

**A POSTMODERN APPROACH TO ECOLOGICAL
SUSTAINABILITY:**

THE RE-ENCHANTMENT OF FIJI'S FORESTS

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WEAVING

The landscape gave to me a loom
And bid me to weave a garment true
"For who?" I asked, as it was not clear
"For me" it replied, "for me to wear"

So I took the threads of my experience
And lay them together as warp and weft
And because the threads came from this place
The pattern to emerge was one of grace

But why was such a lovely gown
Woven by me without a plan?
But then at last the answer came:
Both loom and threads came from the land.

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ABSTRACT

"Na cava na i sau ni taro ni kena tamusuki na veikau e Viti?", a vuqa era taroga. Au nanuma ni bibi cake na taro. Kevaka e cala na veitaro e tarogi sa dredre sara me kunei na kena i sau a veiganiti. E gadrevi li me vakavinakataki na kena vakatulewataki? Se na navunavuci vinaka li? Na bula toro cake vakailavo li? Se na i tovo vakavanua? Au nanuma ni vu ni nodra vakacacana na tamata na veika e tu tikivi keda a Viti me vaka na musu kau e vakatau mai na noda i tovo vakavanua. Ia na mataqali tovo vakavanua cava a tokoni e Viti me baleta na kena i tuvaki ni vanua, se tiki ni tovo cava e cala? E Viti e kunei kina na bula veimaliwai ni veimatatamata, ia sa bula ka donumaka e dua na gauna ni veisau vou. Na veisau vovou sa kena i tovo na kila ka, kei na i tovo e bucini cake ena yavu ni vakasama e taucoko. Na veisau vovou sa veisautaka na i rairai ni vanua e Viti ka kidomoka na veika kece e vakamareqeti ki na dua na kena yaga e qiqo. Ia, na tamusuki ni vaikau sa vakayacori makawa e Viti ni bera na gauna ni veisau oqo, e na gauna ni bula va-Koloni, ka sa dodonu me rau beitaki ruarua na i tovo e rua oqo. Na nona dusi e dua me beitaki ena sega ni vukeya na leqa, ia na veika e rawa ni vakayacori sa i koya na noda taqomaki keda mai na noda vakalecalecava ni sega ni cala na i tovo ena kena vakacacani na veika e tu tikivi keda. Na vei tovo kece sara e dodonu me ra vakaitavi ena kena kunei na bula toro caki. Na i vakarau ena sega ni vunitaki dua mai na i tavi me qaravi. Na kena rawati na i naki ni nodra karoni me tudei na veika bula e tu tikivi keda sa gadrevi kina na vakatulewa matau ka ni veika e dau yaco e sega ni vaka i vakarau. Sa gadrevi talega kina na i tovo ka sega ni okata na kila ka me gaunisala duadua ni kena veivosakitaki na i tuvaki ni vanua. Na kena vakaduavatataki ni veivakasama kei na rokovi ni veika tawa kilai vakakina na veika e tawa siqemi rawa sa rawa ni kunei ena vuqa na i tovo, ka okati kina na vei tovo makawa vaka-Viti kei na nodra na vavalagi. Kevaka e vakasaqarai dina me tudei tu na vanua era bula voli kina na veika bula tikivi keda, na i tavi e tu sa i koya na kena vakasaqarai se kunei vou tale eso na veivakasama vovou kei na kena vakauqeti na nodra bula vakataki ira ga na veika bula.

"What is the answer to deforestation in Fiji?" many people are asking. To find an answer we first need a question. If the wrong question is asked the possibility of an appropriate answer is out of reach. Is better management needed? Is it better planning? Perhaps it is a greener economy? Or is it culture? I argue that the causes of human induced environmental degradation in Fiji such as deforestation lie in the character of culture. But what culture or cultures do the landscapes of Fiji support, and what aspect of culture is at fault? Fiji is culturally diverse but currently dominated by modernity. Modernity is a culture of knowledge, and a culture built upon the foundations of a steady state rationality. Modernity has disenchanting the landscapes of Fiji and squeezed all forms of value into the narrow framework of utility. However, deforestation also happened in Fiji before modernity arrived with the colonial British, and so both pre-modern and modern cultures in Fiji must share the blame. Pointing at someone to blame does not solve our problem, but what it can do is prevent us from pretending that cultures are innocent when it comes to environmental disharmony. All cultures are responsible for enacting a sustainable life. Tradition will not hide anyone from that responsibility. Fulfilling the obligation of ecological sustainability requires a rationality of process because reality is in a constant state of flux. It also requires a culture that does not see knowledge as the only way of engaging in a conversation about or with a landscape. A rationality of process and a respect for the unknown and unknowable can be found in many different cultures, including the non-modern Fijian culture and non-modern cultures in the West. If ecological sustainability is what is sought, the task is a discovery or re-discovery of process thinking and a re-enchantment of Nature.

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PREFACE

I invite you on a journey: A journey to understanding ecological sustainability. I can't promise that you will get to the end, as there is no end - only an on-going journey. I began such a journey in 1990 at the onset of this doctoral research programme, and I am still on it. What you will find between the bindings of this dissertation is something of a travel diary describing my adventures on the way to the level of understanding I had when the thesis was submitted. This travel journal will hopefully provide you with a map that lets you walk a similar path.

I take you through a metaphorical landscape, a landscape full of obstacles. Looking back to where I have been along the way presented me with an opportunity to clear a path for you to traverse, thus meeting me where I now stand at the outer limits of language, at the threshold of a kind of silence, at the edge of a flowing stream of linguistic nothingness. At the waters edge we are able to gain a glimpse of what lies on the other side - an understanding of ecological sustainability. The thesis cannot take you or I there, as to get there we must get wet. We must learn to swim in this silence. In each chapter I will attempt to guide you through each stage without having to encounter all of the obstacles that I was confronted with - only a select few.

During the course of the various chapters we will pass quickly through a technical perspective and a non-critical social outlook. This will demonstrate the need for an adventure in theoretical development, in the preparation of a methodology. It involves the construction of a viewfinder that may be capable of uncovering the meaning of ecological sustainability, without reducing it to a false question. This becomes the main purpose of my work. We will prepare the ground for this theoretical exercise by passing through an introduction to a critical approach, an approach that is not afraid to question delicate issues. Following this we will discover the need to inspect the foundations of existing dominant theoretical frameworks. Such inspection involves a process of deconstruction where the philosophical foundations of modern viewfinders are dismantled. We will discover subtle flaws and realise the need to begin afresh, and proceed in such a way that the flow of understanding is not obstructed. We will then engage in a process of reconstruction, and the viewfinder that develops will begin to reveal what had been covered over and obscured.

I introduce a theory of ecological sustainability called the 'autobiography of the landscape' which is recited in language through a 'bioregional narrative'. Language plays a crucial role, where narratives and myths begin to make sense as a metaphorical means of bringing meaning into culture from beyond the reach of language. It is a means of letting the landscape speak, and thus be capable of informing us in the way of ethical instruction. I then develop a politico-linguistic means of bringing such a bioregional narrative into being.

It became clear that in different parts of the world the landscape to traverse on the way to understanding is completely different, with a different actual and metaphorical geography. The paths over such terrain will always need to fit the landscape they are in, and as such, a map that is successful in one place will not necessarily apply to another. We need to discover or re-discover these paths in our own landscape. In our adventures we must pay attention to the actual land we are in and not some hypothetical place. In order to prepare such a map and to walk the path it describes, we must experience the place we are in, and so, for this reason, I do not offer any universal formula - a map to end all maps, simply because no such thing is possible.

I wish to make it clear that one of the primary tasks of my work is to prepare the basis for a meaningful dialogue with Fijian culture concerning this issue of ecological sustainability. In being a member of a Western culture I take my torch from a fire that was lit more than 2,000 years ago in a part of the world which we now call Europe. In journeying to Fiji I apologise for some of my heritage (as modern colonialism is a nasty stain on my diplomatic robe) but not all of it. In this journey I seek to engage in discourse with Fijians who apologise for some of their heritage but not all of it - cannibalism notwithstanding. In bringing to the surface what I believe to be forgotten treasures of Western culture I hope to show that a true and meaningful dialogue is possible and desirable concerning ecological sustainability and *e na kana taqomaki na Vanua* (the protection of the landscape).

Before such a dialogue is possible I must carefully prepare my own ground for this discourse. Preparing this ground involves coming to an understanding of who I really am and what aspect of Western culture I hope to represent. To be able to do this I have had to look closely at Western culture in the light of the issue of ecological sustainability. Without engaging in such an exercise of cultural self-reflection I cannot hope to be able to represent anything from the West authentically. For all my criticism of Western culture (which will become apparent in the pages to follow) I realise that the

West is not homogenous. My respect for those in the West who also hold such criticism commands me to exercise a degree of caution in my critique. Demonstrating my own capacity for respecting parts of my own culture provides what I hope to be an indication of my capacity to respect Fijian culture as well.

All the romanticism and idealism in the world could not grant me the ability represent the Fijian side of such a dialogue. As such, my primary audience are not Fijians but modern people of any race. My thesis is a message to modernity. This message arises from a perspective that seeks to over-come the ecological contradictions of modern life. Modernity took a number of centuries to develop and similarly its over-coming is unlikely to happen over-night. I make no apologies for engaging in a debate concerning such an enormous cultural concern. I justify this by declaring that ecological sustainability is an enormous cultural issue and that it is incommensurable with modernity. It is a question that concerns the relationship between humanity and the rest of Nature in a particular landscape. The landscape of my concern is the Fiji Islands. Modernity is there, and ecological sustainability is not. I do not pretend that pre-modern cultures, by virtue of being pre-modern, are *ipso facto* ecologically sustainable. This is an unfortunate form of romanticism which I seek to surpass without bowing out to the status quo. I develop an alternative way of approaching the whole question of indigenusness, an approach that will be controversial. But an unprejudiced eye will recognise the path I have chosen to walk, a path that many have feared to tread.

