 1998: 312). Indeed, its use as an analytical standard, they claim, leads to a form of education that is ‘inherently deterministic and ... invites co-option by advocates of particular ideologies’ (Jickling and Spork 1998: 323).

Interestingly, Jickling and Spork note that while education *for* the environment is underpinned by notions of liberty, the sloganistic use of the term means that this approach becomes a moral imperative, and thus ‘becomes less liberating’ (Jickling and Spork 1998: 312). As they point out, there is little liberation in an approach to education that claims to be critical and encourage thinking but that has a pre-determined outcome:

The crux of the problem is, however, structural. When we talk about “education for the environment” we imply that education must strive to be “for” something external to education itself. Unfortunately, there is an oxymoronic quality embedded in this construction. If we want students to examine ideologies, criticise conventional wisdom and participate in cultural criticism and reconstruction, then we must accept that they may well reject the externally imposed aim that has been pre-selected for them. If we are serious about education, we should, in the first place, put aside *our* most promising visions for the future. Moreover, if we really want to open students’ minds to alternative world views, it makes little sense to steer them, however gently, towards a particular vision. The prepositional use of “for” ultimately leads, therefore, to either a literal or programmatic interpretation which is, in our view, deterministic. (1998: 323-4) (Author’s emphasis)

To provide a sound educational experience, Jickling and Spork maintain, environmental educators need to

acknowledge that shaping the future does not consist of being led to adopt some alternative vision. Rather, it involves the more indeterminate process of examining and re-casting society. If we acknowledge that education should be free of specified ends, then we are ultimately led to challenge the way in which “education for the environment” operates to predetermine educational aims. (1998: 325)

The problem with slogans becoming ‘operational doctrines or unquestioned directives for practice’, they contend, is that this ‘can also diminish critique of, or conceal, particular agendas’ (Jickling and Spork 1998: 312). For this reason, Jickling and Spork maintain that education *for* the environment must be retired: ‘[i]t may not be enough to theorise, reflect, clarify and act while still in the arms

of “education for the environment” or “education for sustainable development”. We may need to explore new possibilities, free of the burdens that these slogans carry’ (Jickling and Spork 1998: 323).

For the purposes of this thesis, however, whether Jickling and Spork’s argument is correct is not of primary importance. What is crucial, rather, is how such atypical arguments – when they do manage to see the light of day – are countered by advocates of an opposing position, and how such responses work to re-legitimise one discourse as truth. When the Jickling and Spork paper first appeared as a conference presentation at AERA in 1996, it ruffled feathers in the field of environmental education.⁹¹ There was great interest in the issues raised, with discussion groups held in the United Kingdom following the AERA conference, for example. Unsurprisingly, advocates of the education *for* the environment approach were quick to respond, proving just how difficult it was to let go of the enduring orthodoxy that education must be *for* the environment. For example, Palmer argues thus:

[S]urely it is important to retain goals and terms that have actually served and continue to serve the critical function of assisting teachers and other practitioners to discover overlooked and important dimensions of environmentalism. I would actually go further than this, and say that an understanding of the phrase “education for the environment” ... has been the bedrock stimulus for the practical development of environmental education programmes in classrooms around the world. ... Countless students and teachers have found the use of the word “for” in relation to the environment most helpful when coming to grips with criticism of conventional wisdom, consideration of alternative worldviews and formulation of attitudes and values that will enable us to recast society for the better. ... To lose sight at this stage of the accepted terminology is to lose sight of important research findings that reveal the critical role of “in the environment” and “about the environment” experiences in terms of illuminating an understanding of actions “for the environment”. ... Surely the ... language of the field of environmental education similarly awaits the appropriate time for reformulation.’ (Palmer 1998: 238-9)

Palmer’s argument reveals two interesting issues: how the orthodox position retains a capacity to see itself as the position of challenge and oppositional criticism, not as the orthodoxy; and how an orthodox position is able to

⁹¹ Spork, Helen, personal communication, 2004.

maintain control by simply declaring, for example, “now is not the appropriate time”.

There was also a swift response⁹² from Fien, a response that allegedly ‘reflects an appreciation of the opportunity to engage constructively with contesting ideas in environmental education’ (2000: 179). Fien thus begins his rebuttal of Jickling and Spork’s argument by claiming that they are, of course, wrong because they have presented a false interpretation of education *for* the environment, one driven by their own beliefs:

Thus, the article addresses Jickling and Spork’s concern that education for the environment is a universalising discourse that seeks to marginalise other approaches. It does this by showing how it may be Jickling and Spork’s lack of reflexivity over their own ideology of education which leads them to construct such a partial interpretation of education for the environment. (Fien 2000: 179)

He continues in this vein by claiming: ‘[p]ut simply, Jickling and Spork’s critique is not of education for the environment as it has been developed in the literature but of a partial reading that has been constructed through an unacknowledged but, nevertheless, ideologically motivated and literal textual reading’ (Fien 2000: 186). Fien contrasts the supposed failure on the part of Jickling and Spork to reflect on their own beliefs and ideology with ‘the way many practitioners of a critical education for the environment have been open in describing the approach as an integration of “red-green” environmentalism *and* socially-critically approaches to education’ (2000: 181).

It is significant to note that the response here takes the form of a moral attack. It is their ‘lack of reflexivity’, their ‘lack of openness about their own ideological dispositions’ that is the problem (Fien 2000: 181). Fien claims that two of the hallmarks of the socio-critical stance underpinning education *for* the environment are ‘reflexivity and self-critique’ (Fien 2000: 184), thus making it impossible that education *for* the environment could be constraining debate in environmental education. Indeed, Fien argues, as noted previously, that

⁹² While there was a two-year lapse in publication, this was due to journal publication timelines. I was working with Fien during this period and he responded immediately to the Jickling and Spork paper.

‘education *for* the environment is based upon and embodies education *in* and *about* the environment’ (Fien 2000: 183). As such, he claims, it is not deterministic. In support of his argument, he cites a passage from his text *Education for the environment: Critical curriculum theorising and environmental education* which talks about the type of work one needs to undertake as a “transformative intellectual”, work such as

actively theorizing upon one’s own environmental and educational ideologies, ... This is one of the secrets of success in being a transformative intellectual. There are others of course, including perseverance and hard work, constantly being open to ideas and constructive critique, political literacy and a keen eye for strategic opportunities, and courage, skill and patience in dealing with the arguments and possible complaints of those whose teaching serves the interests of the Dominant Social Paradigm. However, the hallmark of a transformative intellectual is her and his “inner life”, that commitment to ecological and social justice and transformation, which is sustained not only by moral outrage (and we do need our share of that) but also by the habit of critical reflection upon one’s views and work (Fien 1993b: 98 in Fien 2000: 185).

What Fien fails to see, however, is that the demand to be a transformative intellectual and for reflexivity and self-critique is deterministic and normative. Not only is it normative, but successfully so in environmental education: there is little critique of education *for* the environment, and no critique, for example, of how concepts of democracy, social justice, empowerment or transformation are used to underpin it. This normativity allows him to accuse his detractors of failing to be reflexive, while at the same time failing to acknowledge the normativity in his own position. One section of Fien’s rebuttal illustrates this point:

Jickling and Spork’s neglect of the strong educational orientations of education for the environment, means that the anomalies really reside within their own critique. For example, an *educationally* oriented critique might have replaced the word “environment” in education for the environment with the educational goal of “environmental citizenship” or “action competence” rather than focus solely on the *environmentally* oriented “red-green future”. Unfortunately, the construction of this partial interpretation of education for the environment seemed to suit Jickling and Spork as it made it easy for them to describe education for the environment as indoctrination for a particular social vision. (Fien 2000: 182)

Fien is here implying that if Jickling and Spork were speaking about education *for* environmental citizenship or *for* action competence (empowerment), then they would not have a problem with education being *for* something. This is an interesting point to make, less because he is correct than because it indicates the way in which the setting in which a discourse occurs helps to legitimise and maintain it. We now live in a time, for example, when it is politically incorrect – almost impossible – to critique concepts such as democracy, empowerment and citizenship without being accused of walking with the devil on the dark side. This setting facilitates Fien’s ability to make such a charge because it is unlikely – at the moment – that many will speak out against the desirability of these things. In addition, Fien also fails to see that the practices of reflexivity and self-critique that he holds dear have a religious history, one that is more connected to governing conduct than it is to liberation. Indeed, Fien is correct in referring to this type of work as habit-forming, as it is work that fashions a new type of persona: the self-governing, and self-regulating, transformative intellectual. However, what he misses is that this work occurs within the limits of the normative prescriptions imposed by socio-critical theory.

Fien lays additional moral charges against Jickling and Spork. Among these are that Jickling and Spork are handmaidens for some hidden social and political interests, which we can only assume are not those of critique but of the Dominant Social Paradigm. Fien argues, for example, that their ‘partial interpretation’ may be as a result of their hiding their research technique, and thus, their ‘political position’ (2000: 180). It is Fien’s contention that

such issues of methodology and method are very important in assessing the quality of research. For example, openness about the former allows readers to reflect on the political position of researchers while careful descriptions of the methods we use enables judgements to be made about the trustworthiness of our conclusions. (2000: 180)

According to Fien, such failure on Jickling and Spork’s part puts the validity of their entire argument into question. Clearly, rhetorical arguments with their many historical antecedents are not valid unless their “political position” is made explicit, a claim Fien can only make because he sees everything through the lens of critical political theory.

In Fien's rebuttal of Jickling and Spork's argument, he is also surprised that education *for* the environment is accused of confining discussion, which he clearly sees as the role of the liberal position he claims Jickling and Spork's argument represents:

It is interesting, perhaps ironic, that where education *for* the environment arose as a resistant discourse ... to address a perceived overemphasis on nature study and liberal educational approaches in environmental education, it is now being read as a hegemonic discourse by a critique that fails to acknowledge or engage reflexively with its own liberal underpinnings. This may be because liberalism, as the dominant ideology in western education, is seen as "natural" and therefore without an overt ideology or agenda (which would then need to be explained), unlike emergent or residual ideologies. (Fien 2000: 186)

As I noted earlier in relation to Palmer, this is further evidence that the orthodox position has a remarkable ability to keep seeing itself as the underdog. This is no doubt made easier by the fact that the socio-critical discourse is an oppositional one.

Fien concludes his rebuttal of Jickling and Spork's argument by invoking Foucault in attempting to understand why scholarly disputes are a part of the academic culture. He argues that he is 'increasingly coming to see Foucault's notion of discourse as power/knowledge as an important way of explaining this' (Fien 2000: 188). This new understanding of Foucault's concept of power/knowledge then leads him to argue that

it could be that the critique presented by Jickling and Spork (1998) represents not a critique of education *for* the environment, *per se*, but an attempt to control the influence of critical environmental education through the power/knowledge of liberal educational and environmental discourses. ... Their desire to control discourse in environmental education is also revealed by their attempts at limiting who is entitled to speak about the field. Numerous examples of this are found in the paper. For example, Jickling and Spork allege that several Canadian educators are "refusing to engage in serious discussion" as they "champion the conversion of environmental education into 'education *for* sustainable development'". Two techniques for controlling discourse are evident in this brief passage. One is Jickling and Spork's failure to declare their own positions within environmental education debates and, thereby, attempt to construct themselves as disinterested commentators

... The second technique of control evident in this passage is the attempt to marginalise the voices of other researchers through the use of loaded terminology, in this case, through the use of terms such as “serious discussion”, “champion” and “conversion”. The use of such vocabulary may be interpreted as an attempt to construct others as unworthy commentators who “champion” ideas, rather than “argue” for them, who want to “convert” environmental education rather than “reorient” it towards sustainability, and whose work cannot be described as a “serious discussion”. (Fien 2000: 188)

The advocate of education *for* the environment does not see himself as part of this power relation but as somehow standing outside of it, perhaps because he still, despite his new found faith in Foucault, sees himself and his acolytes as being in “the truth” about how environmental educators should think and act. Despite his recourse to Foucault, Fien’s critique still shows an old understanding of power as “control”, not as “power relations”.

Jickling and Spork did not in fact respond to Fien’s rebuttal, despite claiming in their 1998 paper that they wanted to encourage debate in the field about this issue. Why did they then not respond? According to Spork⁹³ it was not because they were proven wrong by Fien’s rebuttal, but because they thought the discussion would, given Fien’s response, quickly degenerate into a tit-for-tat exchange between them and Fien, the voice of the orthodoxy, and that they would rather leave it open for others to respond. None did. This is another remarkable feature of discourse struggles: some positions of principle become so marginalised that they struggle to find additional supporters, or at least supporters who will “speak publicly”. Indeed, sometimes proponents of an unorthodox position are dissuaded from engaging in such debates. For example, according to Jickling (personal communication, 2007), he was actively discouraged from responding to Fien in the journal *Environmental Education Research* by a then member of the editorial team, Stephen Gough, in October of 2002 (around the time of publication of Fien’s rebuttal). This shows how effectively particular relations of power are able to establish themselves and thus govern what can be thought – and what can be said – in a field.

⁹³ Spork, Helen, personal communication, 2004.

Discourse struggle: Contesting environmental education's goals

The second example of rival discourses competing for dominance in environmental education can be seen in the discussions that have taken place over the use of the term “sustainable development”. From a governmentality perspective, this debate too can be recognised as one over fundamental principles competing for a position of dominance and truth.

While the concept of sustainability is now common parlance both within and outside the environmental field, ‘there is still no agreed definition of the term, despite its widespread acceptance, and the recognition of its significance by governments, NGOs, business and academics alike’ (Palmer 1998: 83). The generally accepted meaning of the term “sustainable development” famously appeared in the 1987 Brundtland Report, *Our common future* (World Commission on Environment and Development 1987) where it is defined as development that meets the needs of the present without diminishing the capacity of future generations to meet their needs. This definition has been reiterated in almost every environmental report advocating sustainability since then. As Palmer notes, ‘[t]he notion of sustainable development [was] well and truly on the environmental agenda by the 1990s’ (1998: 21). However, doubts over the inclusion of the term “development” were raised early on. Immediately following the publication of the Brundtland Report, for example, Anupam Mishra expressed a common concern:

We should not assume that we can look for solutions to our problems within the framework of the current development pattern. It would be folly to think the Brundtland Commission can find solutions within the “counter-productive framework” of governments, the United Nations, the World Bank, and so on. Because the present structures have given us the disease, is it then logical that they should also provide the cure? (quoted in de la Court 1990: 118)

Aside from the inherent anti-governmentalism of these words, Mishra’s response also shows how principled the debate is, with its claims that some approaches, such as “development”, and some organisations, such as “government”, are “counter-productive” to the cause of environmental salvation.

As indicated earlier, the struggle over – and of – high principle has been played out in environmental education also. One example is the debate that took place between two academics, Lucie Sauvé and John Huckle, in October 1998 when they both wrote a series of papers that acted as discussion starters for an on-line colloquium on “education for sustainability” organised by the *Canadian Journal of Environmental Education*. Versions of their papers were subsequently published in the 1999 issue of the journal.

In her two papers, Sauvé argues that sustainability and/or sustainable development is not an appropriate goal for environmental education because of the problematic nature of the notion of sustainable development. She argues that UNESCO’s support for the idea of sustainable development has legitimised the term and that

[w]ithout further analysis, and at great expense, UNESCO is now placing sustainable development at the heart of the project of planetary education, considering it to be the ultimate “goal” of human development (UNESCO 1998). Environmental education is here reduced to being an instrumentalist tool in a long list of other types of “education for ...”, all intended to serve such a finality. (Sauvé 1999b: 10)

Apart from the instrumental nature of all “educations for”, which Jickling and Spork (1998) also found problematic, for Sauvé the focus on sustainable development is an example of how the field has in recent years taken ‘a step backwards’ and been ‘[r]educed to a tool for sustainable development’ (1999b: 14). Indeed, she argues that education for sustainable development does not present an opposition to the status quo but rather strengthens it:

[E]ducation for sustainable development does not correspond to a change of epistemological, ethical, or strategic paradigms, but to a progressive form of modernity that aims to preserve the values and practices of modernity. This, in turn, promotes an instrumental rationality based on scientific and technological knowledge. (Sauvé 1999b: 19)

The notion of sustainable development is thus problematic because of its proximity to the status quo or dominant social paradigm and the ease with which a variety of competing positions of principle have managed to use or co-opt the term. For example, sustainable development is a term that it is used not

only by environmental educators but by governments, industry, business and economists. Sauv  argues that these “others” interpret the term differently from environmental educators and have managed to co-opt the term for their own – impure, we can assume – purposes. It may be a suitable term for these others, she argues, but it is not suitable for education because ‘it poses many problems of conceptual, ethical and cultural natures ... [and] it does not, in any way, refer to an educational foundation but rather to a contextual choice made by some social actors at a specific historical moment’ (Sauv  1999b: 20).

Given the problems that Sauv  has with the term “sustainable development”, she proposes an alternative path for environmental education: education for the development of responsible societies. She seems not to have noticed that this is yet another “education for” also with an instrumental goal. This aside, in making her case for this new goal for environmental education, Sauv  makes it clear that she is not against development per se. Development that seeks to ‘[realise] ... the potential of persons and social groups to achieve a higher quality of “being”’ (Sauv  1999b: 29) as opposed to economic development, for example, is viewed as a laudable goal. Sauv ’s vision of this higher quality of being becomes evident through her view of responsibility. Here she makes a classic distinction between “deep” and “shallow” responsibility.⁹⁴ With shallow responsibility individuals merely feel obligated to follow laws, while with deep responsibility there is a sense of responsibility that sees ‘a union of subject and object, of humans and nature ... between being and doing’ (Sauv  1999b: 29).

Therefore, rather than education for sustainability, Sauv  argues that we need an environmental education that ‘involves nothing less than the reconstruction of systems of relationships among persons, society and the environment’ (Sauv  1999b: 11). Such education is, she argues, a way forward because it ‘adopts an ethic of responsibility’ and takes into account ‘one of the

⁹⁴ This mimics discussion in the environmental field over “deep” and “shallow” environmental philosophies such as that between “deep ecologists” and “social ecologists”. See, for example, Bookchin (1993) and Naess (1988).

fundamental issues in the current crisis, namely the rupture between human being and nature' (Sauvé 1999b: 28). This "rupture" needs to be repaired because it 'can only result in the dehumanisation of man, the atrophy of his essence even in the lucky case of biological survival' (Jonas 1984: 136 in Sauvé 1999b: 29). She offers 'Amerindian, Oriental or African cultures' as an example of beings that are fully integrated. They are integrated because

[t]he concept of "development", as adopted in the West, does not exist in these cultures where balance with the environment does not have to be interpreted as a special kind of (sustainable) predation, or taking. Rather, this balance is related to a cosmology that is completely different from ours, a cosmology that has nothing to do with the modern paradigm of sustainable development. (Sauvé 1999b: 24)

It is interesting to note here the ahistorical account of non-Western cultures, as if these were always already "transformed". In addition, while seemingly an argument opposed to the orthodoxy of education for the environment/sustainability, this argument sounds strikingly similar to what we have heard before, especially in its calls to "unify" the person, and the person and nature, and to have "real" rather than "false" responsibility. Sauvé displays quite clearly here the transformative agenda at the heart of her argument. We need a transformation, indeed a reunification of the person, and we need a person who is responsible. It is clear that the problems she raises with the arguments put forward by advocates of education *for* sustainability are not about their transformative nature, but rather against what it is they are trying to transform people into. Sauvé is against the principle, not the process.