The issue of indigenous forest conservation in Fiji presented for me a doorway into this debate concerning indigenusness, and ecological sustainability. The Vunivia catchment provides a case study which enabled me to guide my questioning from the lofty heights of philosophy to the dampness beneath my bare feet as I walked through the forests of that landscape, and the pains in my back, knees and ankles from the hours and hours of cross legged sitting in meetings with the local people there. Through the course of the thesis my thinking underwent a number of quite substantial changes in direction, as a yacht would do when tacking towards its destination. Like the yacht, my changes in direction were not random but were necessary in order to reach my target viz. an understanding of ecological sustainability. Although I was staying on course the research had the appearance of a waywardness as a sailing ship would appear to those unfamiliar with seafaring. The changes in direction were not preconceived as I did not know in advance where this research was taking me, they were discovered as I progressed. What remained important was that I continued to question relentlessly and also remain willing to discard my earlier views should they prove inadequate. It is for this reason that I

present my earlier views in chapters 3, and 4 then openly criticise them in order to move beyond them.

This thesis is an engagement in questioning, and in this questioning I will uncover a way of asking just what ecological sustainability might be without it being a false question. This notion of ecological sustainability refers to a relationship between humanity and the rest of Nature in a particular place. It implies a sustainable relationship. For something to be sustainable it must be compatible. The notion of compatibility implies an aptness. The notion of apt underlies the meaning of adaptation which is so commonly used in ecological and evolutionary theory (Toulmin 1981). However, the aptness of a human population in relation to the rest of the landscape is not merely a question of science. It is also a question of art. It is very much a human question. Accordingly, we are talking about social, cultural, political, economic, psychological, geographical, philosophical, aesthetic, and religious issues.

Human sustainability, as an enduring adaptive condition with a landscape, requires the perpetuation of a compatible relationship between people and place. This also requires the perpetuation of compatible relationships within a human community in order to sustain their collective outward relationship with their ecological surroundings. If obstructions to compatibility exist then the condition is not a sustainable one, as it will not endure. It is for this very reason that I take the human condition seriously in my questioning concerning ecological sustainability. It is also because relationships within a human community are also part of Nature, as I do not construct an imaginary boundary between humanity and Nature as many people in the West do.

If ecological sustainability is about the entire relationship between humanity and its ecological surroundings, then the ecological character of the whole of a human population must come under scrutiny. It cannot be addressed simply in terms of the activities and achievements of an 'environmental management sector'. Reducing ecological sustainability to a sectoral pursuit arises out of a misunderstanding of the ecological character of all human activities whether they be economic, social, political or even psychological.

Through the course of the thesis I endeavour to weave a number of seemingly incommensurable threads into a cohesive garment able to be viewed for the picture that emerges in the final pattern. However, in order to do this I have had to reinvent the loom (standard of rationality) as these threads could not be woven using the one I

inherited in my formal education. In so doing I discovered that my line of thinking was not alone in the wilderness (i.e. outside the dominant Western world view). Out here I have come across countless other outsiders who, in their aggregate, comprise a genealogy of a difference; a deep alternative heritage that has a history that predates Socrates and post-dates modernity.

This research programme has been a theoretical adventure, and to convey the meaning that it yielded required a careful unfolding of ideas so that its coherence and its relevance could be appreciated by my audience. A quote from Nietzsche is perhaps appropriate here - "One skill is needed - lost today, unfortunately - for the practice of reading is an art: the skill to ruminate, which cows possess but modern man [sic] lacks." (Nietzsche 1956: 157).

And so, as the Sierra Cognito lie ahead, in the spirit of Don Quixote¹ I mount my trusty steed (my conceptual framework), and with you upon a sturdy mount embark upon an adventure (this thesis), ready to engage in fierce and unequal debate with countless giants (philosophers of the Socratic tradition) and dragons (those driven by prejudice), all of which will endeavour to block our passage. It may have the appearance of insanity as it did with that self-acclaimed knight-errant of Castile. But whoever stands firm in their convictions takes on the appearance of madness in the eyes of those who do not understand their message. And like Don Quixote, I seek to augment a substantial change in my culture - to cultivate a reenchantment of Nature.

¹I refer here to the character of Don Quixote of the first part of Cervantes' tale, before the author destroys his spirit of abandon in the second part.

PART I
ECOLOGICAL SUSTAINABILITY AS HUMAN ECOLOGY

The thesis is divided into four parts. The Purpose of Part I is to introduce the thesis topic and the approach to be used in the investigation that follows. The various purposes of Parts II, III, and IV will be explained at the end of chapter 2.

CHAPTER 1 - INTRODUCTION

1.1 A GENEALOGY OF INQUIRY

The focus of this thesis is not so much Fiji but the issue of ecological sustainability. Fiji in general and the Vunivia catchment in particular presents a case study in which the question of ecological sustainability can be framed. Fiji provides a situation of environmental degradation, of landscape, of ecology, of societies, of economies, and of culture. Each of these ingredients play a part in the issue of ecological sustainability and, because of this, each of these aspects of a place called 'Fiji' have been subject to questioning.

But what do we refer to when we use the name Fiji? and what is this place that goes by the name of Vunivia? When using the terms 'Fiji' and 'Vunivia' I do not refer to a society, an ecosystem, a geographical territory, an economy, or a culture. I refer to a place that has all of these things and more. Commonly, a name of a place gives us meaning in terms of a spatial surface upon which we can conceptually add a variety of components. We may study these components in the framework of different disciplines such as ecology, sociology, economics, and anthropology for example. But I wish to keep all of these components of place together conceptually from the beginning as a form of geography (human and physical). This is because 'Fiji' is unable to be separated into components for purposes of study without misunderstanding this place. For this reason I will not undertake to introduce Fiji by summarising its location, population, climate, economic character, social structure, ecological diversity, and culture. Because to do this will lead directly to a misconception of what it is that I am studying.

I wish to introduce a concept of place rather than a place as such. This is because this concept of place is crucial to understanding what follows. Hence, a place called 'Fiji' is an experience which I have had and seek to capture in language. I began experiencing this place when I took my first breath at the Suva War Memorial Hospital in April of 1965. I have been experiencing Fiji ever since in a way that is peculiar to me, and as such, my experience of a place called Fiji will be necessarily different from that of any one else. I stayed in Fiji until the age of four when I came to live in Aotearoa/New Zealand. I returned to Fiji many times in subsequent years and grew to understand that place in my own way. In 1986 my relationship with this landscape changed when I conducted my first research project there with my BSc Honours dissertation on the regeneration of Fiji kauri (*Agathis macrophylla*) (Weaver 1987). From then on Fiji was to be a place of questioning for me, where that questioning focused on landscape and the idea of environmental management. I initiated a reserve proposal in 1987 concerning a 4,000 ha area of Fiji's last remaining stand of dense old growth kauri forest, as a result of my interest generated with my BSc Honours dissertation on that species. The area was finally gazetted by the Fiji government as the 'Wabu Creek Nature Reserve' in 1992.

My experiences with the political and planning processes surrounding this reserve proposal and its eventual protection kindled in me a vivid interest in the social and political process of environmental management, with particular concern for the indigenous forests of that country. I was employed as a contract 'biologist' in 1988 by the Royal Forest and Bird Protection Society to undertake a 'survey' of Fiji (with three other members of a team) to investigate the feasibility of implementing a national parks and reserves system for Fiji, and to prepare a national proposal (Lees 1989). This work was to prove to be a turning point in the focus of my professional interests as they related to environmental protection in general and forest conservation in particular. Although ostensibly employed as a 'biologist' the work involved very little biology. Most of the time in Fiji on that 2 month contract was spent negotiating with government planners over the economics of environmental protection in the light of the development aspirations of the tribal owners of all of these areas of natural forest. This experience led me to realise that a PhD in forest ecology was not going to help me in my quest to contribute to the protection of what remained of the untouched tropical rainforests of Fiji. I needed to know about economics, policy and planning.

These circumstances formed the backdrop to my research proposal to conduct this PhD thesis. The thesis proposal was driven by 1. a desire to understand ecological sustainability in relation to the forests of Fiji, and 2. a desire to know enough about

economics, policy and planning to be able to engage effectively in the process of environmental protection in Fiji. The thesis began in 1990, although I remained reluctant to place restrictions on the scope and the context of the research. Instead I proceeded to explore the issues in question viz. indigenous forest conservation in Fiji as a management process; and, answering the question: 'what does ecological sustainability mean?'. I was under the impression that the meaning of ecological sustainability would precipitate out of an inquiry into environmental management. I undertook a field trip in 1990 to frame the context of the research and visit the case study area. This study area - the Vunivia catchment is a place that I was already familiar with as it had been an area under investigation in the 1988 national parks survey. I focused on the economic, policy and planning dimensions of the issue in question with an eye on social concerns, which were then viewed from the perspective of a novice in the domain of the social.

At this stage in my learning I began to see the potential for alternative forms of development (i.e. alternative to logging) for areas of indigenous forest as a means of protecting them. Of particular interest at this time was tourism. Also of interest in the domain of planning was that of compensation to landowners in the establishment of protected areas on tribal land. Another area of particular interest at this time was forest history and its relation to management.

In 1991 I worked on a contract for the IUCN (World Conservation Union) as part of a consultancy to the Fiji Environment Unit (the National Environment Management Project). My role on the project team was varied. One of my tasks was to conduct a social case study of the Vunivia catchment (also my thesis study area) to help shed light on the social dimensions of environmental management in that country. In addition to this I designed a national environmental planning proposal for integrating the processes of site selection, planning and management of ecologically sensitive areas, which I called the 'Fiji Environmental Management Areas Programme Proposal'. I will discuss some of this work in chapter 3.

As a result of this work I began to understand the necessity for an explicit social dimension in environmental research and management, and the need to view the Fiji situation in the light of a broader international economic perspective. The thesis developed along these lines in the absence of any substantial exposure to what is available in the domain of social science. I could have left that out of the work and still produced a thesis that carried the central message of the need to bring a social analysis into environmental management planning.

However, not satisfied with my lack of understanding of social theory I undertook to study sociology in order that I could present a perspective on the domain of the social from a more informed position. Furthermore, and more importantly, I was still dissatisfied with my analysis as it seemed to be lacking a cohesive understanding of environmental management. Also I felt that I was still no closer to understanding the meaning of ecological sustainability although I did have many thoughts on this. The dilemma facing me was whether or not to tackle this much bigger question concerning ecological sustainability knowing that it was a far bigger issue than I had originally thought. I knew that if I pursued this idea it would turn the thesis into a much more radical, critical and philosophical exercise. In so doing I ran the risk of contradicting my earlier work, losing the confidence of my department, and losing the support of those I was professionally involved with. But I decided that hiding from risks leads to conservatism and stagnation, and certainly is not an appropriate attitude if ecological sustainability is to be understood.

For about 10 years or so I have had a hazy idea that the relationship between humanity and the rest of Nature rested upon the character of the human ecological niche. But what is this niche? I was at first under the impression that I could explain the human niche as the actual practising economy, but also knew that religion, world view, language and rationality played an important role. The common etymology of the words economy and ecology as the Greek *oikos* provided inspiration for a fusing of these two domains in a theory of ecological sustainability. I was then inspired to throw myself at ecological economics as the meta-discourse for framing the notion of ecological sustainability qua the human niche. However, I was still dissatisfied with this line of thinking as it still prevented me from going outside economics into the cultural milieu that make economics possible.

I moved from a position of dialectical materialism into one of dialectical transcendental realism² thus moving my professional position to one commensurate with my private one. I began to piece together a theory and method of environmental research which I call 'transcendental cultural ecology'. It is a transcendental, dialectical and holistic approach to understanding environmental issues such as deforestation in Fiji with specific reference to ecological sustainability. This theory and methodology is concomitantly a means and an end of this inquiry. The theory came about through a

²Dialectical materialism and transcendental realism are discussed in chapters 5 and 6 and appendix 2.

process of questioning and became a philosophical and theoretical platform from which to revisit the idea of ecological sustainability in Fiji. It provided a means of tying together many different threads that had appeared to be relevant yet hitherto could not be woven into a cohesive fabric. The only way that such cohesion became possible was when the thesis moved back from the theoretical canvas far enough to be able to bring culture into view. It was at this level that I was able to present a discourse of ecology and of society without reducing one to the other, i.e. by developing a discourse that encompasses more than both.

1.2 THE DEFORESTATION DEBATE IN FIJI TODAY

The continued loss of indigenous forest ecosystems is a major problem in Fiji today. Statistics, however, are always conflicting and it is difficult to develop an accurate picture of the actual rate of deforestation in that country. Some predictions suggest that Fiji's indigenous forest resource will be all but exhausted within 50 years (Watts 1980), whilst others are less pessimistic. At present the exact total area of indigenous forest cover in Fiji remains unknown although various figures have been used. The most recent official estimates suggest that approximately 750,000 ha still remain from a total land surface of 1.83 million hectares (Watling and Chape 1992). Between 11% and 16% of Fiji's forests had been converted to non-forest land uses between 1969 and 1991, with the rate of forest loss occurring at 0.5 - 0.8% per year from a base of 838,000 ha in 1967 (*ibid.*). However, figures such as these are not accompanied by an adequate definition of what is meant by the word 'forest'. Indigenous forests in Fiji are mostly logged over and in fact relatively little undisturbed natural forest remains. What does still exist tends to be targeted by logging companies and landowners as financial fruit ripe for picking. Furthermore, while indigenous forests are being removed or degraded, the establishment of exotic plantations obscure the deforestation figures. Exotic afforestation in previously non-forested areas, and reforestation and 'enrichment' planting of exotics in cut-over indigenous forest boosts the national statistics in terms of the total area of forest cover.

Due to much argument over the history of forest loss in Fiji (Weaver 1992b) the issue of indigenous forest conservation is shrouded in controversy. The debate is a complex one but principally revolves around the issue of whether the current industrial regime of forest utilisation (including the clearance of land for non-forest land uses) is any worse than pre-industrial phases in Fiji's cultural history. Some suggest that the modern Western economy is solely to blame (e.g. Weaver 1992a), while others argue that what

we are now witnessing in tropical deforestation is no worse than pre-colonial times (e.g. Brookfield and Overton 1988; Clarke 1988). To side with the former argument, for example, provides solidarity for indigenous rights movements irrespective of the way those rights might be exercised, and is naively anti-colonial as it implies that pre-modern Fijian culture was inherently ecologically benign. On the other hand, siding with the latter argument (perhaps inadvertently) provides political support for the socio-cultural status quo and ignores the ecological malfunctioning of modernity. As such, this argument is a false one as both sides fail to recognise which aspects of culture obstruct the possibility of sustainability. Western culture cannot be said to be innately ecologically belligerent, and Fijian culture cannot be said to be inherently sustainable without stereo-typing and romanticising.

Undoubtedly the predominant factor in the process of forest loss in Fiji during the last few millennia relate to the activities of its resident human populations. It is important to recognise, however, that the current basic geographical pattern in Fiji of a humid, forested east contrasting with a dry deforested west was already in place when the first Europeans explored Fiji during the 18th and 19th centuries. One early explorer, Thomas Williams, describes a 19th century view of western Viti Levu:

To the SW. are low shores with patches of brown, barren land; then succeed narrow vales, beyond which rise hills, whose wooded tops are in fine contrast with the bold bare front at their base (Williams 1858:8).

A present day observation of the Mt. Evans range near Lautoka on the island of Viti Levu fits this description well. More recent research has indicated that this pattern may have existed for many centuries and that large areas in Fiji's western regions were deforested as early as 1,500 years ago (Southern 1986). In other Pacific Islands pre-European deforestation has also been a significant part of the cultural ecology of this oceanic region. Flenley and King (1984), for example have provided evidence to suggest that forest loss was a significant factor in the collapse of megalithic culture on Easter Island. Pre-European deforestation of upland regions of the Hawaiian Island of Kaho'olawe, according to Kirch (1982), led to the abandonment of much of the interior region some 300 years ago. In addition to this, Nunn (1991) has pointed out that although much of the debate concerning land degradation in the Island Pacific has been attributed to human impacts, non-human factors must not be underestimated. He has suggested that climate changes are also likely to have played a major role in what is regarded as land degradation.

The historical situation of tropical deforestation in the Pacific is complex and cannot be reconstructed easily without making dangerous generalisations as to where the blame principally lies. But the search for blame tends to be motivated in one way or another by more than merely a desire to set the record straight. For example, these kind of data have led some authors to conclude that the pre-modern peoples of the Pacific themselves have been responsible for most of the forest loss in this region, which implies that more recent industrial activities, established by Europeans are far less to blame for deforestation (Blaikie, and Brookfield with Clarke 1987; Brookfield and Overton 1988; Clarke 1988). Pre-modern cultures may not have been as ecologically innocent as some would have us believe, but even if this were true it would in no way provide an adequate justification for supporting the cultural status quo³. Such an interpretation arises from an inadequate critique of both pre-modern culture and modernity, and cites unsustainable practices of pre-modern cultures as a scape-goat for the ecological problems of the present day.

1.3 CAUSES OR MERELY SYMPTOMS?

The formulation of effective strategies for attaining ecological sustainability must be grounded in accurate interpretations of the real causal agencies of non-sustainable life. Failure to do so renders environmental programmes ineffectual as such management essentially barks up the wrong tree. As a result a great deal of management may be carried out which, instead of moving a particular culture 'towards ecological sustainability', moves a culture no closer to the sustainable ideal because unsustainable aspects of cultural life are left unconstrained. Pin-pointing these unsustainable, yet uninhibited cultural features is a crucial aspect of a critical approach to environmental problems in general and deforestation in Fiji in particular.

Internationally the issue of tropical deforestation has also been a subject of much debate. Many official responses to the deforestation problems in developing countries echo the position held by the Food and Agriculture Organisation in the Tropical Forestry Action Plan which stated that deforestation is "mostly due to the transfer of forest land to

³I do not suggest that supporting the modern industrial status quo was the intention of these authors. Instead I wish to point out that their argument can easily be used to cover over some major cultural differences between modern and pre-modern societies. These cultural differences need further investigation as they form a crucial aspect of cultural ecology, and the study of ecological sustainability. Such an investigation into the ecological differences between modern Western and pre-modern Fijian cultures is the precise aim of this thesis.

agricultural use through shifting and other forms of cultivation" (Food and Agriculture Organisation 1985:1). This view was supported by the 1988 Fiji Minister of Forests who told the 2nd National Conservation Congress that:-

...it is generally recognised that the main cause of the destruction and the degradation of tropical forests is the poverty of the people who live in and around them and their dependence on the forest lands for their basic needs (Tavaiqia 1988:3).