In this debate over principles, one of the ways in which Sauvé claims distinction is by setting the boundaries between those who are and those who are not fully transformed beings. For example, she places non-educators in this non-transformed category. In her account, these types

participate on committees and commissions because of their social and professional position but who unfortunately have never had a chance to think about education itself on the basis of specific philosophical and ethical insights and therefore improvise in this area from other concerns of a political or organisational nature. (Sauvé 1999b: 26)

This patronising stance leaves no doubt: these other concerns are not as moral or principled as educational concerns. Such an account works to set the parameters between “insiders” and “outsiders”, between the “believers” and the “non-believers”.

In an incantation of failure we have heard before, Sauv  argues that environmental education is not about “problem solving”, which she argues is at the heart of the Tbilisi Declaration, or about nature education. It is more than these – these are not enough. However, even when the “more moral” action component is taken, this is not done well enough: while it is laudable that ‘the goal of environmental action is increasingly considered by educators, the action taken is usually instrumental in nature and rarely reflective’ (Sauv  1999b: 18). The problem for Sauv  with such instrumental, non-reflexive action taking is, we can assume, that it is not transformative – or not transformative enough.

Sauv  nonetheless acknowledges that, given the complexity and diversity of environmental education, it would be difficult to provide a ‘single pedagogical proposal’ (Sauv  1999b: 15). While she is happy to accommodate a diversity of approaches, this is only acceptable if ‘pedagogical choices are coherently designed, contextually adapted, and justified within an explicit reference framework’ (Sauv  1999b: 15) So, while she may be open to considering other approaches, she still insists on certain standards.

Sauv , like many other writers in environmental education, sees the field’s failure not in ‘the existence of a wide range of conceptions of environmental education. Rather, it is the fact that there is often a wide gap between discourse and practice (rarely clarified) and this leads to confusion and a loss of effectiveness’ (Sauv  1999b: 15). However, this wide gap recurs in her argument. She does not address precisely what the practices of her principle (of education for the development of a responsible society) are – that is, what the means are by which such a society is to be brought into existence.

Huckle (1999), in responding to Sauv , has no problem with supporting education *for* sustainability. While he agrees that the terms “sustainability” and “sustainable development” may be interpreted or used in different ways, for Huckle, the term “education for sustainability” nonetheless presents an opportunity for a new start for environmental education, one that overcomes the failures of the past:

Despite its transformative rhetoric, the reality of environmental education as practised has too often suggested that it has become a “mere fashion or slogan” that fails to confront the real causes of unsustainable development or address radical solutions (Gough, 1997). Growing attention to sustainability has provided the opportunity for a fresh start and what will hopefully be a temporary phase in the continuing development of environmental education. Then sustainability will join democracy as a concept that students begin to discursively construct and realise within coherent programmes of global citizenship education. (1999: 43)

Perhaps Huckle’s ease with the new term is because he still sees a critical environmental and educational ideology underpinning education for sustainability. His confidence seems well founded, if the government documents which are cited at the beginning of this chapter, and the use of education for sustainability without the italicised *for*, are anything to go by. In Australia at least, there is no longer any debate about the purpose of environmental education; it is to educate for – to create – a sustainable society. For Huckle, like other proponents of education for sustainability, education must be about social change – but this must be a social change that is underpinned and indeed driven by a “free, democratic, civil society”.

Another of Sauv ’s critiques of education for sustainability is its clear link to economics. For Huckle, there is no way for us to separate the two. He argues that ‘[t]he global environmental crisis cannot be separated from the global economic crisis and any analysis of the causes and possible solution to environmental problems should start from this fact’ (Huckle 1999: 36). Indeed, he argues that what is good about education for sustainability – underpinned by critical theory – is that ‘[i]t seeks to set a partial and arrested enlightenment on a new path of sustainable development, by subjecting the economic and political spheres (the market and the state) to discursive democracy or popular

control guided by the kind of communicative reason still found within the public and private spheres' (Huckle 1999: 37).

In response to Sauvé's call for education for the development of responsible societies, Huckle says this is nothing more than education for citizenship. He suggests that such an approach could be seen to be no less contentious and problematic a focus than sustainability. Thus, Sauvé 'should be cautious before suggesting that responsibility is any less contentious and problematic than sustainability as a focus of education. We all know what the political right means by education for responsibility and indeed human rights education is partly a response to schooling as a means of social control' (Huckle 1999: 42).

Huckle delineates a realm of socially critical educators from interveners in the same sectarian way that Sauvé does. He argues that some who call their work education for sustainability are not true to the cause. Indeed, he goes so far as to suggest the need to "unmask" these impostors (a witch hunt of the non-believers and, perhaps, heretics?):

And let us be cautious before giving all proponents of education for sustainability the benefit of the doubt and agreeing that they are well intentioned. They are not a single homogeneous group with similar beliefs, values, politics and practices. They include right wing tokens on influential commissions; apolitical and idealist improvisers at educational conferences, and left wing propagandists in classrooms who deserve our scorn. All can promote education for sustainability by using a sales pitch, but the duty of critical proponents is to unmask their ideology and reveal the true interests they serve. (Huckle 1999: 42)

From the governmentality perspective, such statements are the way in which boundaries between competing discourses come to be defined and set.

Huckle also claims that educating for the sort of responsible citizenship needed for "discursive democracy" is fundamental to achieving a sustainable society: '[o]nly when the economic, political, and cultural spheres are fully democratised will people be able to realise their common interest in forms of development that are ecologically, economically, socially and culturally sustainable' (1999: 37). Such is the role, he argues, of education for

sustainability. As noted earlier, the setting in which Huckle is speaking enables such all-encompassing claims to be made and to remain uncontested.

According to Huckle, if many socio-critical educators now prefer to use the term “education for sustainability” instead of “environmental education”, this is for four reasons: first, the new term does not carry the ‘baggage’ of the old which was ‘too closely associated with nature study and the natural sciences’; second, it provides ‘a sharper focus on the social construction of nature and the environment’; third, it addresses global issues and ‘suggest(s) alternative ways of reorganising the economy, environment, society and education’; and finally, it ‘provide(s) a democratic means of promoting values that should lie at the heart of education as a process of enlightenment’ (Huckle 1999: 38). This is not indoctrination, he argues. Rather, education for sustainability ‘seek(s) to inform critical reflection and action whilst safeguarding students from indoctrination with the procedural safeguards built into critical pedagogy’ (Huckle 1999: 41). For Huckle, education for sustainability is thus able to escape the constraints of multiple interpretations of the term “sustainable development” because it fundamentally

seeks to expose contradiction, ideology and politics and allow learners to glimpse genuinely democratic and empowering meanings. It is because sustainability, like democracy, poses conceptual, ethical and cultural problems that it is an ideal vehicle for an education based on critical theoretical foundations. (Huckle 1999: 40)

Thus, for Huckle, a critical approach to education for sustainability will ensure that the problems Sauv  envisages are overcome.

Sauv ’s brief rejoinder to Huckle (Sauv  1999a) sees her agreeing with Huckle’s argument:

It is possible for me to disagree with the concepts of *sustainable development*, *sustainability* or *sustainable future* as a relevant basis for educational theory (because of the conceptual, ethical and theoretical problems they convey), and at the same time agree with most of the other key concepts used by the proponents of “strong sustainability” (following Huckle’s expression), such as “transformative education”, “critical pedagogy”, “democracy”, and so on. I also agree with most of their theoretical framework (with its axiology and its strategical and

explicative aspects), as long as it can be interpreted without reference to the reductive concept of sustainability. (Sauvé 1999a: 46-7)

While Sauvé and Huckle present themselves as being opposed to one another, what we see in their exchange is that their arguments are strikingly similar: there is a need for social and political change; there is a need for personal transformation; and, there is a need to educate for something, be this for sustainable development, sustainability or for responsible societies. From the governmentality perspective, these papers are clearly presentations of principle, and are both attempts to show the primacy of the principles each author believes in. These papers thus show the ways in which discourses struggle with one another, while Sauvé's rejoinder to Huckle (Sauvé 1999a) shows how one discourse manages to maintain its dominance, not least, as I have mentioned earlier, by calling on concepts such as "transformation" and "democracy" which are, in their present temporal, cultural and political context, almost impossible to argue against.

At this point we can draw an appropriate reminder from Dean, one that allows us to sidestep engaging in this debate over principle, and instead 'shift our analysis from the study of the relationship between ideology and social structure to the operation of regimes of practices' (1999: 65). Instead of understanding the debate between Sauvé and Huckle as the articulation of a truth, the governmentality framework allows us to recognise the power relations at play in this, and similar debates. In this way, we begin to build our understanding of how such sectarian struggles result in a dominant norm for the field, one that works to include and exclude, that is, to govern what it is possible to think and to do in environmental education.

Discourse struggle: Contesting environmental education's practice

As noted previously, the goal of environmental education is to alter conduct, both individual and societal. However, how to translate this goal into practice has not always been agreed. As Palmer states:

Whilst there can be little doubt about the urgent need for promoting change in attitudes and behaviour, for encouraging people to appreciate and enjoy the world around them, and for equipping the decision

makers of both the present and future to adopt environmentally responsible approaches, it would seem that some fundamental questions remain unanswered. In particular, debate continues around the world on how best to achieve these goals and on what are the most successful ways of approaching environmental education in practice. (Palmer 1998: 79)

A third illustration of the establishment of the discourse of education *for* the environment as orthodoxy in environmental education is one that shows the shift from calls for “behaviour change” to calls for “empowerment”. Environmental education has long sought to understand how to bring about a change in the environmental conduct of individuals. Just as psychology moved from behaviourist conditioning strategies to humanist empowering strategies in seeking to change behaviour, so too did environmental education.

In the 1970s and 1980s the research focus in environmental education was on trying to ascertain the best means for changing an individual’s environmental behaviour. This research was predominantly undertaken by researchers at the University of Southern Illinois, led by Harold Hungerford. The majority of these studies sought to identify, predict and determine strategies to control a range of variables considered to be determinants of responsible environmental behaviour (Hines, Hungerford *et al.* 1986/7, Hungerford and Volk 1990, Ramsey, Hungerford *et al.* 1989).

Hines *et al.* (1986/7) undertook a meta-analysis of 128 behaviour research studies and from these developed a model of environmentally responsible citizenship behaviour that rested on three variables: entry-level variables, ownership variables and empowerment variables. Entry-level variables were those relating to environmental sensitivity; ownership variables were those relating to personal investment in the issue; and empowerment variables were those relating to the knowledge and skills needed to “take action”. It was argued that all these variables needed to be addressed if an environmental education programme was to succeed in achieving the goal of behaviour change. They noted that while environmental sensitivity is difficult to change, it must nonetheless be taken into account by educators; that a sense of ownership can

be built through real-world experiences in the environment; and that empowering students will help them to change their perceptions of their own skills and abilities for affecting environmental change. More recent incarnations of this approach to environmental education can be seen in the social marketing and environmental psychology strategies of Doug McKenzie-Mohr (McKenzie-Mohr 2000, McKenzie-Mohr and Smith 1999), USAID (Day and Smith), and GreenCom (GreenCom n.d.).

Despite the request from so-called “behaviourists” to consider empowerment as one of the variables of behaviour change, such approaches are deemed in error for being too focussed on behaviour modification and too individualistic. It is claimed that they focus too heavily on understanding, predicting and modifying behaviour, and not enough on empowering individuals to freely choose to modify their own behaviour (Colquhoun and Robottom 1991, Greenall Gough 1993, Jensen and Schnack 1997, Robottom 1987b). What is called for instead is an educational goal that empowers students by developing their competency in taking action *for* the environment.

One of the clearest examples of “how to” empower individuals to act for the environment is the concept of “action competence”. This is a concept that is underpinned by the ‘fundamental assumption ... that environmental problems are structurally anchored in society and our ways of living’ (Jensen and Schnack 1997: 164). It is thus an approach to the teaching of environmental education that seeks to teach students how to act ‘on a societal as well as a personal level’ (Jensen and Schnack 1997: 164). As such, it is perfectly matched to the orthodoxy of education *for* the environment. Action competence is best defined as the ability to fully participate in democratic processes⁹⁵ of decision-making in order to affect one’s own life and community in the present and in the future (Jensen 1995a, Jensen and Nielsen 1996, Jensen and Schnack 1994, 1997, Jensen, Schnack *et al.* 2000).

⁹⁵ The strong and positive focus on democratic processes in discussions of action competence reflects the concerns of the Nordic setting from which the concept has emerged.

The concept of action competence is described as having four essential components: knowledge and insight, commitment, visions of the future, and the experience of taking action (Jensen 1995a: 155-7). Knowledge and insights are deemed essential in order to develop coherent understandings of issues, that is, ‘what the problems are, how they arose and what possibilities there are to solve these problems’ (Jensen, Kofoed *et al.* 1995: 36). Commitment is also central to the development of action competence. As Jensen *et al.* state, ‘[i]t is important to work with both these components when teaching, since knowledge about the problems is not transformed into action if courage and commitment are not present’ (1995: 36). Developing a vision of the future – that is, ‘pupils’ ideas, dreams and perceptions about their future’ (Jensen 1995a: 156) – provides students with an opportunity to contemplate an “ideal” future for themselves. Finally, students also need to gain experience in undertaking a variety of “actions”. Jensen (1995a) thus calls for students to be actively involved in learning within their community by working to resolve local problems which the students have identified as important.

Student choice in identifying issues to address is a central feature of the action competence approach. Action competence requires a process of learning for democracy, through democracy. While the Danish setting in which Jensen works no doubt influences his commitment to democracy, the concept of action competence is also well suited to the discourse of education *for* the environment, with its commitment to equity and democracy. So strong is this commitment, that Jensen argues that action can only be said to be taking place when, firstly, students are working on problems that are important to them, and secondly, when they are planning for and taking action on problems they have chosen. These two characteristics of “action” are outlined in the matrix in Figure 1 below.

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print copy of the thesis held in
Griffith University Library

Figure 1: Different Perceptions of Action (Jensen and Schnack 1997: 169)

Jensen and Schnack differentiate between “action”, “activity” and “behaviour change” (1997: 163). For an activity to be an action, it must not only be freely chosen by students but must also actively target *solving* a problem. Jensen and Schnack provide the following example:

Thus, the fact that a class, for example, cleans dirt and waste from a beach could not be characterised as an action if the problem in question is pollution of the marine environment. Even though cleaning the beach leads to the immediate disappearance of certain of the polluting elements that originate in the sea, the activity will not have any effect on the problem because the activity does not address the causes of the problem, but, on the contrary, is focused solely on its symptoms. It cannot, therefore be characterised as an action against the environmental problem in question. (1997: 169)

Is it really feasible for school students to solve the global problem of marine pollution, however? Is this advocacy, not education, as Jickling (1991a) had argued years earlier in relation to critical environmental education pedagogy? Viewed through the governmentality framework, the example cited above shows that only certain forms of action are deemed “good enough”. It also shows how an orthodox position in a field maintains its position through the setting of standards, even standards that may only be possible for an elite to fully achieve.

The point of difference between such “empowering” and “behaviourist” approaches is thus a focus on developing competence in taking action, rather than a focus on changing individual behaviours. As Jensen and Schnack argue,

the action competence approach 'is based on a scepticism about the educational paradigm in environmental education which manifests itself partly in a marked tendency to individualisation and partly in a tendency to regard the educational task as a question of behaviour modification' (Jensen and Schnack 1997: 163). They argue that 'education [is] something more than academic schooling or behaviour modification' (Jensen and Schnack 1997: 163) and see it instead as a vehicle through which students 'have to learn to be active citizens in a democratic society' (Jensen and Schnack 1997: 164).

The two main strategies for achieving the goal of changing environmental behaviour proposed by the field are broadly referred to as "behaviouristic" and "empowering". What becomes evident through the governmentality framework is that, firstly, there is a struggle for dominance between the two, and secondly, they are both focussed, even if it not clear to the latter approach, on fashioning from individuals new types of beings: the environmentally active and informed citizen. What is interesting to note here is that the goal of changing the ways in which individuals conduct themselves remains steady, it is only the means that some argue need to be more liberatory. The argument here then, while seemingly about means, is once again one over principles.

It is also interesting to note that it is the less moral, less liberatory, more behaviouristic approaches such as social marketing that are most often taken up in the real world, most notably by those seeking to educate "the community". However, given the current orthodoxy, even social marketers now claim that they are seeking to "empower". Indeed, so strong is the orthodoxy that it is nigh impossible to make any other claim. Perhaps advocates of socio-critical environmental education are able to be "non-behaviourist" only because they operate from an assumption that when individuals become empowered they will naturally and inevitably make the choice to alter their conduct in an environmentally positive way. However, both approaches still rest on the assumption that there is a self to be liberated through empowerment.

What is important to note here is that the orthodoxy that change will only be achieved through empowering individuals to change themselves and society has real effects on the field of environmental education. The first of these is a sense of failure, the second, an unwillingness to address the actual means – clear of a romanticised call for a poorly articulated “empowerment” – for bringing these new citizens into being. In the following chapter, I begin to shift the focus in environmental education from the evaluative context of competing philosophical positions to a concern with the actual means by which individuals might come to incorporate the environmental into the very fabric of their beings, so much so that they are able to fashion for themselves a new persona as an environmentally active and informed citizen.

What these three examples of the purpose (should environmental education be for anything?), nature (should environmental education be for sustainable development), and strategy (should environmental education change behaviour or empower?) describe is how a discourse comes to establish itself as orthodoxy – one with directives for thinking and practice, and the practice of thinking – though engaging in academic debate. They also show the high stakes in these discourse struggles: success at becoming orthodox means the ability to be able to govern conduct in an entire field of endeavour.

As noted in Chapter Two, one of the ways in which knowledge is connected to power in modern liberal forms of rule is that it is given legitimacy and made powerful through the institutionalisation of various regimes of practices. The university, and the concomitant apparatus such as academic journals, conferences and programmes of study, provide a way for ensembles of intellectuals to legitimise their own knowledge as scientific and therefore true, while at the same time gaining the credential of “expert”. As discourses become orthodox, they institutionalise regimes of practices that govern what it is possible to think, and what it is possible to do, in a field.

This activity is not simply intellectual, however. It is also governmental. As Rose notes, three things occur when discourses become orthodox:

First, the grounding of authority in a claim to scientificity and objectivity establishes in a unique way the distance between systems of self-regulation and the formal organs of political power that is necessary within liberal democratic rationalities of government. Second, expertise can mobilize and be mobilized within political argument in distinctive ways, producing a new relationship between knowledge and government. Expertise comes to be accorded a particular role in the formulation of programmes of government and in the technologies that seek to give them effect. Third, expertise operates through the particular relation that it has with the self-regulating capacities of subjects. [It is] the plausibility inherent in a claim to scientificity and rationalized efficacy [that] binds subjectivity to truth, and subjects to experts, in new and potent ways. (1996c: 156)

We have seen above how education *for* the environment has managed to establish itself as an approach that is seemingly at a distance from the institutions of governmental power, most notably through its anti-statist and anti-institutional rhetoric. In addition, we have seen the power of such a position, one that, through ‘the plausibility inherent in a claim to scientificity and rationalized efficacy binds subjectivity to truth, and subjects to experts, in new and potent ways’ (Rose 1996c: 156). We next turn to how expertise ‘can mobilize and be mobilized within political argument ...[thus] producing a new relationship between knowledge and government’ (Rose 1996c: 156). The following sections show how experts are now central to the thinking, intentions and calculations of government. In illuminating the power/knowledge relations involved in the establishment, legitimation, distribution and maintenance of the orthodoxy of education *for* the environment, the governmentality lens provides an opportunity to side-step the endless moral debate in environmental education and demonstrate how “that-which-is”, such as the ubiquitous sense of failure, may not be as imagined.