The burden of blame is placed on the rural poor. A slightly more informed view was put forward in the Fiji Government's 1992 National State of the Environment Report which reads:-

There are four principle causes of deforestation in Fiji - clearing of forests associated with large scale commercial agriculture/ rural farm development projects; the continuing small but steady growth of smallholder mixed commercial and subsistence farming; the continuing spread of small settlements, urban growth and the infrastructure to service them (roads, dams); and fire.... [However]...exploitation of forest for timber is also a factor in deforestation. [Although] Logging in itself does not necessarily permanently reduce forest cover (Watling and Chape 1992:54).

My contention is that most of these 'causes', however, are merely symptoms of a much deeper equation of cultural disharmony with the landscape. Some are bold enough to say that logging itself is a principle cause of deforestation in Fiji (e.g. Dunlap 1980; Lees 1992; Weaver 1989, 1992b) which demands more than a code of logging practice to solve Fiji's deforestation problems. But what of the causes of logging? Surely logging is only an epiphenomenon of a more general equation of resource abuse by an economy underpinned with a cultural value system that cannot see past the utility value of commodities in exchange? The dominant cultural character of Fiji today not only sustains but celebrates this cultural tendency of a disenchantment of Nature where all value is vested in utility. This is not to say that all people living in Fiji support this view but that the dominant cultural disposition, as it is currently practised, is one that views Nature in terms of its ability to be used for profit.

Opposing views that do argue for a different form of valuation are not hard to find but they are not taken seriously as an adequate or sophisticated account of environmental strategy making. The value system of the pre-modern Fijian tribal culture does not give utility precedence over all other forms of value, but this cultural equation has been pushed to the periphery of modern life in Fiji. The call for a different cultural basis of value is not restricted to Fiji, as of course, environmentalists, human rights campaigners,

social justice advocates, feminists, supporters of racial equality, some religions, and indigenous rights activists the world over are also seeking a re-examination of the basis of value in modernity. But what aspects of culture and value in Fiji are unsustainable, and *a fortiori* what alternative cultural formula can lay claim to ecological sustainability?. I believe that the place to look is the philosophical and common sense ontology of culture. In other words, how does the dominant cultural configuration in a country like Fiji envisage reality? Does this culture see humanity as separate from or part of Nature? Is an individual separate (i.e. alien) from others or are individuals all interconnected as beings in Being⁴? Is reality in a deterministic steady state or is it in a constant state of creative flux? The cultural implications of this riddle are profound indeed, and I suggest that the way they are answered will make the difference between the possibility or the impossibility of ecological sustainability.

⁴This terminology is that of the German philosopher Martin Heidegger. 'Being' with a capital 'B' encompasses the interconnectedness of Nature (the whole), whereas 'being' with a lower case 'b' refers to individuals as part of that whole (see Heidegger 1962 for example).

CHAPTER 2 - THE QUESTION OF ECOLOGICAL SUSTAINABILITY

Nothing is more revolting than the majority; for it consists of few vigorous predecessors, of knaves who accommodate themselves, of weak people who assimilate themselves, and the mass that toddles after them without knowing in the least what it wants (Goethe)¹.

2.1 INTRODUCTION

Exploring the question concerning ecological sustainability is not a trivial undertaking and leads one into the basis of human cultures and the relationship these cultures have with the rest of Nature. In exploring this issue I have been repeatedly confronted with the need to call into question my own culture and aspects of this culture that are dear to the hearts of many of its members. Attempting to criticise this culture, or any culture, if reproach becomes necessary, is often met with unwelcoming resistance, frequently laced with prejudices designed to blindly defend a tradition in spite of a disclosure of its ecological shortcomings.

In my questioning of modernity², which comprises the dominant cultural influence in relation to the forests of Fiji, I uncovered a number of fundamental ecological flaws in this cultural scheme. It becomes necessary to develop alternatives that are ecologically appropriate. However, so many critics of modernity have in the last 150 years sought spiritual and ethical refuge in non-Western settings, such as those of Asia and or tribal cultures. I wish to show that an abandonment of all of Western culture is not necessary in order to locate a genuine creative alternative to modernity. In so doing one is also forced to pin point with far more precision what ecological sustainability means. This

¹(Cited in Kaufmann 1980:17).

²I use the term 'modernity' to refer to a cultural formation that developed in Europe following the fall of the medieval world, accompanied by the rise of science as a form of knowledge. Modernity has since migrated out of the West into Asia, Africa, the Americas, and Oceania. The modern condition stretches historically back to the 16th and 17th centuries, when the foundations of modern science, politics, and economics were being drafted. However, modernity must not be seen as an historical period, but rather a cultural tendency. In this way we can see that modernity, as a cultural phenomenon, arrived in Fiji with the explorers and settlers during the 18th and 19th centuries. Modernity as a culture includes capitalism and socialism, and for this reason I talk about 'pre-modern' instead of 'pre-capitalist' Fiji. The cultural flavour of modernity will become more and more apparent through the course of the thesis.

can also help prevent the inadvertent cultivation of romanticism, the construction of more 'noble savages', and the following of alternatives simply because they are dressed in 'Eastern' or tribal clothes. It also helps to prevent the burning of Western straw figures in the environmental inquisition. Irrespective of one's cultural heritage, taking seriously the dictum 'know thy self' is a crucial moment in the path to understanding the issue of ecological sustainability. Indeed, one need only look outward to the landscape and there, whether we realise it or not, we see before us a reflection of what we really are.

2.1 THE POSSIBILITY OF ECOLOGICAL SUSTAINABILITY

There are two major thematic undercurrents in this thesis. The first revolves around the question concerning ecological sustainability in general (i.e. a general theory). The second concerns the consequences of ecological sustainability with particular regard to the indigenous forests and the people of Fiji. Rather than defining the term 'ecological sustainability' at the onset and proceeding to test its presence or absence in Fiji, I instead use the entire thesis to pose the question and frame an answer. Both of these aspects of the thesis will be dealt with in tandem throughout the thesis and will be developed in stages corresponding to different levels of understanding. Each stage gives rise to a deeper understanding of both aspects and provides a new platform with which to explore the next stage.

This outlook implies first that there is such a condition as ecological sustainability, and that it is possible to achieve this condition as a way of life. It must be made clear from the beginning, however, that the question concerning 'ecological sustainability' is not necessarily a question concerning environmental management. The two may indeed coincide but this is not necessarily the case. If the inquiry were merely about environmental management, then the issue of ecological sustainability could be avoided. Indeed this is often the case with environmental research and practice. The term 'sustainability' is used as if it had a meaning that is understood by its users and its audience, and indeed as if this meaning was commensurate with environmental management (what ever that is). As such 'sustainability' is a much abused word. It has become a platitude used to placate an environmentally concerned audience who search for words that please the conscience rather than meanings that make a difference.

Some people see ecological sustainability as a technical issue, able to be apprehended at the technical level, at the level of management within the context of existing socio-economic structures. A great deal of environmental debate conducted by non-government

groups and within and between official agencies is carried out at this level. It amounts to a technocratic discourse framed by the language of planning, management, law, and policy. Within this language game the term 'ecological sustainability' is supposed to have authentic meaning, as if it were merely a planning, management, legal, or policy issue, and as if these disciplines were a sufficient framework for posing the question concerning ecological sustainability. It *is* an issue at these levels, but it is also much more than this. Ecological sustainability is a social issue. The social aspects of this issue coexist with the technical and, as such, an authentic discourse concerning ecological sustainability must be framed in social language with social meaning. Only then can the technical have meaning vis-a-vis the social dimensions of ecological sustainability. But is it sufficient to engage in discourse and action at the level of the social?

I believe that, like the technical, sustainability is social, but it is also more than this. It is a cultural issue, where the level of the social exists with culture. It is at the level of culture that we can begin to question language and standards of rationality of a society in general, and we can bring an ecological dimension back into the discourse. This discourse is cultural ecology. We must remember that social life is cultural by virtue of it being acted out within the framework of a language, a standard of rationality, a world view, and a belief structure that is not universal for all human societies in all landscapes. It is within the context of culture that social relations are acted out in human societies. Culture is inherited by the members of a society through actions, ritual, language and the rationality that underlies language, which lends meaning to social life, and gives people their conscious world. Culture is also actively created through social actions, language, and the apprehension of new meanings gained from experiences in social life - experiences of realities such as landscape. In this sense cultures evolve. A debate on the question concerning ecological sustainability must, at least, be framed within a discourse on culture.

When the idea of ecological sustainability is questioned at the level of culture one can begin to uncover what it is about people that makes ecological adaptation to a changing landscape possible. It is this adaptation, this changing in people through culture, that makes ecological sustainability possible. But how do people adapt, and what is this process called adaptation? These questions will be addressed later in the thesis, but suffice it to say that the types of questions to be confronted will be of this form. Hence: how is ecological sustainability as culture possible?

2.3 QUESTIONING AS A METHODOLOGY

Many questions have been posed in the above paragraphs; which should be regarded as a sign of things to come, as this thesis is foremost an engagement in questioning. Through relentless questioning I can hope to gain access to meaning - the meaning of ecological sustainability and its appearance in social and political life in Fiji. Questioning of this form sees nothing as unquestionable, and in this sense the approach is openly a critical one. I do not place any caveats on this questioning by erecting a 'not negotiable' sign over certain aspects of this inquiry. To do so would be to hide from questioning as if there were something to be afraid of. Moreover, this questioning extends to myself, and I also become an object of inquiry. As such the approach is phenomenological and reflexive. Hence, I disagree with Francis Bacon and sustain the view that (contra Bacon) the "strength and excellence of the wit" has everything to do with the matter. This self reflection will appear in a number of different forms. For example, my own language and ability to possess knowledge about reality will be questioned. This is where science spills over into philosophy.

The momentum gained from such questioning can take us further than we may have expected, to deeper meanings. But some of this cannot be done through thinking or speaking (it is no longer science or philosophy), because a great deal of meaning in cultural life passes swiftly through the net of language. And as Wittgenstein (1922:7) tells us: "What we cannot speak about we must pass over in silence". However, even though we cannot utter the unutterable, we can point to it in various ways. This is what art does. This is what poetry is capable of. As such, we can begin to uncover new tools of inquiry and hence endure long after many others would have given up. We have poetics, we have metaphor, and we have myth. And here is where we can continue questioning in the domain where language cannot venture. Through a repeated revisiting of these ideas in subsequent stages in the thesis, I hope that my audience will be able to detect the locus of my own understanding of ecological sustainability.

2.4 PRESENTING HERMENEUTICAL UNDERSTANDING

The approach to this research is broadly hermeneutical³. I wish to focus, for a moment, on what I mean by 'hermeneutical', and elaborate on the difficulties associated with presenting hermeneutical understanding. Hermeneutics is a methodology of the interpretation of meaning, deriving its name from the Greek god Hermes, who transmitted the messages of the gods to mortals (Bleicher 1980). It has been used as a means of extracting meaning from texts from the time of the ancient Greeks, but has also been used extensively in different religions that have sacred texts, as a means of extracting authentic meaning from such texts (Bleicher 1980). In Europe this methodology reached a high point with the work of Protestant theologian Schleiermacher who sought to uncover deeper meanings from Christian writings in the absence of ecclesiastical guidance (Carr and Kemmis 1986; Connolly and Keutner 1988 for example). From the interpretation of sacred texts hermeneutics has spilled over into philosophy and the social sciences under the general agreement that human understanding is thoroughly bound up in language, and where the human intellect does not have the capacity for a pure vision of reality in itself (Wachterhauser 1986). This form of social inquiry begins with the acknowledgement of the centrality of language as a pivotal mediator of meaning in social life.

Hermeneutics focuses on the unveiling of subjective meanings through the repeated revisiting of a text (or a social situation), where the authentic meaning as originally captured in language, is able to be apprehended by both the observer and the observed. This school of thought became popular in the social sciences during the 20th century following the work of Dilthey (Wilson 1989), the social theory of Weber, the phenomenology of Husserl (see Bell 1990), Heidegger (1962), the hermeneutical method of Gadamer (e.g Gadamer 1975), and later the critical hermeneutics of Habermas (e.g Habermas 1973, 1979). The principle issue at stake is the understanding of intersubjectivity in social life, incorporating the subjectivity of both the observer and the observed.

This focus on subjectivity arose out of a reaction against the positivist claim that social reality can be studied objectively, as if the author is capable of removing herself or

³I do not employ the 'hermeneutic method' as defined by the school of hermeneutics in the tradition of Hans Georg Gadamer. I instead derive my inspiration from the later works of Martin Heidegger himself as they developed from the mid 1940s. The details of this approach will be explored in chapter 4.

himself entirely from the research (see Carr and Kemmis 1986, Outhwaite 1987; Fay 1987, for example). This, of course, is not possible (see Kuhn 1970; Ricoeur 1973; Fay 1987; Rainbow and Sullivan 1979) or even necessary in order to gain an understanding of social life (see Heidegger 1962). What is more important is to understand the nature of inter-subjectivity itself, which comes from the constant reflection of what is studied, combined with reflection on the investigative apparatus employed, that is, perception and the methods of interpretation of empirical information by the person/s conducting the study.

A hermeneutical approach invites the researcher to interpret a situation in the light of the details and the overall situation, gain a degree of understanding, and use this understanding to reinterpret the situation from a more informed position. Each time a new level of understanding is achieved it can be called a turn of the hermeneutic circle (see Wachterhauser 1986; Dreyfus 1987; Gadamer 1988 for example). To give an example, imagine viewing an environmental problem such as deforestation in Fiji for the first time. It may appear *prima facie* to be a technical problem. Thus the interpreter puts on a technical viewfinder and views the situation. If the situation were purely technical the interpretation would reveal a solution at the technical level. If, however, the situation were more than merely technical, then the interpretation is likely to uncover numerous contradictions in the process of attempting to understand the issue using the technical interpretive approach. These may be social contradictions that stand in the way of resolving the problem in question. Thus, no matter how sophisticated the technical approach might be, and how elaborate the creative response is (in the way of management options for example), the technical approach will miss the point in terms of locating a robust solution for the problem.

This demonstrates the need to revisit the situation from a revised perspective, for example, a social one. If this is carried out, the social framework of interpretation will reveal much more about the situation than was possible if viewed solely at the technical level. However, this is not to say that the technical stage of hermeneutical understanding was not valuable - it was. It is because of the first viewing of the situation that the second viewing became possible. It served as a pointer to a deeper locus of the source of the problem in question. If the source of the problem was indeed social then the investigation would lead to a solution at the level of the social, perhaps with a number of additional turns of the hermeneutic circle using modifications of the social framework. However, a social perspective may still, at best, provide merely a platform that points to a deeper source of the problem (which may lie in culture), which

necessitates the employment of a cultural interpretive framework of inquiry. If the issue is indeed a cultural one then the location of cohesive answers becomes possible. I began at the level of the technical and ended up in culture, metaphysics, and post-metaphysical inquiry. My task is to show you how and why I went where I did in my questioning about ecological sustainability. But first a note on praxis.

The nature of the hermeneutical approach, as it is practised, does not lend itself to the rigid separation of theory and practice. This is because at each turn of the hermeneutic circle both theory and practice are employed which together facilitate the need for a revisiting of the situation from a broader perspective. Hence, theory does not inform practice any more than practice informs theory - the two share a similar status (as opposed to one dominating the other). The result is called praxis. The notion of praxis, which can be traced back to the Greeks, is an on-going dialectical process of action and reflection, guided by a moral disposition to act 'justly' in what the Greeks called *phronesis* (Carr and Kemmis 1986).

The methodology of this thesis as a form of praxis was not something that was able to be defined at the onset of the research programme, but something which evolved along with the understanding gained from conducting the research itself. To present the method as if it were established at the beginning and merely carried out according to pre-defined rules would be to misrepresent the actual process of coming to understanding in the work. The methodology evolved with the research. Indeed, the way that it did evolve presented me with the opportunity to refine the processes that I employed in order to develop a methodology as one of the principle outcomes of this research. I call this methodology 'transcendental cultural ecology'.

2.5 WHAT IS 'ECOLOGICAL SUSTAINABILITY'?

Any attempt to define ecological sustainability as a fixed standard and able to be placed into an unchanging box labelled "Ecological Sustainability" will have misunderstood the magnitude of the issue. Ecological sustainability is not a thing as such, nor is it a process that lends itself to any fixed definition. This does not point to a kind of nihilism concerning the notion of sustainability but serves as a reminder that we are not talking about a trivial issue. This is why I make an early distinction between ecological sustainability and environmental management. The latter is a process of controlling the world where it has been damaged, the former is a process of not damaging as a way of

life. They do not merely differ in degree, they differ in kind from each other⁴. The question concerning ecological sustainability is a far more challenging question than that concerning environmental management. This is because we are very familiar with management and can recognise it easily enough. But ecological sustainability? What does this look like? What must we look for when we search for it? What constitutes it and makes it different from anything else? Why is it not the same as management?

To talk sensibly about the differences between sustainability and management we must also pose the question:- what is meant by 'management'? When we talk about management we tend to refer to the controlling of something outside ourselves. We manage something to conform to a rule, law or a model as a form of stoicism⁵. Many times we concoct a model of how we believe the world should be (based upon a law of some form) and then go out to engineer a management situation into shape so that it fits our model. But where does this model come from? And who is to be the judge of the appropriateness of the model - managers, scientists, planners, politicians, philosophers, God? Until we are prepared to question management critically, we will never be able to understand the way it differs from ecological sustainability. To play the devil's advocate I refer to one of Nietzsche's comments on the morality of stoicism which also applies to the idea of management:

Your pride wants to impose your morality, your idea, on nature...you demand that she be nature "according to the Stoa," and you would like all existence to exist only after your own image....And some abysmal arrogance finally still inspires you with the insane hope that *because* you know how to tyrannize yourselves - Stoicism is self tyranny - nature, too, lets herself be tyrannized: is not the Stoa - a piece of nature? (Nietzsche 1973:15-16).

In terms of the management model mentioned above, where is the source of legitimation for any model? This is an important question as it lies in the realm of ethics which may guide us in our actions in the world - actions such as management. There are many

⁴In chapter 9 I will revisit this question concerning management. There I make a distinction between 'management' and 'mitigation'. The former involves controlling the environment, the latter involves controlling ourselves. I do not suggest that all forms of environmental mitigation should be avoided in relation to the question of ecological sustainability. I only show that mitigation is only that - a last ditch effort to 'mop up' after the damage has been done, or to try and stop existing damage from continuing.

⁵I use the term 'stoicism' in reference to the Stoic rationality rooted in the philosophy of Zeno (died in 261 b.c.) (see Rist 1978) which embraces a form of determinism and holism which leads to ethical systems of control (see Jonas 1963; Cheney 1989b).

ways of legitimating a discourse of ethics, and of management, but is the process of legitimation able to be grounded in a form of justice, a justice to the earth, a justice to people? Where does it come from - this justice, this source of good, of environmental benevolence, of ecological sustainability? This is a big question. It may sound obscure, but I believe that it lies at the heart of our problem. I will undertake to answer this big question through the course of this thesis.