Legitimising an orthodoxy

One of the ways in which discourses come to legitimise themselves is through their appearance in policy documents.⁹⁶ There are a range of environmental education policy documents, both national and international, that assist in legitimising the discourse of education *for* the environment. As outlined in

⁹⁶ As Rose has indicated, ‘attempts at governing may be formally rationalized in programmatic statements, policy documents, pamphlets and speeches’ (1999: 4).

Chapter One and earlier in this chapter, these documents all call for individuals to be empowered to be active and informed citizens capable of acting *for* the environment. This discourse is apparent from Tbilisi's claim that environmental education 'should involve the individual in an active problem-solving process [that] encourage[s] initiative, a sense of responsibility and commitment to build a better tomorrow' (UNESCO-UNEP 1978: 2), to the claim of the *National environmental education statement for Australian schools*' that '[e]nvironmental education for sustainability also involves applying such knowledge and understandings, skills, attitudes and values in active and informed participation to address environmental issues, problems and opportunities' (Australian Government and Curriculum Corporation 2005: 10).

At a national level in Australia, documents reflecting this discourse appear as early as 1975. Annette Gough, for example, notes that the following definition appeared in a Curriculum Development Centre⁹⁷ Environmental Education Committee Interim Report in 1975: 'Environmental education is intended to promote among citizens the awareness and understanding of the environment, our relationship to it, and the concern and responsible action necessary to assure our survival and to improve the quality of life' (1997a: 9).

Thirty-five years later, this focus is still evident. For example, the *Environmental education for a sustainable future: National action plan* (Environment Australia 2000), *Educating for a sustainable future: A national environmental education statement for Australian schools* (Australian Government and Curriculum Corporation 2005) and *Caring for our future: The Australian government strategy for the United Nations Decade of Education for Sustainable Development, 2005-2014* (Australian Government 2006) documents all call for individuals to become environmentally active and informed citizens. In the *National statement for schools*, environmental education is defined thus: 'Environmental education for sustainability is a concept encompassing a vision of education that seeks to empower people of all

⁹⁷ Annette Gough worked for the Curriculum Development Centre from 1974-1981 (Gough, A. 1997a: xii).

ages to assume responsibility for creating a sustainable future' (Australian Government and Curriculum Corporation 2005: 2). The *National statement for schools* goes on to say that

... schools will be important in preparing and empowering students to assume responsibility for creating and enjoying a sustainable future. Such a vision for school education is transformative. It is more than a curriculum issue and requires a whole-school approach and innovative teaching and learning. (Australian Government and Curriculum Corporation 2005: 3)

What is evident here is the rise in status for “empowerment”, to a position of orthodoxy for environmental education teaching in schools in Australia. It is no surprise to note, in addition, that it is a leading proponent of education *for* the environment, Gough, who is cited as the lead writer for the *National statement for schools*.

In *Caring for our future* the definition of environmental education is as follows:

Best practice education for sustainable development incorporates several key components including:

- futures thinking;
- the importance of good process (including transparency; identifying foreseeable costs and benefits);
- building capacity for individual and organisational change;
- critical thinking and reflection;
- innovation;
- mentoring and facilitation;
- genuine participation in decision making;
- the formation of partnerships for change; and
- lifelong learning. (Australian Government 2006: 3)

The *Caring for our future* statement was developed after consultation with relevant stakeholders at the UNESCO Decade of Education for Sustainable Development Symposium held by the Federal Government, and chaired by Fien, in Melbourne in July 2005. It is thus no surprise to see the definition includes critical thinking and reflection, genuine participation in decision-making, and building capacity for individual and organisational change, for example. What a governmentality perspective makes visible here is that experts are in a conditioning-conditioned relationship with governments: they help to frame the goals of governmental programmes of reform, and link these

programmes of reform to broader governmental objectives for subjects who are self-governing, self-regulating citizens.

One of the principal institutions for such programmes of reform is the school. As indicated in Chapter One, the semi-normative prescriptions of the education *for* the environment discourse are now also a regular part of State-based curriculum documents in Australia. As Robottom states,

[e]nvironmental education now has an explicit social agenda, with the national statement on Studies of Society and Environment recommending the values of democratic process, social justice and ecological sustainability. To the extent that these policies are influential, they provide a legitimation for examining environmental issues from a social perspective more empathetic to dealing with philosophical questions and not just empirical questions. (1998: 173)

In Queensland for example, the *Studies of society and the environment: Years 1-10 syllabus* is underpinned by four key values: democratic process, social justice, ecological and economic sustainability, and peace (Queensland School Curriculum Council 2000:1). It ‘encourages young people to be active participants in their world’ (Queensland School Curriculum Council 2000: 1) by developing their capacities to ‘participate in decision-making processes that highlight active and informed citizenship’ (Queensland School Curriculum Council 2000: 10).

The Queensland curriculum document is underpinned by two policy documents. The first, titled *Teaching for ecologically sustainable development: Guidelines for years 11-12 Geography* (Department of Education Queensland 1992), was developed by Hilary Macleod, a bureaucrat working in the Queensland Government Department of Education. Within it she makes a claim we have heard before from advocates of socio-critical environmental education: that ‘it is only when education *for* ESD [ecologically sustainable development] is the intention that ESD is likely to be achieved’ (Department of Education Queensland 1992: 1). A second policy document, the *P-12 Environmental education curriculum guide* (Department of Education Queensland 1993) was developed by Kathleen Gordon, another bureaucrat in the Queensland

Government Department of Education. She outlines the purpose of environmental education thus:

Though there are many definitions of environmental education, its purpose is to promote effective learning and teaching, helping students to acquire the understanding, skills and values that will enable them to participate as active and informed citizens in the development and maintenance of an ecologically sustainable, socially just and democratic society. (Department of Education Queensland 1993: 5)

She reiterates this point later:

Effective environmental education programs in schools provide all students with the opportunity to acquire:

- an awareness of and concern for the total health of the planet and its people;
- the knowledge, skills, attitudes and values needed to protect and improve the environment (natural, social and personal); and
- new patterns of behaviour, including both personal lifestyle choices and informed social action that reflects this care. (This aim is both a consequence of the previous two and their ultimate purpose). (Department of Education Queensland 1993: 6)

These documents demonstrate the significant influence of the leading Australian advocates of education *for* the environment (and their ventriloquists) in the development of government policy. As already noted, Fien and Gough have been involved as principal authors of the two most recent national government environmental education statements. The authors of the two Queensland documents, Macleod and Gordon, were students in a Master of Environmental Education programme at Griffith University at the time of their writing these documents.⁹⁸ This programme was developed and delivered by Fien and had an explicit socio-critical agenda.⁹⁹ In addition, Fien is acknowledged by both authors in the document, with Gordon noting that he also supplied some of the text used within the document.

⁹⁸ I know this because between the years of 1992-2002 I worked with John Fien at Griffith University as a research assistant, administrator of the research centre he headed, student and lecturer. Given his standing and involvement in the environmental education community, both in Australia and internationally, I was privy to many things, including the role of the leading scholars in Australia in the development of such policies.

⁹⁹ The outline for the “Foundations of Environmental Education” subject in this master’s programme states that ‘[a] variety of approaches to environmental education are analysed to establish the roles of environmental education in helping to create the social context for addressing environmental problems and as an agency in the transition to ecologically sustainable and socially just ways of organising people-environment relationships [to] provide a view of environmental education as a socially transformative activity’ (Fien 1993c: 1-2).

These government policy documents shed light on two things. First, they show a discourse being legitimised as orthodoxy through its inclusion in a policy document. Second, they demonstrate the power relation between experts and their expertise, and governments within modern forms of liberal rule as is clearly seen in the involvement of experts from outside the government in the development of these policy documents. This is a conditioning-conditioned relationship – a productive power relation that governs both parties and from which both parties gain something. Governments rely on expertise to give validity to their proclamations, and experts see their particular discourse gain legitimacy in becoming public policy. In this instance, remarkably, this happens even with a discourse such as education *for* the environment that, at first and second glance, appears to be resolutely anti-statist. Even while calling for the transformation of governmental structures such as the school, advocates of education *for* the environment are able to call for the fashioning of citizens – the same type of self-governing citizens who are the goal of liberal modes of government. In these ways, these policy statements, developed by governments, and widely distributed, assist in legitimising a discourse, in this instance, the discourse of education *for* the environment.

Distributing an orthodoxy

The development and implementation of policy statements constitute one way in which a discourse can be distributed and become orthodox. Another common distribution vehicle is the institution of the university, especially where the establishment of neo-disciplines is concerned. Three forms of distribution that emanate from the institution of the university are described here: degree programmes for mid-career professionals; in-service professional development programmes for teachers; and the dissemination of research reports and papers.

Paying heed to the master's voice

In the early 1990s, academics at Griffith and Deakin universities in Australia (John Fien and Helen Spork at Griffith, Annette Gough and Ian Robottom at Deakin) jointly developed a Masters level degree programme in environmental education – a first in Australia and one of the first in the world. The programme

was aimed at the mid-career professional development market and unashamedly reflected the socio-critical orientation of these academics. It was openly critical of – even hostile to – other environmental education orientations. Indeed, the aim of this programme was to develop critical and reflective thinkers through building competencies in ‘critical reflection, action research, curriculum change and social change’ (Awberry 1994: 8).

The programme consisted of four core courses and was offered in the on-campus mode by Griffith University and in the off-campus or external mode by Deakin University. During the 1990s in Australia, these were the only masters’ degrees available in environmental education.¹⁰⁰ Aimed at mid-career professionals, the programme attracted individuals who were, or who aspired to be, in middle management and decision-making positions. As noted above, bureaucrats such as Macleod and Gordon who were working in departments of education undertook this programme. The socio-critical orientation of the programme was then disseminated through the policy documents that they produced. In this way, this masters programme can be said to have served as a training ground for cohorts of “agents of virtue”¹⁰¹ (Theroux 2002), mimics of the master’s voice, able to speak and operate both inside and outside the university as experts in education *for* the environment.

The high profile these four academics had in Australia – all but Helen Spork were editors of the national environmental education journal, the *Australian Journal of Environmental Education* (AJEE), at one stage or another, with all the gate-keeping opportunities that such a position affords – assisted in the success of these programmes. This group of academics were also prolific writers and presented their ideas at conferences in Australia and internationally. In addition, the Masters’ programmes also attracted visiting scholars from the United Kingdom, Denmark, the United States, Canada and South Africa for

¹⁰⁰ A masters programme in environmental education/education for sustainability is now also offered by Macquarie University, convened by another advocate of education *for* the environment, Daniella Tilbury.

¹⁰¹ While Paul Theroux (2002) uses the term “agents of virtue” to describe aid agency workers in Africa, I think it is an apt term to describe many socio-critical environmental educators.

short periods. This helped to establish, legitimise and distribute the programme's particular socio-critical orientation to environmental education, both within Australia and internationally.

Guiding the teaching profession

In Australia, these two universities have also acted as key sites for the development of in-service or continuous professional development programmes for teachers in schools. In particular, Fien and his team at the Centre for Innovation and Research in Environmental Education (CIREE) at Griffith University, of which I was a part in the 1990s, developed many of these programmes in Australia in the 1990s and early 2000s. Among these were *Teaching for a sustainable world* (Fien 1996c), *Learning for a sustainable environment: A workshop guide for teacher educators* (Fien, Heck *et al.* 1997), *Coastal and marine studies in Australia: A workshop manual for teachers* (Fien and Ferreira 1997a) and *Teaching and learning for a sustainable future* (Fien *et al.* 2000-2006). Professional development programmes using these materials were conducted around Australia and throughout the Asia-Pacific region, thus disseminating the discourse of education *for* the environment in schools, teacher education institutions and government departments across the Asia-Pacific (Ferreira *et al.* 2006). In this way, curricula across a region came to be “captured” by the orthodoxy of education *for* the environment.

Some of these programmes have won awards, a fact of prestige that has doubtless helped to cement the socio-critical orientation as orthodoxy.¹⁰² One of the programmes, *Teaching and learning for a sustainable future* (Fien *et al.* 2000-2006), is distributed through the networks of UNESCO. Free distribution of this resource, both in hard copy as a CD and freely available on-line (<http://www.unesco.org/education/tlsf/>), means that the world's sixty million plus teachers or ‘agents of change’ (Fien *et al.* 2000-2006) are potentially being reached. UNESCO has also supported translations and culturally contextualised

¹⁰² There have however, been criticisms of these programmes by those who occupy an even higher moral ground than Fien. Jucker (2003) and Dillon (1999), for example, claim these programmes are too normative, technicist and deterministic and not participatory and empowering enough.

content modifications of the programme. As I have argued elsewhere, ‘this alignment has meant that the resource has not only been publicly endorsed and promoted by UNESCO but that UNESCO has also disseminated the resource through its extensive networks, including national ministries of education’ (Ferreira *et al.* 2006: 32).

These in-service professional development programmes thus not only serve as a vehicle whereby theoretical positions are given a practical form. Like the Masters programmes described above, they produce a network of environmental educators – conformists to the code of education *for* the environment – who act as experts in institutions outside of the university, thus disseminating the orthodoxy yet further.

Positioning the research agenda

Another mechanism through which the discourse of education *for* the environment has been established, legitimised and distributed is research. One of the most influential and widely cited texts in environmental education in Australia has been the “little red book” written by Fien, *Education for the environment: Critical curriculum theorising and environmental education* (1993b). The continuous positive citing of this text, with its clear commitment to education *for* the environment, has almost conferred on it the status of environmental education scripture. The orthodoxy has even spread to research methods, with action research and participatory research methods deemed the most appropriate (see, for example, Malone 1999, Robottom and Hart 1993b, Tilbury and Cooke 2005).

There has been some reaction against this orthodoxy. In a critique of these approaches, Walker claims that research in environmental education has had little influence on the teaching of environmental education in schools because the socio-critical theory of education *for* the environment

is not a practical theory and while it may be appropriate as a critique of the problems it is unable to contribute to a practical solution of the problems. It falls short of viable strategies for social action. Moreover,

schools are structured in such a way that they cannot accommodate the radical social change required by the theory. (Walker 1997a: 157)¹⁰³

I offer a similar critique of the theory below.

Another influential mechanism through which the discourse of education *for* the environment is disseminated as orthodoxy in Australia is the Australian Research Institute in Education for Sustainability (ARIES). ARIES, under the directorship of Daniella Tilbury, was established by the Australian Federal Government in 2003. ARIES undertakes research in education for sustainability in Australia and ‘specialises in research methodologies [most notably action research] that are compatible with the critical theory paradigm underpinning Education for Sustainability’ (<http://www.aries.mq.edu.au/>). ARIES defines education for sustainability thus:

Education for sustainability motivates, equips and involves individuals and organisations in reflecting on how they currently live and work. This assists them in making informed decisions and creating ways to work towards a more sustainable world (ARIES website 2006),

and

[W]e do however, distinguish between education (or learning) *about* sustainability (developing understanding and awareness) and education (or learning) *for* sustainability (the process of engaging people in actions towards sustainability). Learning for sustainability aims to go beyond individual “behaviour” change and seeks to engage and empower people to implement systemic changes. (Tilbury and Cooke 2005: 15)

Currently, the vast majority of Australian Federal Government funding for environmental education research is channelled through ARIES. This has two effects. First, ARIES is in a conditioning-conditioned relation with government in that it helps to “re-educate” government to accept the orthodoxy of education *for* the environment/sustainability, while government is able to influence the types of projects funded. Second, ARIES is able to direct or govern the environmental education research focus in Australia through funding – and

¹⁰³ In 2006, the calls for diversity in approaches to environmental education research (Walker 2006) and the need to collaborate across research approaches (Russell 2006), indicate that there is still a sense that the field more generally views only some approaches to research as “correct”.

therefore enabling – certain research directions and not others. Through the writing and dissemination of research findings in research reports and scholarly articles, the truth of certain ideas comes to be orthodox, that is, generally immune to questioning.

Maintaining an orthodoxy

The strategies discussed above help to maintain education *for* the environment as orthodoxy in the field. If all the policies, and all the research say the same thing – that only environmental education that is transformative, through a process of empowerment, is “good” environmental education – then the orthodoxy of this discourse is maintained. Another mechanism through which this occurs is the professional association.

Professional associations

In Australia, the field of environmental education ‘became more highly organised internally in 1980 with the formation of its own national professional association which has gone from strength to strength with a significant presence in each State and Territory’ (Robottom in Palmer 1998: 170). The Australian Association for Environmental Education (AAEE) is now considered the peak national environmental education organisation. It has representation on a range of governmental bodies, including the National Environmental Education Council (NEEC) that was established to provide advice to the Australian Federal Government Minister for the Environment and Heritage. The Association publishes an annual refereed academic journal (AJEE), a quarterly newsletter, and holds a biennial conference. Its membership includes teachers, academics, government agency staff and private enterprise employees. The Association has also undertaken projects on behalf of the Federal Government, most notably the “National Professional Development Program in Environmental Education” that was offered to in-service teachers throughout Australia in the 1990s. AAEE defines environmental education thus:

Environmental education is an across-the-curriculum approach to learning which helps individuals and groups to understand the environment with the ultimate aim of developing caring and committed attitudes that will foster the desire and ability to act responsibly in the environment. Environment education is concerned not only with

knowledge, but also with feelings, attitudes, skills and social action.
(Australian Association for Environmental Education n.d.)

This definition is not surprising given the pivotal roles that leading advocates of education *for* the environment have had in the Association. As noted previously, Annette Gough, John Fien and Ian Robottom have all been editors of the Association's journal. Fien and Gough have also led the Association as President and are both Fellows of the Association, a recognition of their contribution to the field of environmental education in Australia. They are also academics and as such, are recognised as leaders in environmental education in Australia. In these ways, advocates of a particular discourse have been able to spread the word – the gospel – of socio-critical environmental education in Australia. The involvement of scholars such as Fien and Gough in mechanisms such as AAEE have helped to establish, legitimise, disseminate and maintain the discourse of education *for* the environment as orthodoxy.

Establishment of a discourse as orthodoxy

I have described in the preceding sections the ways in which one particular discourse has come to be the orthodoxy for a still emergent field of inquiry and education. In describing the circumstances or setting of the emergence of this discourse along with the battles, challenges and contestations its proponents have experienced in establishing the discourse as orthodoxy, and continue to engage in to legitimise, distribute and maintain the orthodox position, what becomes apparent is that this discourse has become orthodox not as an inevitable result of its innate “rightness” or unavoidable truth, but because it has, for the moment, won a battle between competing discourses. As a victor, it has been able to engage in relations of power that have been beneficial to it, relations of power that are dispersed outside of “the government” and are productive in assisting in the establishment of a discourse as orthodoxy.