2.6 POSING THE RIGHT QUESTIONS

As suggested in the abstract I wish to focus, not merely on the formulation of answers to the question concerning ecological sustainability, but more importantly, the posing of appropriate questions. But what is an appropriate question? I am attempting to understand ecological sustainability. As such I need to find a way of uncovering it. I could ask an enormous variety of sophisticated questions but the answers so revealed can only be as good as the question. For example, if ecological sustainability was merely a legal issue, a legal question would be capable of uncovering an authentic answer. I could ask - "is ecological sustainability possible in Fiji if the New Zealand Resource Management Act (1991) were implemented there?" Now, I will suggest here that such a question is about as sensible as asking - "is ecological sustainability in Fiji heavier or lighter than an elephant?" They are questions, yes, but they are not relevant questions. They both do not even come close to addressing the issue of ecological sustainability.

In terms of establishing the rules for this method of questioning I heed the advice of Bergson in his attempt to clarify what constitutes an appropriate question. There are three dimensions to Bergson's formulation. The first is the establishment of a problem. The second involves the discovery of genuine differences in kind (as opposed to degree), and the third concerns the apprehension of real time (Deleuze 1988). For Bergson,

the truth... is a question of *finding* the problem and consequently of *positing* it, even more than of solving it. For a speculative problem is solved as soon as it is properly stated... its solution exists... although it may remain hidden and, so to speak, covered up: The only thing left to do is to uncover it... The stating and solving of the problem are very close to being equivalent: The truly great problems are set forth only when they are solved (Bergson 1946:58).

In this respect Bergson has much in common with Heidegger, who also focuses on the importance of questioning as a methodology in itself. They are also similar in the way they extend their questioning to the dominant Western concept of time. In so doing they add a new and exciting dimension to metaphysics that (they claim) helps to unmask

much of what Western philosophy has left concealed since Aristotle (see chapter 7).

Questioning, which is the "piety of thinking" for Heidegger (1976, 1977), may be seen by some as inappropriate at a stage in history when there is no time to waste by sitting and thinking. However, according to Heidegger (1968:4) "it could be that prevailing [humanity] has for centuries now acted too much and thought too little", where he goes on to say that "*most thought provoking in our thought provoking time is that we are still not thinking*" (ibid.:6, his emphasis).

I believe that the problem of ecological sustainability is one of the great problems of our time. The solving of which can only come in the framing of the appropriate questions. Deciding whether or not we have posited an appropriate question is the next dilemma. How is this done? A starting point for this is also taken from Bergson. He makes a distinction between two types of false problems. The first are non-existent problems whose terms contain a confusion by establishing a search for a difference in degree rather than a difference in type of condition. The second are badly stated questions which contain badly analyzed composites (Bergson 1946).

An example of the first kind of false problem is the searching for a means of bringing forth ecological sustainability by attempting only to find ways of reducing the rate of resource use in an economy. This is sensible if, and only if, the problem of unsustainability is a problem of *degree* and not a problem of *kind*, in terms of the relationship between humanity and the rest of Nature. The idea of sustainability contains an implicit reference to 'in perpetuity'. This notion of 'perpetuity' contains a reference to a condition of 'for ever' or 'eternity'. I will return to this idea later with regard to the notions of time, but state it here to indicate a need to take 'eternity' seriously. 'Eternity' or 'in perpetuity' is not merely different in degree from 'for a very long time', it is different in kind⁶.

It is this difference in kind that underlies the meaning of the idea of sustainability and distinguishes it from environmental management. It demands more than merely a modification in the rate of current practices. It demands a change in the context of our lives, a transformation in our cultural being.

⁶I will look more closely into the question of time in chapter 7.

Another example is the age old question of "which comes first, the chicken or the egg?". The answer lies not in a decision based on an analysis of the question but comes through something which lies outside the question itself - in the standard of rationality that makes the question possible. The question points to a contradiction. But this contradiction points the way to an alternative way of thinking. The answer can come, in this case through dialectics, where neither the chicken nor the egg are temporally or existentially distinct from each other, they are two sides of the same coin. I mention dialectics here because it is to reappear in later chapters as a central ingredient to a form of rationality that (I believe) enables an understanding of ecological sustainability.

The second type of false problem (involving the use of badly analyzed composites) can be depicted by considering the confusion of ontology and epistemology in philosophical argument. This amounts to a poor analysis of the composites viz. ontology and epistemology, where they are mistakenly seen as only different in degree rather than different in kind. One is a theory of reality (ontology), the other is a theory of how we might come to have knowledge about that reality (epistemology). The conflation of the two (called the epistemic fallacy by Bhaskar 1975) can happen in rationalism for example, where the map is seen as being the same as the landscape which it symbolically describes (such as when mathematics is seen as more than a human language system).

These are not simply mistakes but serious methodological misconceptions that can lead entire research programmes up blind alleys, where rather than finding an authentic solution, all that is found is an answer that satisfies the inadequate criteria laid out in a false set of questions. Technically orientated approaches to the question concerning ecological sustainability do precisely this, and so too do those undertaken at the level of the social, whilst leaving culture out of the picture. I will set out to demonstrate this in subsequent chapters.

I believe that much of science in practice is so preoccupied with finding of solutions that little effort is spent framing appropriate questions. In this thesis I shift the emphasis from the solution to the question. This is not employed as a means of obscuring the issue or avoiding getting on with 'good science'. But it is a way of questioning that can do justice to the issue of ecological sustainability, an issue which I believe is not only scientific but metaphysical. Without such a focus on questioning, the issue of ecological sustainability is easily trivialised. Some scientists, for example, may decide to define the term 'ecological sustainability' first and then proceed to exercise an axiomatic

methodology that reinforces the definition (see Rota 1990 for an account of the mis-use of mathematical logic in metaphysics). But the circularity of such an approach will not be capable of uncovering any deeper meanings in relation to ecological sustainability, if indeed it is a metaphysical issue. It would if the meaning of the term 'ecological sustainability' was self evident, but I seek to demonstrate that it is far from this. Both the framing of the question and the answer come simultaneously as a consequence of this inquiry.

2.7 CULTURE AND LANDSCAPE

That the landscape is an active agency in social life is not commonly made explicit in technical, or social forms of discourse that attempt to deal with the issue of ecological sustainability. During the course of this research I was faced with a dilemma in this regard. I knew that sustainability was a social issue, but I also knew that it was ecological. However, I found it impossible to reconcile the social and the ecological dimensions of my questioning whilst imprisoned in the theoretical domain of the social on one hand or the ecological on the other. The question is often asked about aspects of human life - 'Nature or nurture?' as if there had to be a choice between the two. This question is a false one as it asks us to select one from a pair that in reality are inseparable. To state it more specifically, "is our relationship with the landscape social or ecological?" The answer is that it is bigger than both. We are social beings, but we are also ecological beings, and because of this society, any society qua humanity is *ipso facto* ecological.

One of the biggest problems faced by people questioning at this level is the theoretical and common-sense distinction between humanity and Nature - the humanity/Nature dualism. This dualism is sustained by a false argument which suggests on one hand, that the social world is in some way separate from the landscape, and on the other that ecological reality is not social. Some attempts at reconciling this have been made in the field of socio-biology (see Midgley 1978; Alexander and Noonan 1979; Dwyer 1986; Wrangham 1987) and social ecology (e.g. Bookchin 1986).

This conceptual separation between humanity and the rest of Nature extends into the scientific literature on both sides of this false fence. For example, landscape ecology tends to differentiate between 'cultural' and 'non-cultural' landscapes in relation to ecosystem dynamics (Godron and Forman 1983; Weinstein and Shugart 1983; Forman 1989). Slesser (1989) for example, maintains this humanity/Nature dualism whilst

suggesting that "the distinction is necessarily blurred" (ibid.:423). We are told by Slesser that "ecology deals with the natural system, which is driven by solar energy, and mans [sic] perturbation and management of it" (ibid.:423). Existing on the basis of solar energy is supposedly what makes things natural. But the criteria is a tenuous one at best, as there is no attempt to substantiate the assumption that human actions are outside Nature, rather than being a particular aspect of Nature. Furthermore Slesser goes on to define human ecology in terms of the relation of ecology to economics, as if the entire relationship between humanity and the rest of Nature was able to be reduced to this. I hope to show that such a reductionist approach to human ecology can help up to a point, but ends up obscuring the meaning of ecological sustainability.

The interpretive social sciences, and critical theorists have reacted against the intrusion of the natural sciences (i.e. positivism) into the social domain, implying that there are ontological distinctions between the domain of the 'natural' and that of the 'social' (e.g. see Outhwaite 1987; Bhaskar 1979, 1981). As such, both ecology and sociology have a tendency to maintain a distinction between each other or, as in the case of positivist socio-biology, there is a denial that the social domain is anything but mechanistic. There is also a tendency in modern societies to keep disciplines and institutions administratively separate (which affects the way we think about their subject matter), and there remains a common-sense humanity/Nature dualism in our own language.

The English language, for example, has a word called 'Nature'. But what do we call 'Nature'? We tend to have 'Nature' as meaning something like 'that greenery outside the window'. Nature is seen as something outside ourselves. The point is that when we look at the world through our own view-finder labelled 'Nature' we do not see people or ourselves in the field of view. And if we do see our selves we see only our 'biological' body, with our non-biological mind or self still sitting behind the viewfinder doing the viewing. This is an example of the Cartesian dualism of body and mind, as if they were two separate things (see Capra 1982; Bohm 1980; Bhaskar 1975, 1979, Davies and Gribbin 1991; Johansson 1989; Whitehead 1929, 1930 for example). If we were to see the reality of body and mind as something bigger than both we might begin to understand why there is no need to separate humanity from the rest of Nature in an inquiry about ecological sustainability.