It is not that the proponents of education *for* the environment are not evangelists preaching a truth. This they are. However, we can now recognise the fact that they are also intimately engaged in the occupation of government. In understanding as a discursive orthodoxy the current calls in environmental

education to transform individuals into citizens capable of transforming society, we are able to cast new light on how empowerment and transformation are understood in environmental education.

Effects of Orthodoxies

In viewing environmental education through a governmentality lens, what becomes visible is that the orthodoxy of education *for* the environment is a rationality of rule that has *effects* in the real world. In the case of an idea such as education *for* the environment, the effect is that of embedding a conviction that only environmental education that is transformative, though a process of empowerment, can be considered successful. One of the principal consequences of this conviction is the instilling of an ever-present sense of failure, partly because these are goals that could only ever be reached by a small group of people – in fact, by an elite. Not everyone can be a “transformative intellectual”, or a “leader” in the transition to sustainability.

The reading I have undertaken in this chapter shows, however, that despite the almost totally unachievable goal of transformation, a certain success can nonetheless be claimed for environmental education. For example, environmental education as a field of endeavour has been able – within a relatively short period of time – to establish itself both as a concern of government and as a body of expertise with which government must engage. Governments call on environmental education experts to help develop policy and to undertake research, and support the field with policies, school curricula and programmes to ensure its implementation in governmental institutions such as schools. International agencies such as UNESCO support it through conferences and now even a “Decade” that exhorts every government on the planet to take environmental education seriously. This is quite an achievement in less than 40 years.

The field, however, continues to see only failure. I contend that this is a prime consequence of the fact that the discourse of education *for* the environment has become the orthodoxy. With its calls for the empowerment of individuals so

that they all become leaders, and for the wholesale transformation of social structures, it is almost inevitable that these goals would lead to a sense of failure, given their other-worldliness. The religious genealogy of these ideas necessitates a sense of failure as a means for ensuring constant striving. While the conviction that only environmental education that is transformative, through a process of empowerment, can register success leads almost inevitably to a sense of failure, the actual embedding of such a conviction can itself be seen as a success. Success – definite but limited – can thus be seen for contemporary environmental education: success at establishing a field of concern, and success at establishing as orthodox the need to empower individuals to be active and informed environmental citizens. However, for this success to be acknowledged by environmental educators, the field has to begin to see itself not as transformative and liberatory but as normative and governmental.

CONCLUSION

In this chapter, I have argued that the dominant discourse in environmental education – so dominant that it has become orthodox – can in fact be recognised as a rationality that rules or governs what can be thought and what can be done in environmental education. The proponents of this orthodoxy do not see or understand their position in such governmental terms, however. Rather it sees itself as having ‘an emancipatory action-constitutive interest’ (Robottom and Hart 1993b: 11) and as a means to ‘recast society for the better’ (Palmer 1998: 239). When governmental terms are adopted, however, certain new emphases emerge – such as its position as a theory for an elite, not for the masses. Furthermore, the governmentality lens allows us to jettison the orthodoxy’s self-understanding in favour of a more precise and accurate understanding of what environmental education *actually does* and *how* it does it.

This chapter has thus offered a positive account of the power relations that enable education *for* the environment to be the orthodoxy in the field of environmental education. It has described the mechanisms, instruments and techniques through which certain norms have come to be established and continue to govern the ways in which it is acceptable to think and act in

environmental education. In making these mechanisms visible, education *for* the environment comes to appear less like a truth. Indeed, I have unsettled “that-which-is” in demonstrating that education *for* the environment may not be “the truth” but rather a rationality that rules or governs contemporary environmental education thought and practice. As such, it has effects on how environmental education is practised. One of these is the claim that environmental education is failing to transform both individuals and society. However, in making visible the unique relationship between power/knowledge and the self that characterises modern efforts at governing, it becomes clear how environmental educators are engaged in this governmental work of directing, shaping, fashioning – in short, governing – the thinking and practices of environmental educators. Environmental education *can* thus be described as an active mechanism through which environmental conduct is governed with a light and liberal hand, a governmental shaping of a “civilised” population of environmental citizens.

CHAPTER FIVE

CONDUCTING CONDUCT: FASHIONING THE ENVIRONMENTAL SELF

To rediscover the earth and renew our relationship with it we need to rebuild and refine some of the natural skills and senses that we have let atrophy inside our artificial cocoons. (Van Matre 1990: 229)

[W]e are called to environmentalism not only because we want to make the world a better place or because we are interested in the subject matter but because the ideas of environmentalism speak to something deep inside us. (Thomashow 1995: xi)

The individual is not a pre-given entity which is seized on by the exercise of power. The individual, with his identity and characteristics, is the product of a relation of power exercised over bodies, multiplicities, movements, desires, forces. (Foucault 1980e: 74)

EMPOWERMENT AND NEW PERSONAS

In Chapter Four I argued that the obligation to transform has power because of its emergence in a particular setting and because of its particular relations of power, not because it is fundamentally correct. As a discourse that has become orthodox, its semi-normative prescriptions now regulate and govern the conduct of environmental educators, to the point where there is now a moral imperative to educate *for* individual empowerment and the transformation of social structures. This imperative has *effects*, effects that I argue limit the possibility for recognising measures of success in environmental education.

The current chapter, in sidestepping the imperative of transformation, offers a way for success to be understood and recognised in environmental education. This is a matter of shifting our understanding from “empowerment as transformation” to “empowerment as governmental”. In doing so I will show empowerment to be something other than a means for transforming beings through rediscovering, reconnecting with, or liberating their “true inner selves”; something other than a strategy for making whole – for joining together – a self that has been cruelly rent asunder by an incomplete or inauthentic culture. Rather, I show empowerment to be a sophisticated governmental technique through which new types of personas are constituted. In this way, I am able to

show that empowerment is not transformational or liberatory but is, instead, governmental.

By using the governmentality framework developed in Chapters Two and Three, this chapter demonstrates how empowerment can be understood as a technology of citizenship for fashioning new types of beings – beings who are so “environmental” that they have very specific concerns, interests and capacities that allow them to *be* active and informed environmental citizens. This chapter thus describes the quite specific orders of living environmental educators aim to instil in their students and how, in so doing, they govern environmental conduct.

This description strengthens the main argument of this thesis: that a focus on transformation leads to a sense of failure whereas a focus on the governmental – the actual techniques and mechanisms for bringing new personas into existence – will allow some success, albeit definite and limited, to be claimed for environmental education. Perhaps all that is achievable, within the limits of this world, is a fashioning of individuals with new sets of habits, habits that are ‘a daily practical mechanism of conduct’ (Hirst and Woolley 1982: 138). This is not a simple achievement. The complexity of the mutual engagement between power, knowledge and the self is what enables power to reach ‘into the very grain of individuals, [touch] their bodies and [insert itself] into their actions and attitudes, their discourses, learning processes and everyday lives’ (Foucault 1980d: 39). We need to understand just how remarkable the achievement of small changes in environmental conduct is. If we do, it may be possible to free the practices of environmental education from the normative imperative of total moral transformation that currently has a stranglehold on the field.

Interestingly, an approach to environmental education that may be able to achieve this more realistic view is one that currently seeks transformation. Two environmental education programmes are presented in this chapter to illustrate this point. They are *Ecological identity: Becoming a reflective environmentalist*

by Mitchell Thomashow (Thomashow 1995), and the range of “Earth Education” programmes developed by Steve van Matre (Van Matre 1974, 1979, 1989, 1990, Van Matre and Johnson 1987, 1997). An examination of these programmes allows me to address one of the main interests of this thesis, that is, how environmental education’s response to the problem of environmental behaviour, that is, to empower individuals to be active and informed environmental citizens, is a technique through which governments are able to fashion citizens whose conduct is less environmentally damaging than before. By understanding empowerment as a technique for governing conduct, we are able to see that environmental education can make some claim to success, not through transforming beings, but through instilling new sets of habits and techniques of environmental self-governance that allow individuals to *be* “good” environmental citizens.

STRATEGIES FOR FASHIONING A NEW PERSONA

To those environmental educators who know the work of Steve van Matre and Mitchell Thomashow, the selection of such programmes as examples to illustrate how empowerment is a governmental technique will seem a surprising, even an odd choice. This is because these programmes clearly seek *transformation*. I have chosen these programmes for three reasons, however. The first reason, as I indicated in Chapter Three, is that there is a dearth of information in environmental education that focuses on the detail, that is, that provides direction on *how to* empower individuals to become informed and active environmental citizens. The programmes of these two authors offer some of the clearest ways. While both these authors reside in the USA, the techniques and strategies they outline in their work are easily recognisable in environmental education programmes in the West more generally. Values continua, quiet times in nature, experiential learning, immersion in nature, and so on, are widely used pedagogical practices in the field of environmental education. In addition, van Matre’s work underpins the programmes of many environmental education centres in Australia (Ballantyne and Packer 2005), while Thomashow’s work underpins at least one masters’ level subject in

environmental education in Australia (*Education, sustainability and social change* at Griffith University).

The second reason for choosing these two programmes is that one has an adult-oriented focus (Ecological Identity) while the other is principally child-oriented (Earth Education). This allows me to show that the range of techniques employed to fashion environmental personae is quite homogeneous and limited. Regardless of differences in audience such as location or age, the same sorts of techniques tend to be used by environmental educators to affect environmental conduct.

The third reason for choosing these programmes is that they provide very detailed directions for “how to” transform individuals through empowerment. These authors see their work as a means to reconnect individuals to their true, pre-formed, whole and perfect selves, and would no doubt be shocked to see their work described as governmental. Nonetheless, their programmes provide clear and extensive detail of the particular techniques of empowerment they use to enable individuals to fashion new personas for themselves. Such detail provides rich data for my redescription of these programmes through the governmentality lens.

I am able to turn these seemingly unsuitable programmes to my purpose here by separating out the moral agenda of these programmes from the actual mechanisms and techniques that they use. I make visible some of the assumptions underpinning these programmes – assumptions about the nature of the self, and about the purpose of education, for example. In doing so, I am not seeking to provide an analysis of how these programmes’ focus on transformation is false or leads necessarily to a sense of failure. Instead, by embracing an analytics of government, my aim is to show how these and similar programmes are able to successfully fashion new beings through instilling new orders of living – orders of living which are themselves a means for governing conduct. This perspective is a crucial condition for redescrining these programmes so as to show the technique of empowerment as

governmental not transformational. I conclude by arguing for more – more programmes such as these that are clear about their strategies for fashioning new types of personas. I also outline how such programmes might look if they were “programmes of *the* government”, noting in particular that they would be free of the moral agenda that currently encumbers them.

Fashioning an Ecological Self: Ecological Identity

[P]eople look to environmentalism as a way to formulate an ecological identity, to learn about appropriate ways of living in nature, to make sense of the world around them, and to construct a moral point of view. (Thomashow 1995: 28)

Ecological identity refers to how people perceive themselves in reference to nature, as living and breathing beings connected to the rhythms of the earth, the biogeochemical cycles, the grand and complex diversity of ecological systems. (Thomashow 1995: xiii)

Mitchell Thomashow, in *Ecological identity: Becoming a reflective environmentalist*, outlines a range of learning activities that seek to empower individuals to transform themselves into ‘reflective environmentalist[s]’ (1995: ix). He describes how he uses such activities with his tertiary students in the USA or with adults for whom he runs workshops in both the USA and non-Western nations such as Kenya, Tanzania, Nepal, Thailand, Bolivia and Hungary (1995: 8). Thomashow’s aim with these activities is clear:

Despite our diverse experiences and backgrounds, we are *called* to environmentalism not only because we want to make the world a better place or because we are interested in the subject matter but because the ideas of environmentalism *speak to something deep inside us*. I reveal to the class that I am here for the same reasons they are. I want to explore why I consider myself an environmentalist, what this means in terms of my personal and professional choices, how I use my environmental values to construct a personal identity. This class is a phase of a life-long search to understand my place in the ecosystem, my role and purpose as a human being. (1995: xi) (My emphasis)

Two assumptions underpinning Thomashow’s work are immediately explicit. The first is that being an environmentalist is a life-long commitment – indeed a

quasi-religious “calling”.¹⁰⁴ Even the teacher is still on the path to enlightenment – acquiring the attributes of an environmentalist is a life-long quest. The formation of the self through “prestigious emulation” as presented by Mauss allows us to understand Thomashow’s statement as a demonstration of “how to be an ecological person”:

The child, the adult, imitates actions which have succeeded and which he has seen successfully performed by people in whom he has confidence and who have authority over him ... The individual borrows the series of movements which constitute it from the action executed in front of him or with him by others. (1979b: 101-2)

The second assumption underpinning Thomashow’s work is his humanist understanding of self. His activities aim to help students to connect with that “something” thought to be residing “naturally deep inside”. Thomashow outlines his strategy for enabling this reconnection to take place as follows:

Many people experience an inner voice that compels them to explore their relationship to the natural world ... This is the common trailhead, the place where many paths converge. To hike the path implies a searching process, a search to recover and reclaim the importance of nature in one’s personal development. I suggest that this orientation and sensibility involves a reconstruction of personal identity, so that people begin to consider how their actions, values, and ideals are framed according to their perceptions of nature ... This represents a profound educational challenge for anyone who is interested in environmental issues: the necessity of translating the inner voice that yearns to speak with nature into a broad understanding of ecology, community and citizenship ... My perspective is that this is most effectively accomplished when a person learns how to reflect on, discuss, and ultimately internalise the personal and public impact of environmental experiences, and to do so within both private and public life, in classrooms and town meetings, on street corners and in living rooms, on the trail or at the dump. (1995: xii-xiii)

These two assumptions are called into question by the governmentality framework being used in this thesis. Rather than success being measured through one’s commitment to or connection with the environment, the governmentality framework allows for success to be recognised in the

¹⁰⁴ This is another example of the ways in which religious aspirations and language are deeply woven through environmental education thinking and practice. Environmental education, or the desire to be an environmentalist, is seen as a calling. You are required to “bear witness” to the destructiveness of human beings. The connection to the religious is clear in the epilogue to *Ecological identity* which is headed ‘Ecological identity is a way of saying grace’ (Thomashow 1995: 201).

embedding of new orders of living, that is, in the fashioning of a new environmental persona.

The specific activities

Thomashow uses a range of activities to empower his students so that they are able to “internalise” the environment. He sees these activities as ‘a powerful means to bridge the inner and outer life of the environmentalist’ (Thomashow 1995: xiv) and as a means to ‘show how an ecological worldview can be used to interpret personal experience, and how that interpretation leads to new ways of understanding personal identity’ (Thomashow 1995: 2). The range of “ecological identity work” activities Thomashow (1995: 84) deploys to empower individuals to become ecological citizens is discussed below. I briefly describe each activity and then show *how* such an activity can be understood as a governmental technique because it fashions from individuals personas who are not only capable of governing their own environmental conduct but who also have whole new – ecological – identities.

The ways in which this programme is a training regime will thus be made clear. I argue that it is the combination of these sorts of activities/techniques, used in an ongoing, lifelong manner, that leads not to the recovery of an instinct but to the fashioning of a new type of persona – the active and informed environmental citizen. These are orders of living that work to structure and govern one’s life and self, just as the new life habits of radical Protestants did 400 years ago. The following activities from Thomashow’s *Ecological Identity* (1995) are described: memory maps; sense-of-place meditation; trees of environmentalism; beyond the spectrum; catalog of personal property; community network map; political autobiography; power flow chart; environmental stereotypes; the eco-confessional; transforming the ordinary; collaborative text; and the sense-of-place map.

Memory maps activity/technique

In the “memory maps” activity, Thomashow (1995: 8-9) presents geographic maps of the workshop participants’ home regions and asks participants to

use the map to describe your ancestry, where your people came from, when they arrived at your home region, how they earned their living, what the region looked like when they first arrived, what the region looked like when you were a child, and what it looks like now. (Thomashow 1995: 8-9)

The goal of the memory maps activity is to allow participants to reflect on their current “place” in the world and reflect on ‘how their special places have changed’ (Thomashow 1995: 9). Thomashow notes that despite the variety of his audience’s experiences, ‘there is a striking thematic pattern’ (1995: 9). All participants, he claims,

have fond memories of a *special childhood place*, formed through their connections to the earth via some kind of emotional experience, the basis of their bonding with the land or the neighbourhood. Typically these are memories of play experiences, involving exploration, discovery, adventure, even danger, imagination and independence. And what stands out is the quality of the landscape – full descriptions, vividly portrayed, embedded in their memories. (Thomashow 1995: 9) (Author’s emphasis)

For Thomashow, the memory maps activity allows participants

to gain awareness of the connections we make with the earth, awakening and holding those memories in our consciousness of the present. Not to nostalgically pine for a lost, innocent childhood, but to recover the qualities of wonder, the open-mindedness regarding nature, the ability to look at what lies right in front of us. The purpose of witnessing the transformation of those places is to appreciate the magnitude of environmental change, to understand and feel the impact of the changes. (1995: 9-10)

This activity can be understood as a technique for making participants understand – even “feel” – the magnitude and impact of environmental change. More interestingly, however, it also requires participants to feel that they are “connected deep within themselves” to a particular place. As we saw in Chapter Four, one of the legacies of the transformation agenda on the field of environmental education is the proposition that one cannot care for the environment unless one feels a sense of deep, inner – personal – connection with the environment. Through the memory maps technique, participants begin to reflect on where – and how – they fit and belong on the planet. Through undertaking such reflection, participants are beginning to see themselves as

concerned and connected beings. This sort of work is what Foucault referred to as the ‘determination of one’s ethical substance’ where one begins to see oneself as in need of some sort of “work” (1985: 26). This activity also shows how power works in a capillary fashion, seeking to enter into the very grain of our being. In this activity, even our memories – our personal versions of our history – become opened up to scrutiny.

This technique also governs through making clear that there is a norm, and illustrating what it is. Imagine how it would feel to be in a room full of people waiting to be transformed into an ecological community, but lacking a story that connects you to a “special place”. What we see at work here is what Elias refers to as the thresholds of embarrassment and/or guilt. As Elias (1978) has argued, it is the force brought to bear on each other that compels us to act in certain ways – to fashion ourselves as a particular type of person. These thresholds are so powerful that we come to believe in them, and fashion our entire beings in this way, beyond a simple alteration of individual actions. The memory maps technique teaches you that environmental citizens have a deep, ingrained sense of connection to a particular special place so that you – by means of emulation – are able to begin to fashion yourself in this way also.

Sense-of-place meditation activity/technique

In the “sense-of-place meditation” activity, Thomashow (1995: 15-17) takes participants to a “wild place” or on a bush walk. While there, he

[guides] the students through a series of observations that allow them to focus on their senses in relation to the landscape. Feeling the air as it moves through our bodies, we contemplate the prevailing weather system. Listening to the sounds of the insects and birds, we become acquainted with the animal species. There are many variations on this theme. The point is simply to cultivate an awareness of ourselves in this wild place, to slow down for a while and cherish the surroundings. Even those who are uncomfortable with the idea of meditation come to appreciate the experience. (Thomashow 1995: 15)

What is being learnt through this technique is that people are all intimately connected to the environment – so intimately, that when participants breathe in and feel the air moving through their bodies, it is claimed, they can understand

something about weather systems. Thomashow's assumption in this activity is that participants can let go of a false consciousness – the overly abstract rational thought imposed by modern Western culture – and recover their innate and timeless – emotional – connection to the environment. Viewing this activity through the governmentality lens allows us to understand what Foucault means when he says that power is corporeal. Even very physical, seemingly natural acts such as breathing provide an opportunity for us to fashion or cultivate ourselves as persons who are intimately and physically connected to the environment. How we physically interact with the environment can also be governed.