When viewed in this light the landscape can easily be seen as more than merely a social utility (Shields 1990, 1992; Jameson 1988). It is more than a surface upon which we humans act out our relations of production, our institutional restructuring, or our

revolutions. But what is it in our relationship with landscape that might have something to do with ecological sustainability?

At this stage the role of language and the standards of rationality that underlie the meaning of words in language become important concerns worthy of questioning. Social life has meaning where that meaning comes from within, through the recreation of culture through language (Geertz 1973, 1987; Dreyfus 1987), but meaning is also apprehended from outside language, through intuition (see Bergson 1946; Sheldrake 1981, 1991), and an unconscious perception of Nature (Cheney 1989a; Maslow 1971; Ross 1993). This perception and intuition can be recreated in culture symbolically through ritual and in descriptive poetical language (e.g. Halliburton 1981; Cheney 1989a; Kockelmans 1972). This is where my science of transcendental cultural ecology leaps across the threshold and becomes art. This is because it is through what we commonly call art that a culture maintains a link with the rest of Nature that explicitly embraces the inter-subjectivity of this relationship (see Campbell 1986 for example). Art is also a way of bringing into culture that which language cannot grasp, that aspect of reality which lies beyond the reach of language (Murdoch 1993).

Through art human societies can symbolically engage in a discourse with the landscape, and each other, where that conversation happens outside the boundaries of the individual consciousness (Neuman 1959). It is a psychological process of a collective unconscious dialogue with reality as it is apprehended outside or prior to thinking (see Jung 1959 for example). As such, the thesis looks more specifically at the spiritual dimensions of the question of ecological sustainability. Because of this, my methodology called 'transcendental cultural ecology' must question at the level of this post-metaphysical domain of culture.

2.8 DEFORESTATION AND ECOLOGICAL SUSTAINABILITY IN FIJI

As mentioned above, the issue that triggered my interest in the question of ecological sustainability, was that of deforestation in Vunivia. My task was to explore this problem and eventually frame an appropriate set of questions which might reveal the source of the problem and provide a framework for action capable of solving it. My concern is not about solving the problem of deforestation in one particular place such as Vunivia, as environmental management can achieve this without doing anything for ecological sustainability. This is because deforestation could easily be stopped in that small corner of the Fiji landscape through the employment of technical solutions. But what about the

consequences of a halting of deforestation in Vunivia? In so doing have we solved the problem of deforestation in Fiji or merely shifted the spatial locus of deforestation to another part of that country? And for that matter, if we were to stop all logging of indigenous forest in that country, would this amount to ecological sustainability, or would it merely shift the pressure onto forest resources in other countries, or to other types of economic resources in Fiji, or both? Is this ecological sustainability? No, it is only management, and not necessarily good management vis-a-vis ecological sustainability as it does not confront the issue of ecological sustainability itself but bypasses it in the name of 'protected area establishment'.

This is not to say that indigenous forests of Fiji should not be protected, but protecting them without changing the economic pressures on them will be no guarantee that they will remain protected⁷ in some way in perpetuity which is what sustainability demands. This is because, if the economic forces that currently target indigenous forests as a resource are left untouched, there is no guarantee that they will not (a) increase in intensity, and (b) look to the legally protected indigenous forests of Fiji at some future date and, through a socially instructed change in the law, legally fell them then. We have done nothing for ecological sustainability by looking only at forests. We must look at the socio-economic system that uses them, and the culture that makes that form of economy/society possible.

Now we can begin the process of framing an appropriate type of question. Is deforestation in Vunivia an isolated technical problem relating to poor management within the context of a potentially sustainable forest industry? Or is it more than this? Perhaps it is a structural problem relating to inappropriate resource allocation within the context of a potentially sustainable economy? Or is it something deeper? Is it possible that the economy itself is at fault, and that a different greener economic system is what is needed, given that ecological sustainability within that culture is feasible? Or, are there really some serious problems with the basis of the culture itself in terms of its foundations of value, world view, and rationality which render the above possibilities as merely symptoms of what is essentially an unsustainable way of life?

I hope to demonstrate that any form of environmental research that has any interest in ecological sustainability must remain open to undertaking a cultural analysis. Such an

⁷I do not see ecological sustainability as a condition of protecting natural areas in perpetuity as such, but the recreation of a culture that is able to co-exist with the rest of Nature in a dialectical synchronicity. I will discuss this further in chapter 4.

analysis must include an investigation into issues such as social and political relationships, world view, language, meanings that underlie language, mythology, spirituality, ritual and ceremony, technology, the role of knowledge and the way knowledge is legitimated, the basis of value, the use of resources, and the way that resources are distributed. This is a far broader approach to environmental issues than are commonly carried out in an official capacity by governments or non-government environmental organisations that wish to do as much as they can without rocking the political boat.

The Fiji National Environment Management Project conducted by the Fiji Government during 1991 and 1992 is a good example of an official programme. Even basic social issues relating to the appropriateness of certain management practices were not sufficiently addressed. An investigation into the deeper social and political causes of many of Fiji's environmental problems were completely out of the question, partly because they would point to more general social and political issues that are definitely 'not negotiable' in a government sponsored environmental review. This establishes a political framework for environmental management programmes that are so narrow that the real issues are left out of the debate, and recommendations forming the basis of a grand national strategy are only those which are politically expedient. This effectively amounts to the implementation of management programmes that politely sweep the symptoms of an unsustainable culture beneath the carpet. All the rest remains diplomatically unsaid, or is left to lie still-born in renegade consultancy reports, and collect dust in the filing systems of government bureaucracies.

Environmental agencies of any description that ignore the deeper social and cultural issues surrounding environmental degradation often serve to perpetuate the very problem itself. Advocates of environmental management of this type may, inadvertently, help to support oppressive and violent cultural structures in the name of 'diplomacy' or in the maintenance of their own privileges as 'house slaves' in an unjust society. In this way the oppressed and those who represent an oppressed realm (such as advocates of indigenous forest protection in Fiji) may be just as guilty as their masters in failing to act to change the structures of society where those structures are oppressive and unsustainable (Freire 1972). This thesis presents an approach to deforestation in Fiji which refuses to remain agnostic to issues that are politically delicate. It suggests that anything less than the kind of critique offered here will fail to comprehend the meaning of ecological sustainability, and in so doing fail to present a cultural configuration that is capable of living in harmony with the rest of Nature in Fiji or any country.

When people talk about culture and anthropology they often refer to non-Western culture, and non-Western life. Indigenous peoples and indigenous cultures are frequently studied by Westerners, like myself, perchance to capture the essence of what it is to be indigenous to something. Perhaps it relates to an anxiety in modern life expressed as a passion to make contact with something more real than modernity. I believe that we are all potentially indigenous to something - some landscape somewhere, but this relates not only to where we are from (our historical cultural roots), but more importantly, to where we are going, which is influenced by the culture we are practising. This is what ecological sustainability is all about - what we are becoming in the creative cultural process of becoming. In this sense I side with Heraclitus, as opposed to Democritus and Parmenides and their disciples in the main stream of Western rationality. But what have the ancient Greeks got to do with this research?

The primary reason why I pursue an enquiry into the thinking of the ancient Greeks stems from my desire to understand the foundations of what it is to be living within a Western culture - a culture now well established in Fiji. These foundations have been carried with the Western culture where ever it has ventured in the world. One such place is the Fiji Islands. According to Heidegger:-

That which was thought and in poetry was sung at the dawn of Greek antiquity is still present today, present in such a way that its essence, which is still hidden from itself, everywhere comes to encounter us and approaches us most of all where we least expect it, namely, in the rule of modern technology, which is thoroughly foreign to the ancient world, yet nevertheless has in the latter its essential origin (Heidegger 1977:158).

The Western philosophical tradition reaching back to Parmenides holds that substance is permanent (Lacey 1989; Kenney 1991). Parmenides (6th century b.c.) argued (successfully at the time) for the view that Nature existed in an intrinsic steady state of 'being'. Heraclitus argued to the contrary, that all things flow - all is 'becoming'. Then Democritus believed to have solved this dilemma by saying that all things do flow but what flows are unchanging, indivisible bits - atoms. This assumption on the existence of such unchanging bits set in motion what was to become the touch stone of Western scientific knowledge, grounded in what Whitehead (1930) called the 'doctrine of matter'. The assumption of the existence of these atoms as unchanging indivisible bits enabled 'permanence' to survive and become entrenched in the Western world view. Arguments against this conception of the ontology of Nature have been around for at least as long, and have represented a significant metaphysical challenge to the Western mind set. Such a challenge, until the 20th century, tended to be metaphysical. For example, the theology

of Meister Eckhart (Caputo 1978; Cox 1986) and Thomas Aquinas (Arraj 1988) challenged the dominant Western notions on the structure and dynamics of Nature, as did the metaphysics of Nietzsche, Bergson, Whitehead, Heidegger (see Nietzsche 1956, 1973, 1967; Bergson 1911; Whitehead 1929, 1930; and Heidegger 1959, 1962, 1971, 1977 for example). The philosophy of science has also witnessed similar polemics as can be seen in the work of Bhaskar 1975, 1978, 1986 for example) who developed a theory of science called transcendental realism. However, relativity theory and its offspring in branches of 20th century quantum mechanics since Einstein and Niels Bohr have also provided a scientific framework for such a challenge (see Bohm 1980; Davies and Gribbon 1991; Krips 1987; Capra 1975, 1982, Zohar 1990, Zukav 1979 for example). In spite of these challenges, the assumption of permanence and 'being' held sway and 'becoming' (constant flux) was pushed, as heresy, to the periphery of the Western consciousness.