Later, in the sense-of-place meditation activity, Thomashow outlines how participants often

[bemoan] that their busy lives prevent them from contemplating the wild, and how ironic it is that the environmental profession has led them to indoor jobs, or that their thoughts about nature are so often trapped in an intellectual realm. Worried that too much discussion will put us back in our heads and away from the place, I often suggest that people spend the next week thinking about how wild places influence their lives and that they write or sketch their impressions in an *ecological identity journal*. After a few more minutes of impressions and comments, I ask the group to be silent, and we slowly make our way back to the trailhead, nourished enough by the experience that the rest of the day will look just a little bit different. (1995: 15) (Author's emphasis)

Certain points need to be made here. Firstly, we see again the way in which the “rational side” of life is suppressed. The assumption here is that too much thinking will impact on one's capacity to connect emotionally with the environment. Apart from the dualistic mode of thought this illustrates, it also points to an assumption that we cannot be transformed through rational thought. Once again, the reliance on very old religious techniques and beliefs appears clear. Rational thought has no place when faith is required. Meditation itself, be it in the form of silence or focussed reflection in a journal or diary,¹⁰⁵ both of which Thomashow suggests to his students, is a very old religious technique for

¹⁰⁵ Interestingly, the journal writing or sketching Thomashow suggests assumes participants know how to do these things – as they do, thanks to the “head work” they have done through institutions of “the State” such as the school.

reflecting on how one is made up and how one would rather be made up, that is, how one wishes to fashion oneself. As Weber explained, diaries were used by Protestants to help to ensure that one's life was 'subjected to a consistent method for conduct as a whole' (1958: 117). In much the same way, this meditative activity helps to reinforce the lessons learned in the mind maps activity: that an environmental citizen is a person who reflects on their place in the world and actively seeks opportunities to be "nourished" and to reconnect with the environment. The message is clear: if participants want to build an ecological identity, this is the type of work they must undertake. Principally, this involves learning how to become dissatisfied with being "back in our heads".

Trees of environmentalism activity/technique

In the "trees of environmentalism" activity, Thomashow (1995: 25-9) uses the metaphor of a tree to engage participants in thinking about the ideas in which their ecological identity is "rooted", the "trunk" of their identity that acts as a solid and stable core, and the "branches" and "leaves" through which they are able to "grow" their identity. For example, when thinking about how their ecological identity is rooted in the broader field of environmentalism, participants think about a range of environmental archetypes such as Thoreau, Muir and Carson who act as 'role models for ecological identity' (Thomashow 1995: 29) and who may influence how participants think about themselves as environmentalists.

In physically mapping out their own ecological identity through the metaphor of a tree – what Thomashow refers to as 'portraits of ecological identity' (1995: 25) – students reflect on how their identity has been influenced, what nurtures it, and in what direction it is growing. Developing these trees of environmentalism engages participants in ecological identity work in three ways, according to Thomashow (1995: 27). Firstly, they are engaged in mapping out the context of and influences on the field of environmentalism. Secondly, they are engaged in placing themselves within this broad context: 'a person makes a strong personal statement through his or her identification with

a particular approach' (Thomashow 1995: 27). Finally, 'the tree reflects how a person conceives ecological identity' and allows participants to reflect on how their 'understanding of environmentalism influenced [their] sense of self' (Thomashow 1995: 27). In addition, the activity requires participants to look at their tree as 'a manifestation of ecological identity that allows the students to see themselves and one another reflected in the *emerging interpretive tradition* of American environmentalism' (Thomashow 1995: 28) (Author's emphasis).¹⁰⁶

The pictorial representation of one's ecological identity also acts, according to Thomashow, as a means for dialectically integrating the rational and the emotional. He claims that '[t]he artistic approach allows people to express themselves in a non-linear fashion, moving beyond the written word, integrating their knowledge of environmentalism with their deepest beliefs, feelings and motivations' (Thomashow 1995: 27). The assumption underlying such a claim is that there are two parts of ourselves that have been rent asunder by culture, and that these two parts need to be reconciled so that we can once again be "whole".

The trees of environmentalism technique makes visible how we willingly and freely subject ourselves to settings and norms. This is what Foucault (1985) refers to as the "mode of subjection" and the "moral teleology" of ethical fashioning. In undertaking this activity, participants come to see themselves as part of something broader and they see their conduct as needing to fit better within a particular context. In addition, they come to see themselves, and their conduct, as part of a particular code. It is in reference to this code of environmentalism and of "how to be an environmentalist" that participants then begin to fashion their new personas.

Beyond the spectrum activity/technique

The "beyond the spectrum" activity is well known in environmental education and is most often referred to as a "values continuum". In this activity

¹⁰⁶ Given his largely US audience, Thomashow's students are encouraged to locate themselves within the setting of American environmentalism.

participants physically map out a range of environmental positions along a continuum, for example, from ecocentric to anthropocentric, preservation to conservation, or radical to normative. The continuum is mapped out over a physical space, for example, along a wall or on the floor. Participants reflect on where they are positioned on the continuum – usually in relation to a controversial environmental issue – and then physically place themselves at a point that reflects their beliefs and/or values. In practising this activity, participants are able ‘to declare affiliations, not in an exclusive or individualistic sense, but so you can find yourself in the spectrum, and distinguish yourself accordingly’ (Thomashow 1995: 52).

This activity employs a corporeal technique to allow participants to see and feel where they “stand” through literally placing their bodies on a line. This physical assessment works to fashion an environmental self by showing where you stand in relation to the norm. If most participants are on the ecocentric or radical side of the spectrum and you are on the anthropocentric or normative side of the spectrum, you will start to reflect on how you must bring yourself closer to the norm of ecocentrism. Part of what governs here is the threshold of embarrassment and guilt of which Elias (1978, 1998, 2000) speaks and the mode of subjection of which Foucault (1985) speaks.

Catalog of personal property activity/technique

As the name suggests, in the “catalog of personal property” activity participants create an inventory of all their possessions. It is no surprise that such an activity is included, given that much of the debate about “being environmental” centres on changing lifestyles, in particular, our “consumer culture”. This is why, for Thomashow, ‘the issue of material simplicity is such an important theme in the construction of ecological identity’ (1995: 71). In undertaking this activity, participants are asked to spend several hours cataloguing everything they own. While cataloguing, they also need to be thinking about what they own – where it has come from and how it has been produced – and why they possess these items. According to Thomashow,

[t]hrough the process of organizing this list, [participants] learn a great deal about themselves, for they are compelled to focus exclusively on

how their identity is reflected in their possessions. Of course, this is more than a narcissistic activity, or a review of one's financial worth. It is a long look at the implications of property ownership. Our possessions have symbolic meaning and lend insight to many aspects of personal identity. (1995: 70)

In addition to reflecting on one's own consumption, participants are also asked to think of themselves in relation to the broader community – what Thomashow refers to as 'the commons' (1995: 70).¹⁰⁷ As Thomashow clearly states, '[t]he point of this property list activity is not to coordinate a collective orgy of environmental guilt. Rather, it is to reflect deeply on the inner meaning of property as a tool for connecting ecological identity with perceptions of the commons' (1995: 73). By understanding one's own sense of ownership, along with an understanding of where one's possessions come from, how they are manufactured and distributed, and so on, one is able to see one's collection of possessions – and the sense of identity one derives from and through them – in relation to the environmental commons and one's impact on them.

The fashioning of the self that takes place through this technique is clear. Individuals undertake the process of cataloguing their possessions not with a positive frame of mind but with a negative one. The aim of the activity is not to see one's possessions as evidence of divine blessing and one's success in life, as the Protestants did, but rather as an indication of how far down the wrong path one has travelled. While Thomashow says the activity is not about "environmental guilt", this will be difficult if not impossible for most trainee-environmentalists to avoid. The purpose of the activity is surely to provide ways for participants to reflect on how environmental – morally speaking – or not they are.

Another effect of this technique is that it shows that in order to "be good", one must be an integrated person – that is, all aspects of one's life must reflect one's commitment to the principle of environmentalism. Everything in one's life provides an indication of who you are – of how environmental you "truly" are –

¹⁰⁷ Garrett Hardin's (1968) *Tragedy of the commons* popularised the usage of this concept and term in the environmental field.

even the bowl from which you eat or the seat on which you sit. One's entire life becomes open to scrutiny – to be found wanting and in need of work. These are ascetic practices of the self that fashion beings who are able to 'transform [themselves] into the ethical subjects of [their] own behaviour' (Foucault 1985: 27).

The community network map activity/technique

Through the "community network map" activity, Thomashow shows the importance of seeing oneself as part of a community, or commons. The community network map activity is a way for students to understand how they are connected to their community. Thomashow says:

I find that the most effective way to interpret and discuss community is to ask students to draw a map or chart depicting their community relationships. I encourage them to consider all the possible matrices of their perceived communities: affiliations and associations, places, people, neighbourhoods, habitats, electronic networks, whatever they consider to be a representative portrait. (1995: 84)

In order to assist students in understanding their community network map, Thomashow poses the following questions, organised around two themes:

The Structure of Community Networks

- What makes any network a community?
- To which communities do you feel emotional attachment?
- Who belongs to your communities, people like yourself, or people who are much different from you?
- How do the communities to which you belong interconnect?
- Do they form a tapestry of cooperation or do they underscore isolation and division?

Belonging to a Community

- Are you as active in community life as you'd like to be? Which of your community activities are political? Which involve conflict? Which involve environmental issues?
- What are the prerequisites of community membership? How do your community memberships change?
- What allows some communities to change and others to avoid it?
- In what ways does your perception of community reflect your ecological identity? (Thomashow 1995: 27)

By making participants think about their place in "a community", participants understand that the notion of community is central to the work of

environmentalists, especially since, as we have seen in Chapter Four, it is situated in opposition to the individualism that is thought to have contributed to, if not caused, the environmental problems we currently face. Through this technique participants are “empowered to belong” and begin to fashion themselves as persons who are community-oriented and who form part of a ‘tapestry of cooperation’. This fashioning is thus not done in isolation, but with reference to their community. In this way, this technique fashions particular sorts of personas just as it did 300 years ago in the French court society of which Elias (2000) speaks. This technique also reinforces the notion that there is a “civil society”, standing united in opposition to the all-powerful “State”.

Political autobiography: A cartography of political identity activity/technique

The “political autobiography” activity seeks to help ‘people to understand their political values, articulate a coherent political identity, and translate this knowledge into meaningful political action’ (Thomashow 1995: 106). The activity has two phases. The first phase requires participants to develop a political genogram where they map out their family political history, in order to understand the particular political values that are held by their immediate family members (Thomashow 1995: 106). The second phase requires participants to develop a political life-cycle chart where they map out occasions in their lives where they have engaged with political issues and processes in order to understand this engagement in relation to their lives as children, adolescents, young adults, adults, and so on. These two phases lead participants to do four things:

- to elucidate their political ideology, that is, ‘political belief system: values regarding capitalism and socialism, free markets and collective structures, regulation and coercion, right and left, conservation and preservation, etc.’;
- to elucidate their political temperament, that is, ‘one’s disposition, values and behaviours regarding conflict situations: conflict avoidance or assertive provocation, negotiation or belligerence, accommodation or intimidation, cooperation or independence’;
- to reflect on their political actions: voting, civil disobedience, letter writing, organizing, or apathy; and

- to understand the ways in which these are interconnected. (Thomashow 1995: 107)

In enabling participants to reflect on their political views and actions, this technique encourages participants to fashion themselves in new ways, with reference to – or against – their family political history and their previous political activities. A criticism of programmes such as Ecological Identity and Earth Education is that they do not address “the political”. It is interesting to note here, however, that the notion of empowering individuals to be politically active citizens is so orthodox that even those seeking individual transformation must articulate their argument in terms of citizenship and must address issues relating to political identity. However, unlike education *for* the environment, the political is here treated in a subordinate relation to the moral/environmental principle, not as the framework of the latter.

Power flow activity/technique

The “power flow” activity is another technique used by Thomashow to empower participants to become active citizens. Thomashow outlines four activities to instil new forms of conduct in participants: the “power flow chart”, “everyday life as a laboratory of political identity”, “the power of conversation” and “the power of controversy” (1995: 118-35).

The “power flow chart” activity engages participants in constructing a flow chart for a particular environmental issue or controversy so that they are able to ‘interpret the flow of power in political situations, and to strategize appropriate interventions, that is, ways a person or group can take actions to achieve a specific result’ (Thomashow 1995: 118). For the “everyday life as a laboratory of political identity” activity, participants reflect on everyday occurrences which may or may not be political but which provide an indication of their everyday use of power through their behaviour in a range of situations. According to Thomashow, such an understanding of one’s own behaviour is essential because ‘as people become more aware of how they behave in these situations, they can more effectively contribute to a community process for

solving political problems, however they may occur' (1995: 125). All aspects of one's life must thus be scrutinized.

In the "power of conversation" activity, participants reflect on the use and interpretation of language and how this either facilitates or excludes access to political power. According to Thomashow, 'language can be used to divide or unite people. It can create change or it can reinforce the status quo' (1995: 127).

For Thomashow,

controversial issues involve a complex web of power relations, intentional manipulations, and ideological predispositions. The concerned citizen can cut through these walls of controversy by learning how to construct vivid, sincere, and clear dialogues in which the common interests of all parties are served. This task is fundamental to political learning, the ability to use everyday language as a way to participate in the great power struggles of macro- and micro-politics. Political identity work is practised by learning how to have a good conversation. (1995: 129)

Being able to have 'good conversations' is important, Thomashow believes, because

[i]t is through the convergence and comparison of diverse perspectives that politics becomes a learning process, the basis of personal and political transformation. When this occurs, people traverse the "hidden valley of shared values" and find the ecological, political and moral common ground of their humanity. (1995: 135)

In the "power of controversy" activity, participants reflect on whether they support the use of what Thomashow terms 'power-over' tactics if they result in a good environmental outcome. The power-over tactics he refers to include advertising that uses 'propaganda and devious manipulation' or coercive governmental policies (Thomashow 1995: 130-1). Thomashow self-identifies three assumptions about power that underpin his thinking about political identity work: '(1) people improve their capacity to resolve conflicts when they look deeply at the attitudes and motivations they bring to a political situation, (2) upholding a "power within" morality is as important as the urgency of environmental reform, and (3) controversy is the educational means through which people find higher purpose and common ground' (1995: 118-19).

In examining their own thoughts on the use of ‘power-over’ tactics, participants are reflecting on the most moral path to follow (which is not the one of propaganda or governmental coercion), and begin to learn how to have ‘good conversations’ or discussions. The implications of following the right path are made clear: ‘In these situations, one may win the debate, but sacrifice the ideals of “good” public conversation. Is any situation worth this sacrifice, or are there alternative means for accomplishing one’s goals?’ (Thomashow 1995: 132). Thus, these techniques help to govern how one engages with others in the political arena. One learns how to conduct oneself as a “good” environmentalist.

Environmental stereotypes activity/technique

In the “environmental stereotypes” activity, participants learn to ‘recognize how others perceive [their] work’ (Thomashow 1995: 145). As Thomashow says,

The educator usually has multiple objectives: teaching natural history and field ecology to enhance ecological understanding; stimulating a sense of wonder and discovery to enhance moral and spiritual growth; presenting practical everyday choices to promote ecologically sound lifestyles; and pointing out the threats of environmental pollution to galvanize public action and concern.

These objectives are often framed as a series of moral choices. It is likely that the educator, similar to thousands of other environmental practitioners, is either preaching a moral homily, or rousing people to convert to his or her ecological worldview. Environmental practitioners become, accordingly, stereotyped, and are sometimes perceived as moralists. (Thomashow 1995: 145)

Through learning to recognise how others may perceive them and their work, participants are able to be more mindful of their actions to avoid being stereotyped. Through this technique, participants thus learn how to fashion themselves in relation to the perceptions of others and to be constantly reflective of their own conduct. These are the thresholds of embarrassment and guilt that Elias noted work to govern our conduct in quite particular ways.

The eco-confessional activity/technique

The “eco-confessional” activity engages participants in a process of “confessing” their environmental sins. The aim is to help participants break out of the blame/guilt loop, that is, blaming others for the state of the environment,

or feeling guilty about their complicity in the environmental decline we now see (Thomashow 1995: 152). Participants begin the eco-confessional by sharing stories of their own environmentally irresponsible behaviour. This is followed by a group discussion which Thomashow finds 'is a gateway to learning about collective responsibility for the ecological commons' (Thomashow 1995: 152). In undertaking this activity, Thomashow argues, participants come to realise that '[w]e cannot just blame other people for the environmental crisis. All citizens are participants in a non-sustainable system' (Thomashow 1995: 154).

The technique of the eco-confessional has obvious religious roots. It provides an opportunity for participants to reflect on their own "poor conduct", seek forgiveness in a supportive environment, and reflect on the ways in which they can atone for their sins. This reflection and public confession also helps to govern one's conduct by reflecting on negative behaviours and attempting to change them. In such ways is a new persona fashioned.

Transforming the ordinary activity/technique

In the "transforming the ordinary" activity participants are encouraged to find learning in everyday or ordinary experiences such as visiting the supermarket or washing the dishes:

[I]f you consider the deeper implications of dishwashing, whether it's attending more consciously to the actual dishwashing process, or by thinking about the wider ramifications of your actions – energy use, the watershed, food wastes, and so forth – then dishwashing becomes a reflective activity. If I ask a class to keep a journal about dishwashing as it relates to ecological identity and to read those journals at the next class session, then dishwashing becomes a focussed learning activity. (Thomashow 1995: 184)

This technique works to fashion new personas by turning everything – every minute, mundane detail of one's life – into an opportunity for finetuning one's persona. This is a fine example of how power, just as Foucault (1980a) alerted us, exercises itself in a capillary fashion through multiple activities or relays. Power is brought to bear on the self by the self, through reflection, and by others, through their responses in class sessions. Conduct is governed through such constant reflection on how to *be* a better environmentalist.

Collaborative text activity/technique

In the “collaborative text” activity, students write a ‘collaborative text’ so that they can gain ‘an appreciation of [their] collective wisdom’ (Thomashow 1995: 185). One approach to this activity that Thomashow outlines is

to assign a common reading (I often choose Thoreau’s “Walking”). I ask students to select a short passage which they find particularly appealing, inspiring or thought-provoking. Their task is to write the passage on a three-by-five index card. They must then attach a second card to the first one, explaining why they chose the passage.

In class, I hand out six additional index cards to each student. I ask them to hand me their original cards. After shuffling them I return them randomly. The students are then expected to read whatever passage they have received, and attach additional comments, elaborating on the first two cards. Once again, the cards are collected, shuffled, and returned. The process is repeated until all of the index cards are used. At this point, everyone has a chain of cards, representing an anonymous and collective series of commentaries. I randomly choose several chains, and read them to the group. (Thomashow 1995: 185)

The purpose of this activity, as Thomashow understands it, is to produce

a collective wisdom, developing a shared document, reflecting their core environmental values. This exercise has a gentle bonding effect. What starts as a personal response and private dialogue becomes a group effort and a collective essay – the discourse of an intellectual commons. They lose their ego attachment to their personal comments, realizing that the strength of the text lies in their collective interpretation ... Whatever the means, what is crucial is to allow the class to appreciate its own insights, without attaching them to individuals, thus facilitating a sense of community, a solid foundation for future work. (Thomashow 1995: 185)

This technique enables participants to work on losing their sense of individual identity in favour of a group or community identity. This technique reminds participants of the norm, and encourages them to reflect on their relationship to it, a technique Foucault (1986) noted in his study of the ethical regimens of classical Greece. Participants learn to fashion themselves in relation to a norm by “losing” their own identity. In undertaking this activity, participants learn “how to walk” as an environmentalist. The use of Thoreau’s *Walking* – in showing how to *be* in nature – reminds us of Mauss’ (1979a) claim that ‘there is an education in walking also’. We learn how to be an environmentalist by

learning ‘the discourse of an intellectual commons’, that is, how environmentalists think and act.

The sense-of-place map activity/technique

The “sense-of-place map” activity is the final activity Thomashow has participants undertake. This is because, for Thomashow, a

sense of place [is] literally the roots of ecological identity – ideas such as bioregionalism, sustainability, material simplicity, community, citizenship, decentralization, environmental psychology, and others were integrated in this one expression. (Thomashow 1995: 193)

In undertaking this activity, participants construct a sense-of-place map that draws together all of their learning through the range of ecological identity activities undertaken. These “maps” thus record ‘stories of ecological identity – how personal development reflects and is influenced by feelings and perceptions of landscape and habitat ... They are trail markers on the converging paths of ecological identity work – blazing trails home’ (Thomashow 1995: 193). The activity links back to the first memory maps activity, creating a neat circle.

This technique thus serves to draw together by reiteration all the learning undertaken so far. The apprentice-environmentalists have engaged in a process of “taking themselves apart” and in a process of reflecting on the parts and this final activity provides an opportunity to “put one’s self back together again” – to reform the whole. Such activity is a pedagogical technique of the pastoral, to use Hunter’s (1994, 1998) term.

Fashioning a self

What the programmed activities of Ecological Identity make visible, then, is the central assumption underpinning the field of environmental education’s commitment to empowerment and transformation: that to have a special kind of relationship with the environment, you need to have a special kind of relationship with your self also. I argue that these activities do not empower individuals to transform themselves by reconnecting with their true, pre-formed environmental selves but instead work to actually fashion new – in this case

environmental – personas. It is clear that all of the Ecological Identity activities work to embed a new range of habits, new orders for living as an environmentalist. In empowering participants to live in new ways, and in teaching new orders of living, programmes such as Ecological Identity “govern” through fashioning certain types of personas who are able to live – freely and willingly – according to certain types of norms. It is in this way that the technique of empowerment can be understood as a productive form of power: productive of new types of personas through which environmental conduct can be governed, by others and by themselves.

Fashioning an Ecological Self: Earth Education

[T]he earth is in trouble not simply because people don’t understand. It is more than that. Lots of them just don’t care. They have lost a feeling for where they really are. They have literally “lost touch” with the other life of their planet. (Antoine de Saint Exupéry in Van Matre 1990: 128)

Internalizing (understandings). Enhancing (feelings). Crafting (lifestyles). Planning (actions) ... We want these processes to become a regular, integral part of our participants’ lives. (Van Matre 1990: 164)

While we are born with curiosity and wonder and our early years are full of the adventure they bring, I know such inherent joys are often lost. I also know that, being deep within us, their latent glow can be fanned to flame again by awareness and an open mind. (Sigurd Olsen in Van Matre and Weiler 1983: 39)

You can’t achieve the kind of perception we are talking about all wrapped and bundled in the latest synthetic material like so many space explorers. You have to get out there and squish it between your toes, get it under your fingernails, and feel it in your hair. (Van Matre 1990: 233)

“Earth Education” is an approach to environmental education based on programmes developed since the 1960s by Steve van Matre in the USA (Van Matre 1974, 1979, 1989, 1990, Van Matre and Johnson 1987, 1997). The Earth Education programmes and activities are widely used in the field of environmental education, both in their original form, and as an influence on other environmental educational programmes.¹⁰⁸

¹⁰⁸ For example, Earth Education underpins programmes at Bunyville Environmental Education Centre and at Wild Mountains, both in South-East Queensland (Ballantyne and Packer 2005). As noted earlier, many of the earth education activities would be recognised by

Van Matre developed the range of Earth Education programmes because of what he perceives to be environmental education's "failure". Environmental education has failed, he claims, because it focuses on environmental problems rather than lifestyle change (Van Matre 1990: 19). For van Matre (1990), the litmus test of every programme should be whether or not it aims to change specific environmental behaviours and whether or not it succeeds in doing so. Thus, Earth Education has one clear goal: to change environmental conduct (Van Matre 1990: 267). It is this clarity of focus, van Matre claims, that allows earth education to overcome existing environmental education's shortcomings because it allows for carefully crafted learning programmes that provide a 'focused series of sequential, cumulative learning experiences [to be] designed with specific outcomes in mind' (1990: 16).

These outcomes relate to educating participants about 'how life works, and about why they can, and should, make changes in their own lifestyles' (Van Matre 1990: 19). Earth Education programmes seek three specific outcomes: first, for participants to have a basic understanding of how life functions on earth; second, for participants to understand how we are connected to and supported by these ecological systems; and third, for participants to internalise these understandings so that they see what it means for them in their own life and for their own poor environmental habits (Van Matre 1990).

In attempting to achieve these outcomes, Earth Education programmes provide opportunities for participants to learn about, reconnect with, and internalise the natural environment. Van Matre believes that behavioural change will develop from this matrix of ecological understanding and positive feeling for the environment 'and thus rooted will prove to be most enduring' (1990: 23). Indeed, he argues that it is important that this understanding and internalisation of ecological systems and a reconnection with the natural environment occurs before participants are asked to address their own environmental behaviour so

environmental educators, whether or not they are familiar with the Earth Education programmes, as these activities are widely used in the field.

that there is a fertile base on which to ‘seed’ and ‘grow’ new environmental habits (Van Matre 1990: 20).

The overarching goals of Earth Education programmes are thus to develop an understanding of ecological systems and the place of humans in them, to reconnect individuals with their supposed innate and positive relationship with the natural environment, and to establish a range of environmental habits that will result in the adoption of environmentally appropriate lifestyles. I describe below the range of Earth Education programmes and the three broad principles that regulate them. This is followed by a description of the specific activities in these programmes to illustrate *how* these activities can be understood not as a means for reconnecting individuals to their innate environmental selves but as governmental techniques through which particular personas are fashioned and through which environmental conduct comes to be governed.

The Acclimatization programmes

Acclimatization: A sensory and conceptual approach to ecological involvement (Van Matre 1989/1972) and *Acclimatizing: A personal and reflective approach to a natural relationship* (Van Matre 1974) were the first programmes developed by van Matre. The “Acclimatization” programmes sought to provide introductory nature experiences that would help primary school-aged students to develop a relationship with the natural world. Van Matre describes these programmes thus:

In Acclimatization, we wanted to get people out of their boxes and in touch with life again. We wanted them to reach out and touch the earth, to feel themselves as something like microscopic parts of much larger systems. But it is difficult to feel the flow of life if you are too caught up in it yourself mentally ... when you are too full of your own thoughts, you cannot make room very easily for the impressions of the other life around you. Today, the other creatures of the earth can only be heard by those who work at freeing themselves up to listen. (1990: 71)

The nature of the relationship that van Matre wanted participants to develop with the earth is clear. It is to be one of

at-homeness with the earth, a feeling similar to what you have in your own house ... I wanted the kids to have that same feeling of security and comfortability that they have in their own homes, but with the

planet itself – our pre-eminent home – the earth and its communities of life. (Van Matre 1990: 53)

He sought to develop this relationship with the earth by ‘acclimatiz[ing] the kids to the earth and its natural systems. To acclimatize means to become accustomed to a new setting or surrounding, and that’s what we were doing’ (Van Matre 1990: 53). The two Acclimatization texts outline the curriculum van Matre first used in the late 1960s. They offer a radical change from the outdoor experiences of the day that tended to focus on the collection and identification of fauna and flora. The Acclimatization approach is different because it instead “immerses” participants in the environment, in order to “acclimatize” them to their environment. For van Matre, the Acclimatization programme is ‘a hard-hitting, barrier-breaking series of sense experiences that literally immerse the camper in his natural environment. No worksheets here. Our lesson plans are an itinerary of ecological involvement’ (Van Matre 1989: 5). The Acclimatization programme involves sensory experiences such as mud baths, bog crawls and marsh wading, and experiencing the outdoors at different times of day and night and in different sorts of weather (Van Matre 1989: 4-5). The aim of the programme is to allow participants to ‘quite literally absorb’ (Van Matre 1989: 4) and “feel” the environment: ‘to draw it close to him. To love it. To understand it – not for its labels and fables and fears – but as an intrinsic part of himself’ (Van Matre 1989: 5).

Four essential components underpin the Acclimatization programmes: the senses, ecological concepts, the mechanics, and solitude. Woven through all of these and holding them together is what van Matre calls the ‘secret ingredient’: ‘magic’ (1990: 72). The senses, van Matre (1990: 63-75) argues, need to be sharpened so that participants are able to get in touch with, and thereby build a deeper relationship with, the earth. However, an emotional connection without any conceptual understanding will not bring about the changes in habits and lifestyles that are needed. For this reason, it is important to ‘go down both tracks at the same time in our work: the senses *and* the concepts, the feelings *and* the understandings’ (Van Matre 1990: 64). The “how” or “mechanics” of learning is another component that is given close consideration in the

Acclimatization programmes. For van Matre, the experiential education technique of informing, assimilating and applying, in and through the environment, is best because ‘people learn when they take something in, do something with it, then use it’ (1990: 65-6). The final component of the Acclimatization programmes is solitude. Solitude is considered essential if feeling and understanding are to be connected. Indeed, van Matre argues that the development of non-verbal skills is vital if we are to reconnect with our feelings. He argues that it is ‘the feelings that endure in life. It is the nonverbal that attracts us – the nonverbal that we long for and return to’ (Van Matre 1990: 69). The Acclimatization programmes thus incorporate strategies for enhancing non-verbal skills through solitude exercises which work on ‘skills like watching and waiting, silencing and stilling, opening and receiving’ (Van Matre 1990: 69).¹⁰⁹ What binds these four components together, according to van Matre, is ‘magic’ (1990: 74). The use of fantasy is thus a central strategy of the Acclimatization programme. However, van Matre does caution against letting magic overwhelm the message. He argues that the focus should rather be on using magic and fantasy to evoke feelings and to assist participants’ reconnection with the environment (Van Matre 1990: 74).

The Acclimatization programmes were successful, becoming widely used and even more widely modified. Activities were used on their own or as part of completely new programmes. For van Matre (1990: 83-6) the use of his programmes in this way was problematic. He was concerned that the activities, used independently, were not able to meet the specific learning goals he had intended. That is, as interesting “fillers” in programmes, they would not achieve the transformative outcomes that were the intent of the Acclimatization programme. In order to overcome the “misuse” of the Acclimatization programme, van Matre established the Institute for Earth Education (IEE) in 1974 to oversee programme development and provide training and accreditation.

¹⁰⁹ The genealogy of these “skills” is religious, with a long history of use by monastic orders where silence and stillness are the route to God.

The Earth Education programmes

The Institute for Earth Education (IEE) aims to develop model programmes and to outline the principles of Earth Education so that others can develop their own programmes with due regard for these key principles (Van Matre 1990: 86). Earth Education programmes build on and strengthen the ideas and approaches van Matre developed in the Acclimatization programmes. They provide working examples of the principles of Earth Education “in action”.

For example, *Sunship earth: An acclimatization program for outdoor learning* is a programme that aims to awaken feelings and understandings that ‘will help young people better fulfil their responsibilities as crew members and passengers of this wondrous vessel of life that we share’ (Van Matre 1990: 249). Upper primary students undertaking this four to five day programme are ‘on a re-training mission, getting to know their place in space and how they can go about keeping it healthy’ (Van Matre 1990: 249). *Earthkeepers: Four keys for helping young people live in harmony with the earth* is a two and a half day programme for upper primary students where students earn the four keys to living environmentally. They receive two keys (K = Knowledge, E = Experience) while at a special Earthkeepers Training Centre, and two more (Y = Yourself, S = Sharing) once they return to school and home, demonstrating van Matre’s belief that learning has to continue after the experience of the programme itself if it is to bring about the lifestyle changes it is aiming to instil (Van Matre and Johnson 1987: 267). *Sunship III: Perception and choice for the journey ahead* is an Earth Education programme aimed at young teenagers (13-14 years old) and addresses ‘perception and choice in our daily habits and routines. It is about exploration and discovery in the larger context of where and how we live. And it is about examining alternatives and making sacrifices on behalf of a healthier home planet’ (Van Matre and Johnson 1997: vii). These programmes, in seeking to develop ecological knowledge, reconnect with nature and establishing new lifestyles for participants, are underpinned by three key principles of earth education: they whys, the whats, and the ways. These principles are described in detail below.

Earth Education programme principles

All Earth Education programmes, whether models developed by the IEE or those developed by others, are based on three broad principles. These are the *whys*, the *whats* and the *ways* of earth education. An overview of these is provided in Table 1. Each is discussed in some detail below in order to illuminate how the Earth Education programmes constitute a regime through which new personas are fashioned and trained.

Table removed, please consult
print copy of the thesis held in
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Table 1: Principles of Earth Education (van Matre 1990: 87-8)

The whys of earth education

There are three reasons or *whys* for earth education: preserving the earth, nurturing people's innate connection to the earth, and training people in new habits that will allow them to live environmentally. As van Matre puts it, earth education aims to 'preserve the extraordinary richness and biotic health of the third planet from the sun, by changing the perspective and habits of its most dangerous passengers' (1990: 90). In order to do this, ecological understanding must be improved as well as ecological feeling: '[e]arth education provides a new synthesis between the understandings and the feelings: ecological feeling' (Van Matre 1990: 94). While van Matre acknowledges that he is unable to verify that a connection with the earth leads to wiser or happier people, he nonetheless believes it: 'common sense tells us that it must be so' (1990: 95). As we saw with Ecological Identity, and as we see with the Earth Education programmes, the belief that one cannot fully understand the world by rational intellect alone, that one also needs to connect emotionally, is a commonplace of environmental education.

Earth Education programmes aim to 'provide nourishment for those who have a poorly developed sense of relationship with the earth and enrichment for those who have already developed a sense of relationship on their own' (Van Matre 1990: 96). These programmes aim to 'reintroduce people to the real source of their lives, ... and immerse them in the green and growing things that sustain them' (Van Matre 1990: 95). This is not a simple task, however, as van Matre notes, because individuals are understood to have lost their connection with the natural world due to the artificial constraints placed on them by culture and rational thinking. So dire is this situation, van Matre claims, that 'something akin to a healing process' (Van Matre 1990: 96) needs to occur. It is only through such a process of healing, he argues, that we can 'fully [grasp] our ecological relationship with the earth – using both our head and our heart – and once achieved, such wisdom brings a happiness uncommon in the modern world' (Van Matre 1990: 95). It is therefore important that Earth Educators learn healing skills. The final why of earth education is to train participants to take on new environmental habits. For van Matre, the development of

ecological understanding and the reigniting of ecological feeling will work together to bring about behavioural change (1990: 102). These three reasons or whys provide the underlying rationale for all the Earth Education programmes.

The whats of earth education

There are three *whats* of earth education: understanding, feeling and processing. The first “what” involves the development of four basic ecological understandings: the flow of energy, the cycling of matter, the interrelating of life, and the changing of life forms (Van Matre 1990: 105). However, as noted previously, an understanding of ecological concepts on their own is not enough. For this reason, Earth Education programmes aim to give participants contact with the natural world so that they can develop four core feelings: ‘a joy at being in touch with the elements of life, a kinship with all living things, a reverence for natural communities, and a love for the earth’ (Van Matre 1990: 120). For van Matre, it is important that we ‘nourish in others a lasting love for the earth, a joy at being in touch with wild and growing things, [and] a feeling of kinship and reverence’ (1990: 138), if new environmental lifestyles and habits are to be instilled. This is because he believes that long lasting changes are made for emotional, not rational reasons: ‘[w]hy love? Because people will fight for what they love much faster and much harder than for what they merely know’ (Van Matre 1990: 129). In quite biblical tones, van Matre claims that ‘in the end, we believe in earth education that to love the earth is to love ourselves, for we are of the earth and it is one with us’ (1990: 130). Developing a kinship with all living things is seen as the key to realising that we are linked to all other forms of life and are part of the ecological makeup of the planet, according to van Matre. Having a kinship with the planet means understanding the common characteristics of all living things: ‘they process energy, they grow, they reproduce, they face dangers, they do best when the conditions of their homes are most suited to their needs’ (Van Matre 1990: 123).

The final “what” of earth education is processing. This is the opportunity for participants to process what they have learnt about ecological systems and ecological feelings in a way that relates these back to themselves and their own

lifestyles. There are four skills to be learned here: assimilating understandings for how life works on the earth; enhancing feelings for the earth and its life; crafting more harmonious lifestyles; and participating in environmental planning and action. For van Matre, it is not only important to understand how life works, one must internalise this understanding, in order to '[absorb] those insights and [relate] them to [their] own lives on a daily basis' (Van Matre 1990: 131). Ecological understanding must be embodied, so that

it comes oozing back out of them in the way they walk and dress, in all the paraphernalia with which they surround themselves. It is not enough to simply intellectualise these feelings; people have to make them an integral part of themselves. It has to be nature in the navel. (Van Matre 1990: 138)

Another way to process what one has learnt is through crafting a new persona, one capable of having a new, environmental, lifestyle. Van Matre enables this by having participants analyse their present habits and lifestyle and devise strategies for changing those habits that are deemed environmentally damaging (Van Matre 1990: 146-7). This focus on taking environmental action in the realm of one's own life is considered to be more important initially than actions in students' schools or local communities. While the IEE and similar programmes are often criticised by advocates of education *for* the environment for being too focussed on the individual, van Matre argues that 'if we want them to "stay the course", we need to get them working on the one issue that they can actually do the most with over time – their own lifestyles' (1990: 158). It is only then, he argues, that they will be able to 'begin working with others to develop the systems necessary to support their personal efforts' (Van Matre 1990: 159). In this way, he argues, participants become not only environmentally literate but also truly active participants in the process of environmental change, that is, become active and informed environmental citizens (Van Matre 1990: 159). These three *whats* of earth education – understanding, feeling and processing – work to inform what Earth Education programmes focus on.

The ways of earth education

Rediscovering the Earth and renewing our relationship with it are primary aims of earth education. Earth Education programmes and learning experiences have three integral *ways* or processes that are used to ensure this aim is met. These “ways” are termed structuring, immersing and relating. In structuring Earth Education programmes, magical and adventurous learning experiences must be created and staged in order to compel students to engage with the learning; there must be a focus on sharing and doing; there must be an emphasis on the 3Rs of rewarding positive environmental habits and behaviours, reinforcing learning and relating this learning to the learner’s own experience; and positive environmental habits must be modelled (Van Matre 1990: 198-215). Immersion in the natural environment – ‘among the wild and growing things, in direct contact with the elements of life’ – is another key learning process in Earth Education programmes (Van Matre 1990: 225). A range of awareness-building exercises is thus included in each programme and repeated throughout the day in order to keep students “in-tune” with the natural environment: ‘[w]e believe in immersing people in the natural world ... over and over again’ (Van Matre 1990: 237) because such experiences ‘help individuals to cleanse their perceptions’ (Van Matre 1990: 231). The final *way* of earth education is relating. This means that programmes are structured to include daily opportunities for relating to the natural environment, most often through “solitude” experiences. These experiences aim to help learners to ‘relate both *with* and *to* other life on the earth. We want them to relate *with* it personally on an affective level, relate *to* it individually on a cognitive level, then examine their own lives in light of both experiences’ (Van Matre 1990: 238) (Author’s emphasis).

The model person

The Earth Education programmes are unique in providing a “model person” for participants to fashion themselves on. The model person to be emulated is the Tellurian gnome. According to van Matre,

The Tellurian Gnomes, while similar in many ways to other gnomes, are an unusual race who have special responsibilities for guarding earth’s natural places. They have large eyes, ears and hands, but very small

mouths, because to learn you have to see and hear and do, but not talk ... The Tellurians wear large, oversized coats made up of dozens of pockets, each one containing some natural treasure they are seeking a home for, or some special tool for helping them experience the riches of nature ... the Tellurians have an innate sense of the earth's needs. (1990: xi-xii)

While the Tellurian gnome is clearly not an individual, it is nonetheless a persona. It is a good environmental persona: one who looks and listens but does not speak much; one who is constantly prepared and ready to both experience and help the natural environment; and one who has embodied the capacities for doing so, with the tools one needs enfolded up in what one is wearing and in who one is. In this way, the Tellurian gnome points to the sort of model persona and the sorts of practices required of a good environmental citizen.

The specific activities

This section outlines some of the specific activities used in Earth Education programmes to fashion new personas. Van Matre does not refer to them as activities but as vehicles, because he sees activities as merely busy work whereas vehicles are purpose-designed to meet specific criteria 'be it building concepts, instilling feelings, or enhancing solitude' (Van Matre 1990: 261). A number of the vehicles used in Earth Education programmes are focussed on building ecological concepts and understandings, such as "concept paths", "interpretive encounters" and "discovery parties" (in *Sunship Earth*); "munch line monitors", "great spec-tackle", "connection inspection", "time capsules" and the "Earthkeepers game show" (in *Earthkeepers*); and "Solarville", "cycle factory", "museum project" and "Temple of SOL" (in *Sunship III*). However, given the focus of this thesis, these are not of direct concern and are thus not discussed here. What are of central interest, however, are those techniques that aim to fashion new types of personas. These are of four types: immersing experiences, solitude experiences, habit tasks and organising tools.

Immersing experiences

Immersing experiences are those that offer a total sensory engagement with, or "immersion in", the natural environment. According to van Matre, these sorts of experiences

get our participants over those common barriers that most people have erected between themselves and the natural world ... it means casting off your artificial cloak of separateness for a while and making contact with the juices of life around you ... it is at the intuitive, experiential level where we will most likely grasp our oneness with the flow of life. (Van Matre 1990: 258)

To facilitate participants' immersion in the environment, the following vehicles have been developed. They provide opportunities for solitude, observation, discovery and immersion.

Bug's world

This vehicle, outlined in *Sunship Earth* (Van Matre 1979: 173-7) involves blindfolding participants while they are in a natural setting and telling them that they are going into a shrinking machine. There are a variety of tools to make this experience seem real to participants: penny whistles to mimic the sound of the shrinking machine, not being able to see, being led into a hollow tree stump so they can sense a change in their environment. Once "shrunk", participants have to crawl around on their hands and knees following a trail using their arms as feelers, just as a bug would. This vehicle allows participants to experience their world from a new perspective. According to van Matre, '[o]ne thing is certain – bugs will never be the same again, and the kids' world has become larger because they learned about small things' (1979: 177).

Touching trail

This vehicle involves participants once again being blindfolded and this time led by a partner to natural objects so that they can feel, smell, taste and hear their environment and come to know it in a new way (Van Matre 1979: 178). Markers are provided for the leaders so that they know whether their blindfolded charge should be touching, smelling, tasting or listening to the natural objects along the trail. The guides' 'main job is to help their partners [literally] "get in touch"' (Van Matre 1979: 178) with the environment.

Bloodhounds

Here participants are once again on their hands and knees, sniffing out discoveries (Van Matre 1979: 181). They are on leashes (tied to their waist or

belt, not their necks!) and their “trainers” give them a variety of sachets to smell. Participants then have to sniff out the object making that smell. According to van Matre ‘[n]oses to the ground, they discover that by concentrating on the smells, they are able to notice many more besides the one in the sachet ... [t]hey have learned that their noses can tell them a lot about this planet’ (Van Matre 1979: 181).

Micro-parks

In this activity, participants mark off a small section of a natural area, as one would a national park, and get down on their hands and knees and use a hand lens to find points of interest (spider webs, mosses and lichens, ant burrows, etc.) (Van Matre 1979: 192-4). Once they have identified the “attractions” other students come to explore the micro-park using a hand lens. The micro-park experience allows students to become aware that ‘the world is made up of millions upon millions’ of micro-parks (Van Matre 1979: 194).

For van Matre, these immersion experiences are a vitally important component of Earth Education programmes because they allow one to ‘lose your self-identity within a larger natural community, and join the rhythmical dance of energy around you. ... In some ways it is experiencing intuitively our relative insignificance in the panoply of life spread over the earth’ (Van Matre 1990: 259). However, from a governmentality perspective we can see that immersion in nature helps you not to lose your self-identity but to build it, to build it as a person who is both “at one” with the natural world and “insignificant” in relation to the natural world. One *embodies* or takes into oneself, nature. These immersion activities can thus be understood as a technique for fashioning a quite particular sort of persona, one who is able to think about, to act for, and to be at one with nature. In becoming this sort of person, one’s conduct is governed, and one learns how to govern one’s own conduct.

Solitude experiences

Solitude experiences are another integral component and are therefore undertaken each day in Earth Education programmes. Solitude experiences are

seen as important for allowing participants to get ‘in touch with both the flow of life and with [themselves]’ (Van Matre 1990: 263). In undertaking solitude experiences, van Matre claims, participants are able to ‘process what [is] happening to them while getting closer to the natural world at the same time. They [can] feel the process and process their feelings’ (1990: 70). The Magic Spot activity is the principal solitude experience and is used in all Earth Education programmes (Van Matre 1979: 188-90, Van Matre and Johnson 1987: 77-80, Van Matre and Johnson 1997: 53-6).

Magic spots

On the first day of a programme, participants are told to find a place or “spot” in the natural environment where they can spend time on their own each day, out of sight, and in communion with nature, so that ‘the natural world [can] sweep over and engulf [them]’ (Van Matre 1979: 189). The magic spot is a special place for sitting in the environment, watching and listening, thinking, reflecting and “being”. Participants’ magic spots are private and are known only to them and the group leader. They provide a place and time to ‘sit quietly and alone – that’s the one overriding guideline here’ (Van Matre 1979: 189). Through coming to know one place intimately, it is believed that students will develop and deepen their relationship with the natural world. For Van Matre, magic spots are an ideal way for students to ‘make the connection between the problems of the entire planet and this one special place they have begun to value. The more they get to know this one place, the more they will respect and remember one small piece of the natural systems of Sunship Earth’ (1979: 189-90). In the Earth Education programmes, the magic spot activity is supported by the use of a reflective diary, as outlined under the “organising tools” section below.

The magic spot is reminiscent of the very old and widely used religious technique of contemplation or meditation. This introspective technique was used in the Ecological Identity sense-of-place meditation activity as well. Such activities work to fashion new types of personas because they offer a time and a space in which to reflect deeply on one’s own conduct. The use in this activity

of a reflective diary as an “organising tool” may be one of the reasons why an activity such as this is able to work with children who, with rare exceptions, are not already trained to do this sort of intense reflective work upon themselves. With the aid of the diary, participants are able to reflect on their own conduct and their own “being”. This reflection teaches students how to position themselves in relation to nature and to see themselves as connected to the natural world, indeed as *obliged* to relate to it in a certain way.

Organising tools

The Earth Education programmes use a range of tools to help participants organise their reflections on their learning experiences both during and after the programme. These organisers ‘help the learners keep track of what is happening to them in a programme. It is the device that provides some logical way of holding on to the various parts of the experience, and if it is successful, serves as an accessing tool for the learners in the future’ (Van Matre 1990: 257). The *Earthkeepers* training manuals and diaries are indicative examples of the organising tools used in the Earth Education programmes.

Earthkeepers training manual

Participants must carry their “training manuals” with them at all times. The manuals direct participants by clearly outlining ‘what an Earthkeeper must do and describ[ing] the different levels leading to becoming a Master Earthkeeper’ (Van Matre and Johnson 1987: 54). Each section of the training manual concludes with a structured dialogue. In the *Earthkeepers* training manual, this dialogue is as follows:

Q: Why should you increase your contact with the earth?

R: Because getting in touch with the earth is a good feeling.

Q: What is the meaning of E.M.¹¹⁰ for experience?

R: E.M. means _____ [students fill in “My Experience”].

Q: Can you prove it?

R: I have the key to the box.

Q: And what was written in the box?

¹¹⁰ E.M. is a mythical (and mystical) figure who runs the *Earthkeepers* Training Centre but whom students never see (because, as they later find out, E.M. means “ME”).

R: It says E.M. means _____ [students fill in “My Experience”] because that’s how I can increase my contact with the earth. (Van Matre and Johnson 1987: 34)

While the focus here is clearly on shaping the individual through reflection on their own experiences in the environment, the final dialogue in the *Earthkeepers* training manual illustrates that these new persons must also be able to convert others to the cause of saving the planet:

Q: Why should you share your Earthkeepers experience with others?

R: Because helping others improve their relationship with the earth is an urgent task.

Q: What is the meaning of E.M. for sharing?

R: E.M. means _____ [students fill in “Me”].

Q: Can you prove it?

R: I have the key to the box.

Q: And what was written in the box?

R: It says E.M. means _____ [students fill in “Me”] because it’s up to me to help others improve their relationship with the earth.

Q: And who is the real keeper of the keys?

R: _____ [students fill in “I am”] the keeper of the keys. (Van Matre and Johnson 1987: 39-40)

Once students have completed these tasks in their training manuals they are then asked to repeat them verbatim by various “trainers” and “guardians” during the course of the programme. This is because van Matre *et al.* believe that ‘[t]his repetition reinforces the major objectives of the programme and gives [participants] a way of continually adding to their understandings without forgetting what they have already gained’ (1987: 55).

Earthkeepers diary

In the “*Earthkeepers diary*”, participants are encouraged to ‘record things that relate to [their] relationship with the earth’ (Van Matre and Johnson 1987: 56) both during and after the programme. The diary is ‘their special, personal record of their journey to becoming an Earthkeeper and living more in harmony with the systems of life on our wondrous planet’ (Van Matre and Johnson 1987: 57). However, it is not a space without norms and rules for governing conduct. In a message at the beginning of the diary, the habits of the model environmental person are made clear to participants:

I always write in my diary at least once each season; all Earthkeepers should. Even if I'm not in my magic spot, I still write down the neat natural places I've visited and the new plant and animal passengers I've met. I also use my diary to keep track of how I'm doing as an Earthkeeper. It helps me look at how I'm gaining new knowledge, experiencing nature, lessening my impact on the earth, and sharing all of this with my family and friends. After all, an Earthkeeper never stops trying to be a better friend of the earth. I thought you might enjoy a diary like mine. Begin using it at the Earthkeepers Training Centre and keep adding to it at least once a season. I think that you'll find that it helps you keep in touch with something that's very, very important – your relationship with the earth. (Van Matre and Johnson 1987: 56)

We know, after Weber, that diaries have long been used as devices for both ordering and reflecting on one's moral life. The diary as it is used in the *Earthkeepers* programme acts as it did 400 years ago for the Protestants, that is, as a device for keeping a constant check and reckoning on one's own conduct.

Habit tasks

Habit tasks are the final type of activity used in the Earth Education programmes. Habit tasks seek to instil new habits in participants that will enable them to live their lives in a more environmental fashion. The habit tasks provide participants with opportunities for examining their own lifestyles, provide examples of good environmental habits, and provide strategies for crafting a life and lifestyle that is more in harmony with the natural environment. According to van Matre:

We must ask our participants what they can do to get more of those good feelings into their daily lives ... we can examine their daily routines looking for new ways to enhance their ecological feelings. Even better, we can have them do it for themselves. It's easy. Just ask people to make a list of those things they normally do – from the moment they get up until the moment they go to bed – each day during the week (save the weekends for later). Now go through their list with them looking for ideas about how they can do things in a way that will also support or enhance their feelings for the earth. (1990: 139-40)

In *Sunship III*, this work begins before participants embark on the field experience. While at school, they fill out a "Life Inventory" where they reflect on their current skills, the people who have influenced them, how much power they feel they have over decisions that affect their lives, and the environmental

impact of their current lifestyles (Van Matre and Johnson 1997: 10-14). In this way, the process of reflecting on their habits begins while they are still in their home environment.

The four post-programme tasks in *Earthkeepers* also require students to reflect on ways in which they may be able to lessen their impact on the environment; ways in which they can deepen their feelings for the environment; and ways in which they can share their experiences of the environment and what they have learnt during the programme with others. For the lessening impact tasks, for example, students are asked to do the following things for a month and then to have their parents sign a confirmation that they have done them:

Lessening impact tasks

Energy – Choose one:

Heat: When you feel cold, put on a sweater rather than turn up the heat.

Electricity: When you are not using a room, make sure all lights and appliances are turned off.

Transportation: Instead of getting a ride in a car to somewhere you often go, begin walking or riding your bike.

Materials – Choose one:

Water: When you are using water to wash your hands or brush your teeth, turn the faucet on gently, and leave it running only as long as you need it.

Paper: Write on the back of writing paper instead of throwing it away.

Aluminium: Recycle all the aluminium you use.

My son/daughter has done the tasks checked above consistently for at least one month. I believe they have become habits he/she will continue.

Parent's Signature. (Van Matre and Johnson 1987: 102)

In another of the post-programme tasks, students are asked to continue to deepen their connection to the environment by finding a magic spot near their homes and using it; by exploring new natural areas; by continuing to write in their diaries; and by writing poems or stories (Van Matre and Johnson 1987: 103). Another post-programme task is to share their knowledge and experiences with others (Van Matre and Johnson 1987: 104-6).

These habit tasks are designed to embed the new habits students have experienced through the programme, and/or have made a commitment to do as part of the programme. They act as techniques for fashioning a certain type of person by providing very detailed descriptions of the new types of conduct that are needed, along with tools and strategies for ensuring that these new behaviours become habits. They also work to fashion new types of persons because they are all-encompassing orders of living. Participants reflect daily in a journal about their performance, and about what they could be doing instead. Thus, a concern with one's conduct becomes all-encompassing.

Fashioning a self

The description of the Earth Education programmes and activities above illustrates how earth education can be understood as a training regime through which new environmental personae come to be fashioned. Each of the Earth Education activities seeks to govern an aspect of environmental conduct, be this ways of thinking, ways of doing, or ways of being. They seek to “empower” students with a sense that they can, and should want to, live their lives as environmental citizens. It is the combination of these sorts of activities, used in an ongoing, lifelong manner, that leads not to the recovery of an instinct – a reconnection with the planet – but to the fashioning of a new type of person: the active and informed environmental citizen. These are orders of living – very similar in their structure and operation to those used centuries ago by Protestants in Europe. They govern environmental conduct by fashioning persons who are able to govern their own environmental conduct. In this way, we can understand empowerment as a governmental technology of citizenship, as a technique for fashioning new types of environmentally self-regulating, self-governing citizens. Here we see that power is indeed productive, productive of new types of persons, able to govern their own conduct, according to a pre-determined set of (governmental) norms. It is through such fashioning of new personae, with new habits of living, freely and willingly adopted, that liberal governments are able to govern with a light hand.

TECHNIQUES OF GOVERNMENT: A NEW UNDERSTANDING OF EMPOWERMENT

The description of the Ecological Identity and Earth Education programmes makes clear the centrality in environmental education of the “will to empower” individuals to be self-governing environmental citizens. While these programmes seek to empower individuals to “rediscover” or “reconnect” with their environmental selves, this is in order that they may know how, and be empowered to, govern their own environmental conduct. Governing one’s own environmental conduct is a hallmark of being an environmental citizen, as these programmes make clear. As I have noted previously, in seeking to shape individuals as self-governing citizens, environmental education can be understood as a mechanism of liberal government, and empowerment as a technology of citizenship, through which new types of persons – such as the environmentally active and informed citizen – are fashioned.

This is not to say that empowerment or environmental education is “bad” or something that we should avoid doing. Rather, it is to say that if we understand empowerment as governmental rather than as transformational, then we will be able to see some success – rather than endless failure – for environmental education. The description I have undertaken above of the range of activities used in the Ecological Identity and Earth Education programmes supports the key argument that I am making in this thesis: that environmental education can be understood as successful if we free it from the tyranny of transformation, and understand it instead as a mechanism through which environmental conduct is able to be constituted in particular ways.

The question for environmental educators is how such programmes might look, if they deployed the same techniques but freed themselves from the goal of moral transformation. Would such programmes automatically be repressive if they are not seeking to transform? Perhaps they would look the same, given that, as Hunter has noted, the school is a hybrid institution – an institution of the State, using the techniques of the Church. Perhaps, free of the moral agenda, such programmes would have greater clarity of purpose – the fashioning of environmentally active and informed citizens – and greater clarity of process –

strategies and techniques for fashioning, not transforming. Such an approach might also make it easier for us to evaluate whether or not environmental education is successful in achieving its ultimate goal of ensuring that all live their lives in less environmentally damaging ways.

CONCLUSION

In this chapter, I have identified and examined the ways in which environmental education, through a governmental exercise of empowerment, may be able to successfully constitute individuals as active and informed environmental citizens, individuals who are not necessarily transformed by becoming empowered but who do have a new, and less environmentally damaging, “daily practical mechanism of conduct”. An argument has thus been put forward for success to be recognised for environmental education, not at transforming whole beings ready for a world beyond this one, but practical and accessible success at fashioning new personas, personas that allow individuals to conduct their lives in a less environmentally damaging fashion.

Given the revised understanding of power – as productive, not repressive, as relational, not uni-dimensional – offered by the notion of governmentality, environmental education as a mechanism of government, through which conduct is governed, should be seen in a positive light. Programmes such as Earth Education and Ecological Identity can lead to positive outcomes for the environment, as they are able to fashion new personas with the concerns, interests and capacities of environmentally active and informed citizens. However, if they remain focussed on transformation rather than on the task of fashioning new personas, then they will invite, inevitably, a charge of failure. I would thus argue that in environmental education we need more programmes such as Ecological Identity and Earth Education, in the sense of programmes that are clearly focussed on the “how”. They would however, need to jettison the desire to transform, if they are to be successful at bringing into being the environmentally active and informed citizen.

CHAPTER SIX

DEFENDING THE INDEFENSIBLE: AN UNPRINCIPLED ACCOUNT OF SUCCESS IN ENVIRONMENTAL EDUCATION

Classical liberalism did not wish to be an all-encompassing, universal worldview but merely a political programme aimed at eliminating specific social and political evils. (Geuss 2002: 333)

[W]e can see the state as ... a new form of pastoral power. (Foucault 1982: 215)

[Power] doesn't only weigh on as a force that says no ... it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. (Foucault 1980i: 118)

Citizens are not born; they are made. (Cruikshank 1999: 3)

AN UNORTHODOX DESCRIPTION OF ENVIRONMENTAL EDUCATION

Throughout this study, I have aimed to make three significant and original contributions to the field of environmental education. First, I have presented a new understanding of environmental education by employing an analytics of government to describe the field. Second, I have presented a framework for understanding the ways in which power, knowledge and the self intersect in modern liberal modes of rule in order to argue for its usefulness in understanding the current theory and practice of environmental education. Finally, and most importantly, I have offered a way for the field of environmental education to disengage from the heavy charge of failure – the failure to achieve transformation – under which it presently labours. To this end I have presented a positive account of environmental education practice – an account that offers a rethinking of what we are actually doing when we engage in theoretical debates and when we seek to empower individuals to be active and informed environmental citizens.

This thesis also offers the field of environmental education new ways of understanding: of understanding the relationship between power and knowledge – not as repressive and limiting but as mutually interdependent and productive; of understanding the self – not as psychological or as essential but rather as

historical; and of understanding the notion of empowerment – not as liberation or as “re-powering” but rather as a technique for governing conduct. These new understandings have allowed me to present in a more positive light – rather than see as a failure – environmental education’s strategies for governing environmental conduct.

The field of environmental education shows great concern with its failure to successfully transform the lives of individuals so that they are able to be environmentally active and informed citizens and live in a sustainable manner. To examine whether this sense of failure is an accurate reflection of the actual circumstances and outcomes of environmental education, this thesis has engaged in “worrying” certain traditions and assumptions of environmental education. This involved questioning whether environmental education is indeed failing to equip individuals with new concerns, interests and capacities, and whether the moral fundamentalism of the goal of individual and social transformation is the only “true” measure of success for environmental education. In considering whether good environmental deeds on their own are “enough” or whether a particular environmental morality must accompany personal and social transformation, I argue that environmental education is capable of registering success, albeit limited, if it jettisons the anti-statist, over-idealised and utopian goal of moral transformation that it has set for itself.

It is my contention that the widely held but unrealistic goal of moral transformation can only result in failure, as this goal prejudices success and prevents it being recognised. This study therefore offers an alternative to the discourse of failure that I argue inevitably accompanies a focus on deep transformation. It offers a fresh look at an old and orthodox story – a story that seeks moral transformation through empowerment. In doing so, this study offers a possible route out of a limiting bind in which the field of environmental education has trapped itself. Perhaps success is possible, if success can be seen in changed conduct and orders of living that might not be countable as transformative but that do allow individuals to live their lives in a more sustainable manner.

The success of which this study speaks is, therefore, not success at moral transformation. Rather it is success at being able to cultivate new practices and very specific patterns of conduct – for example, success at fashioning new personas with new habits for freely and willingly governing their own environmental conduct. Such success will always be limited, as it is the result of a governmental intervention, which – as this thesis has shown – is, within modern liberal modes of rule, purposive, limited, and specific, rather than transformative. As Geuss pointed out, liberal modes of rule are ‘morally highly abstemious’ (2002: 333) and are therefore not concerned with what citizens believe – like salvation, that is the work of the Church – only with how citizens conduct themselves as members of the “city”.

In this chapter I provide a concluding account of the focus of this study and examine the implications of considering environmental education through a governmentality framework. I discuss what it might mean for environmental education if the unmergable are merged rather than opposed – the State and the self, education and training, coercion and freedom. I also discuss what it might mean for environmental education to think of its work in terms of techniques, strategies and mechanisms; what it might mean for environmental education to let go of the desire for moral transformation; and what it might mean for environmental education to understand itself as governmental. The implications of thinking in this way are not trivial. The chapter concludes by discussing a range of future research directions this study opens up, should the field of environmental education choose to take up the challenge such a fundamental reconceptualisation of the field offers.

SEEING SUCCESS IN ENVIRONMENTAL EDUCATION

The aim of this study has not been to identify *a* truth about the “best” way to achieve “good” environmental conduct. Nor has it aimed to draw generalisable propositions about environmental education that can then be “applied” to similar issues. Neither has this study sought to develop a general theory about “government”, “power”, or “governmentality”.

The aim of this study has been more mundane: to open to examination the ways in which quite particular power relations have allowed certain dispositions in environmental education to be elevated to positions of unquestioned truth, or orthodoxy, within the field, and how such an orthodoxy has effects on practice and thinking within the field. This study has shown how one approach – education *for* the environment – has been victorious in establishing itself as orthodoxy, through its effective – that is, successful – use of all the mechanisms and strategies that the intersection of power and knowledge within modern liberal modes of rule affords. This approach, with its anti-statist stance and social change pretensions, has become the orthodox view for the field, acquiring all the influence over theory and pedagogical practice that such a position of superiority affords.

The orthodox strategy for bringing about the personal and social transformation desired by education *for* the environment is empowerment. This study has offered a positive account of environmental education by describing empowerment as a governmental technology of citizenship, a technology that enables the concerns, interests and capacities of an environmentally active and informed citizen to be freely and willingly acquired. This study has therefore answered the following key question: How can environmental education be understood as successful? This has been achieved by making visible the ways in which environmental education, through its conditioning-conditioned relationship with government, develops and deploys governmental mechanisms, strategies and techniques for governing conduct through the fashioning of environmental personas. This study has, therefore, described how a certain notion of empowerment – as transformational – has come to be understood and operationalised in and through environmental education as the principal means for bringing about both individual and social change “towards sustainability”.

In describing environmental education as a field of endeavour that remains contingent on its historical, cultural and political settings and circumstances, the “transition towards sustainability” can be understood as a governmental

strategy for managing a population's impact on the environment, not as a means to liberate or transform. This study has thus shown how the range of techniques used in environmental education, some of which have religious genealogies, are strategies through which new types of persons are able to be fashioned – fashioned as environmental citizens with the concerns, interests and capacities for willingly and freely governing their own environmental conduct.

Rather than understanding this in a negative light, this thesis has offered a positive account of the quite specific conditions of modern liberal modes of rule that enable and facilitate the fashioning of empowered, active and informed environmental citizens through environmental education. If this new type of person is the goal of environmental education, then we should see success for the field in such a fashioning, despite its resolutely anti-humanist stance and clearly governmental association.

This study has used an analytics of government to gain a purchase on the regimes of government that operate in and through the mechanism of environmental education. Most contentiously, this thesis has made the claim that the field of environmental education does not sit separate from or above the State, but is instead a key mechanism through which modern liberal modes of rule are able to govern the environmental conduct of particular populations. The principal contribution this study makes to the field of environmental education then, is to show it to be a successful mechanism through which liberal governments may come to govern the environmental conduct of their citizens. In reframing environmental education in this way, the fashioning of new personae with new codes of conduct can be understood – in a governmental context – as a means for managing a population, not as a quasi-religious endeavour dependent and intent on the total moral transformation of the whole person.

There are thus some grounds – albeit definite and limited – for claiming success in environmental education. However, such a claim requires rethinking the notion of success: a rethinking that sees success not in morally transforming

entire populations but rather in equipping individuals with quite definite concerns, interests and capacities that will enable them to live their lives in an environmentally sustainable fashion. In order to see the success that environmental education is capable of achieving – success that is not transformative but limited and specific – this study has shown the need for a new understanding of the concepts of power, knowledge and the self. As has been shown, after Foucault, power can be understood as dispersed, relational and productive; knowledge and power can be understood as intimately intertwined and integral to the efforts of modern liberal governments to conduct the conduct of populations; and the self can be understood as a historical product of power relations.

NOVEL CONTRIBUTIONS

The findings of this research study provide a range of insights that have major implications for how environmental education is both thought about and practised. The principal of these is that actual changes in conduct – even if they are “non-transformative” – should be considered as successes in their own terms. This may only be done, however, if the field of environmental education engages in a significant rethinking of key concepts: government and power, the self, and empowerment. Such a rethinking would have major – and positive – implications for environmental education practices and programmes, theory, and policies – and for the natural environment itself.

Rethinking Government and Power

If the field of environmental education is to be successful in fashioning personas capable of living in an environmental manner, then environmental educators’ current understandings of power and government need to be radically rethought. Rather than understanding government and governmental power as repressive, Foucault has shown how in liberal forms of government power is productive and pastoral. Governments seek not to repress their subjects but to conduct their conduct. Indeed, rather than being positioned against an active and informed citizenry, there is a ‘political utility’ (Foucault 1980j: 101) in such citizens.

For modern liberal modes of rule which seek to govern at a distance and to address the problem of the environmental crisis, a citizenry that has the concerns, interests and capacities to manage their own environmental conduct – be this in recycling their waste, taking shorter showers, installing more energy-efficient light bulbs, or using public transport – undeniably has ‘political utility’. Such a positive view of government and power remains highly problematic for the prophets of environmental education who remain captive to a battle between “the State” and what is commonly termed “civil society”. However, if we want to be successful in bringing new types of persons with new habits into being, then it is essential that these old – and unproductive – dispositions be left behind. New environmental conduct will not be achieved by engaging in the intractable, centuries-old argument between “Church” and “State”, especially in the context of liberal modes of rule. It will be achieved, however, by fashioning new personae that have the attributes that allow individuals to take on the orders of living appropriate to an environmentally active and informed citizen.

Rethinking government and power in these ways means that environmental education’s understanding of social change also needs to be rethought. With this new liberal framing of government and power, social change can no longer be thought of as only being able to occur in opposition to “the State”. The essential role of government in bringing about social change should be acknowledged. In addition, social change will need to be seen less as a moral goal for civil society, and more as a governmental response to particular problems – local and specific to a particular time, place and issue. Understanding this means letting go of the sense that social change can only occur in opposition to “the State”. Such a “letting go” would mean a radical shift away from transformational thinking for the field of environmental education.

This is not a negative outcome for environmental education. Indeed, Foucault’s studies allow us to understand the powerful role experts play as ‘engineers of

human conduct' (Rose 1999: 92), engaged in formulating and implementing governmental programmes of reform. Such an understanding of the expert – at one with, rather than opposed to government – allows environmental educators to pursue social change through openly engaging with governmental mechanisms, strategies and techniques.

Rethinking the Self

This study has shown that the self can be understood as historical. Such a shift in understanding is a major one, given the established view of the self as unique and essential. What a shift to an understanding of the self as an historical product of particular power relations offers the field of environmental education is to free it from the constraints imposed by the desire to transform. If the self is not essential but rather an historical and cultural assemblage of attributes and personae, then there is nothing essential to transform. Instead, there is every possibility to successfully fashion new personae, with new assemblages of attributes, including those that will ensure that individuals are able to live in an environmentally sustainable fashion, or be environmentally active and informed citizens.

History has shown us that the individual “as person” supports a variety of statuses to which attributes are ascribed. These statuses and attributes depend on definite social mechanisms and techniques and have no general form or distribution. We can thus see that the status of “individual as environmentally responsible citizen” is fashioned through the “gaining” of various attributes of an environmentally responsible citizen. As has been shown in this thesis, these attributes are acquired through definite governmental techniques. Such an historical understanding of the self allows us to see that particular statuses – such as the environmentally active and informed citizen – and the attributes peculiar to this status, are not contained within the “essential nature” of the individual, waiting to be released through empowerment. Rather, such attributes and statuses are constructed and ascribed to persons using specific techniques – such as empowerment – and with definite purposes – such as the fashioning of self-governing citizens. This does not, however, imply indoctrination or

manipulation. Such fashioning takes place through the unique intersection of expertise, power and the self that occurs in liberal forms of rule. This intersection means that we are fashioned – and fashion ourselves – quite freely and willingly in pursuit of our “self-identified” needs.

The shift to such a view of the self will be, I suspect, the most difficult one for the field of environmental education to make, as it requires letting go of a very firmly held humanist conviction in an essential self. Not to attempt to do so, however, will limit the field’s capacity for success and for achieving the goal of fashioning environmental citizens. If we believe there is an environmental crisis, then fashioning environmental citizens is an urgent task for the field.

Rethinking Empowerment

The final “rethinking” this study offers the field of environmental education concerns the notion of empowerment. As I have argued throughout this study, empowerment is not a means through which to liberate the repressed. Rather, it is a governmental technique used in environmental education to govern conduct by fashioning environmentally active and informed citizens. Indeed, understanding empowerment as a means of “giving” or “helping others to find” their own power of resistance is a conception too dichotomous to fit with the complex nature of power relations in liberal forms of government that Foucault has traced.

Empowerment then is not a means to liberation but is rather, as Cruikshank’s (1999) study demonstrated, a technology of citizenship. Indeed, programmes that seek to empower are ‘particularly clear examples of those contemporary liberal rationalities of government that endeavour to operationalise the self-governing capacities of the governed in pursuit of governmental objectives’ (Dean 1999: 67). Hence, environmental education’s commitment to the strategy of empowerment (albeit a commitment that, for various reasons, seriously misconstrues what empowerment actually is) is in reality another sign of its function as a mechanism through which liberal modes of rule seek to govern conduct.

A FOCUS ON SUCCESS: EFFECTS

If the thesis I have presented – that it is possible to see success in existing environmental education – is correct, then these insights have major implications for environmental education theory, practice and policy. In understanding the theoretical debates, development of policies and deployment of environmental education programmes as strategies for shaping subjects and governing their environmental conduct, environmental educators will be able to free themselves from the current orthodoxies and develop more effective and more focussed means for bringing about changes to environmental conduct. Foucault’s studies have helped us to understand that there may be a greater chance for success from programmes and strategies that are targeted at specific and limited problems, than there is from a quasi-transcendental position of high principle committed to the fundamental transformation of entire populations. Therefore, I propose a perspective on environmental education that does not continue to assume a transformative moral principle as the necessary pre-condition to meaningful change in environmental conduct.

The implication of this is that small changes in conduct – despite being morally non-transformative – may be enough. Such changes have their normative value. If this is the case, then environmental educators will be able to develop far more targeted programmes that spend less time on attempting to bring about moral rebirths in children and adults and more time on trying to instil new orders of living or patterns of conduct. In doing so, environmental educators will also be able to see some success, not at awakening pre-arranged inner beings, nor at transforming evil into good, but at fashioning new environmental persons who freely employ the concerns, interests and capacities that will allow them to live sustainably. Such an achievement is no mean feat. It should not be belittled as “mere behaviour change” but should rather be understood as a quite remarkable governmental success.

A further implication of the thesis presented here is a view of the school – as one of the principal institutions through which we are “trained” in these new

orders of living – that is positive rather than critical. The school should not be understood as an inherently limiting institution of power and oppression. To the contrary, its ability to produce new capacities and sophisticated attributes – whole new personae – should be admired. Rather than being critical of the school for engaging in “training” instead of “education”, we should recognise the success of the school in fashioning beings that are not only willing and able to be civilised members of the city but also active and informed citizens. The school can be seen as productive: it does not prevent the subject from knowing its true essence; rather, it fashions subjects. This is another remarkable achievement. Indeed, the school is one of the most successful governmental mechanisms we have for teaching ourselves how to be self-governing citizens so that we are able to live together, free of the bloody battles between competing moral positions we have experienced in the past in the West. As such, the school may also be the most suitable institution we have through which to fashion environmentally active and informed citizens.

The principal lesson of this thesis, then, is that if environmental education is seeking to develop new forms of conduct – indeed, new types of persons – to deal with the environmental problems we face, then we need a new environmental education pedagogy focussed not on a global goal such as moral transformation but on localised, mundane goals and achievable changes. It may well be possible to avoid an environmental crisis through the cumulative benefits of a series of mundane habits, adopted by self-governing citizens, both inside and outside of institutions. Such a shift in focus represents a major challenge to environmental education. However, it is one essential for the field to accept, if an environmental crisis is to be avoided.

FURTHER RESEARCH AVENUES

This study opens up a range of avenues for further exploration. The first of these is the need to examine the notions of the self, knowledge and power presented in this study across a far broader range of environmental education programmes and theoretical arguments than it has been possible to do here. This will further assess the veracity of the thesis I have presented and provide

additional understanding of how we might change how we think about what we do – and how we might change what we do – in environmental education.

It would also be useful to undertake a longitudinal study that tracks exactly how environmental education is able to fashion conduct. If the participants in an environmental education programme such as Earth Education or Ecological Identity were tracked over a period of time, an analysis of how new ensembles of attributes are acquired and made habitual as participants' relations to their self were changed, could be undertaken.

Another avenue to explore would be one that seeks to understand what a programme such as Earth Education or Ecological Identity might look like were it not seeking to morally transform. What would a “governmental” environmental education programme, incorporating the citizenship techniques of Earth Education or Ecological Identity, look like? What would these programmes look like if the higher moral order was set aside?

A study that looks more closely at the links between the thinking and practices of environmental education and religious thinking and practices could examine why environmental education has the propensity to be more spiritual and less secular. Other possible avenues for exploration along these lines include an examination of how the Christian notion of transformation has been transported with environmental education into non-Christian and non-liberal cultures. Thanks to the efforts of international organizations such as the United Nations, environmental education, with its goal of transformation, has become a global project, as evidenced in the “Decade of Education for Sustainable Development”. An interesting study would be to examine what happens to the orthodoxy of transformation and to the notion of empowerment when it is taken up within non-Christian and non-liberal cultures.

CONCLUDING THOUGHTS

The overarching aim of this study has been to contextualise the dominant discourse in environmental education – the discourse of moral transformation,

and its attendant assessment of failure – within its particular historical, political and cultural circumstances in order to understand that it has a history. The discourse of transformation may be much older than its contemporary exponents in environmental education acknowledge. In outlining the historicity of this discourse, the thesis argues that moral transformation is not essential to environmental education's success but is rather an historical artefact, one that limits recognition of success. Maintaining a focus on moral transformation may well prepare one for the next world: however, such a focus limits the possibilities for achieving and recognising success – perhaps even for our continued existence – in this world.

St. Paul, in his letter to the Ephesians, argued that good deeds alone would not be enough to enter heaven. Good deeds may be enough, however, to ensure our continued existence on this planet. For environmental educators, perhaps conduct should come before conscience, manners before morality. If better environmental manners are *enough* to avert environmental crises, perhaps it is time for environmental education to unshackle itself from the eschatological Christian goal of transformation. Let us not focus on morally transforming the whole person, but rather focus instead on changing only their environmentally damaging deeds.

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