The symbolic relationship between permanence, order and substance on the one hand, and impermanence, creativity and destruction on the other was depicted in the plays of the early Greek dramatists in Attic tragedy. Here the interplay between Apollo (permanence, being) and Dionysus (impermanence, becoming) was a central theme (Nietzsche 1911, 1956; Pfeffer 1972; Kenney 1991). The dominant Western tradition has, since Parmenides, given primacy to Apollo. For me, however, reality is in a constant state of creative flux, of change, and of 'becoming' (see Kahn 1979; Heidegger 1962, 1975; Bhaskar 1979; Kenney 1991; Whitehead 1929; Zohar 1990; Bohm 1980; Prigogine 1979; Foltz 1984; Zimmerman 1983; Keffer et al 1991, for example - the list is huge), which is why I am an ecologist.

As mentioned above, a number of 19th and 20th century philosophers have challenged the metaphysical assumption of permanence in various ways. In the 19th century Nietzsche viciously attacked ideas of permanence and its implications for morality. He argued for a reinstatement of 'becoming' calling his alternative "my *Dionysian* world of the eternally self-creating, the eternally self destroying..." (his emphasis, Nietzsche 1967:550). Nietzsche successfully deconstructed the metaphysical foundations of Western culture but was only able to *point* to where its overcoming could begin. Nietzsche reversed Western metaphysics by substituting Dionysus for Apollo in his ontology (see Heidegger 1975; Heine 1985 for example). Others such as Heidegger, Bergson, and Whitehead agree with Nietzsche in terms of the need to overcome the entrenchment of permanence in Western thinking. However, they argue for a creative alternative that is not only Dionysian, but one that recaptures the dialectical

interrelationship of Dionysus and Apollo, as Nietzsche suggested in his later works (Pfeffer 1972) but never fulfilled (Heine 1985). Such a view is similar to that held in China in the tradition of Taoism and is symbolised in the dialectic of yin and yang, and in India with the dynamic between the Hindu gods Shiva and Vishnu (Campbell 1986).

In this thesis I explore the possibility of recovering the dialectic of Dionysus and Apollo as a conceptual touchstone for developing a form of environmental ethics that can obtain ecological sustainability. The result is a re-enchantment of Nature. But why is Western rationality getting so much attention? Why is a critique of Western cultural developments so important? It is because modern Western life has penetrated the landscapes of Fiji in many ways and has greatly influenced the relationship between landscape and culture in that archipelago over the last 200 years. To ignore this influence is to mis-interpret what contemporary Fijian culture is (see Bayliss-Smith et al 1988). Fijian culture in all its diversity is not what it used to be 200 years ago, and 200 years ago it was different from 500 years before that. All cultures are dynamic and changing.

To imply that cultures are static is to conceptually set them in concrete, and fantasise about how a culture ought to fulfil a romantic legend rather than understand how it really is or was. This may be obvious to anthropologists but many people contributing to the debate concerning ecological sustainability are forgetting the dynamic nature of culture, and that modern Fiji and modern Fijians are not the same people who walked in that landscape in days of old. It is this changing character that allows cultures to transform into approximately sustainable or unsustainable forms.

2.9 OVERVIEW OF THESIS STRUCTURE AND CONTENT

The purpose of Part II to follow is to initiate a process of reflection on the issue of ecological sustainability by first addressing the problem from a technical perspective. Although this perspective is able to bring a social dimension into the discourse, it is unable to question structural problems that relate to the context of social life and the social, economic, and political context of technical approaches. Obstructions to human adaptation to the landscape are struck at the level of the social context, which demands a critical inspection of this context. The context is modernity.

This leads to the need for the establishment of an appropriate theoretical framework

capable of addressing the relevant aspects of this social critique. Theoretical development is the task of Part III. Here the context of social life in Fiji is explored in terms of its heritage and philosophical basis, the latter of which is used to legitimate practices that obstruct ecological sustainability. This philosophical basis is deconstructed and an alternative is developed. This allows for theoretical reconstruction as both a tool and a theoretical outcome. A theory of ecological sustainability is developed which is supported by the deconstruction and reconstruction conducted at the level of metaphysics and post-metaphysics. This leads to Part IV in which the local Fiji situation is able to be re-addressed and an authentic question concerning ecological sustainability can be framed. This is followed by the development of a social and political prescription that is capable of bringing about the kind of cultural transformation needed if ecological sustainability is to become a possibility.

PART II THE VUNIVIA CATCHMENT

Part II brings us to the Vunivia catchment, to where we can begin the process of framing an authentic question concerning ecological sustainability. In the following two chapters I trace my own evolution of thought in relation to the social dimensions of ecological sustainability. I present an analysis that was in the process of transforming as the thesis progressed. This process began in 1990 and I present my perspective as it stood at that time and show how and why I moved beyond it. It is undertaken at the technical, pragmatic level within the framework of the existing planning structures and resource management opportunities and constraints. 'Constraints' often amount to social obstructions to environment management goals when viewed from the perspective of an environmental manager. Such 'constraints' either pose a hinderance to or an opportunity for achieving ecological sustainability, depending on the attitudes of the observer. If the social realities that obstruct 'good management' are seen purely as a hinderance to the achievement of ecological sustainability, the observer has dismally failed to comprehend what human ecology is about (as I had done in 1990).

Ecological sustainability is not about sustaining ecosystem dynamics in the absence of humans. It is about the ability of human communities to exist in a compatible *relationship* with their ecological surroundings. People are part of the equation. Social issues are endemic attributes of human ecology. We are both social and ecological beings. It became clear to me that this point could not be ignored in any approach to the question of ecological sustainability without reducing it to a false question. This realisation was made during 1991 and 1992 where it became obvious that the technical approach must transform into one that is explicitly social.

An introduction to an exploration of the social dimensions of the question concerning ecological sustainability is carried out in chapter 4, where the analysis proceeds from within a non-critical social perspective. It is non-critical in the sense that it does not critique the existing context of social life but is confronted with the need to do so. I avoided this critique at the time because at that stage in the research I was incapable of

doing so in the absence of an appropriate background in social theory. I was also reluctant (at first) to move into an explicitly political arena which becomes necessary once the context of social life is called into question.

In relation to a critique of the context of social life, an adequate theoretical viewfinder must be employed in order to address the social dimensions. The development of such a framework became one of the main tasks of the thesis as a whole, and is presented in Parts III and VI.

CHAPTER 3 - A TECHNICAL APPROACH

3.1 INTRODUCTION

My first visit to the Vunivia catchment was in November 1988. This visit was conducted as part of a contract with the NZ Royal Forest and Bird Protection Society on a national survey of indigenous forest resources in Fiji with the view of developing a national parks system proposal for that country. This trip served as an introduction to the social and economic issues in the Vunivia catchment. As mentioned in chapter 1, this work in Fiji in 1988 set the context for what was to become the original research proposal for this PhD thesis. The findings of the 1988 survey can be found in a report prepared by Lees (1989). Part of this report was designed to serve as an introduction to a reserve proposal for the Vunivia catchment area. However, the degree and depth of social enquiry was minimal. The inventory nature of the survey did not allow any detailed social inquiry.

The Vunivia situation presented an array of real social circumstances that are central to the issue of ecological sustainability. This included a landscape covered with natural forest that was being logged; the social and economic needs and aspirations of local people; the opportunities they had in order to meet these needs from their own resources; and the interests of outside agencies in relation to the various resources in this catchment. Confronting this social dimension in Vunivia provided an opportunity to examine how this particular social world interacted with the ecological dimensions of the landscape. The social system is an aspect of the ecosystem. The social dynamic has an ecological character. But how does this socio-ecological dynamic function, and what is necessary for it to function in an enduring harmonious fashion? The landscape is always changing; society is always changing too. But how can these changes be co-

adaptive as opposed to contradictory? I set out in this research, to frame an authentic question in this regard. I spent two years failing badly, because I was tied up in a non-critical framework. In chapters 3 and 4 I show why and how I failed, and why I needed to spend the final year of the thesis researching the literature in order to realign the theoretical context of the analysis.

3.2 VUNIVIA - A GENERAL OVERVIEW

The Vunivia catchment, comprising some 5,300 hectares, lies at the eastern end of the north coast of Vanua Levu (figure 3.1). It survives as the last remaining extensive area of lowland dry-zone forest in Fiji. It had escaped conversion to non-forest land uses primarily due to its former isolation. This situation has changed in recent years through the construction of roads in the area. The loss of forest cover in the catchment has been increasing in recent years through a combination of commercial logging and small scale cash-crop agriculture. The catchment is almost entirely owned by a single native land-owning unit - the *mataqali* (clan) Namako. This aspect of the thesis is focused primarily on this *mataqali* and its relationship with the Vunivia landscape.

This catchment is dissected by four climate zones as defined by Berry and Howard (1973), where mean annual rainfall ranges from 1650mm at the coast to 3800mm in the highest part of the catchment. Effects of seasonality are variable with an extensive mid-year dry season at the coast (particularly the Naqaralevu peninsula), with a greatly reduced seasonality at the head of the catchment, where rainfall is generally much higher.

Geologically, Vunivia consists of one of the largest deposits of acid volcanics in Fiji comprised of dacite and rhyolite flows and breccias, glass breccias, and thinly bedded pumaceous sediments, estimated to be mid Miocene to late Pliocene in age (Rickard 1970). The topography of the area is influenced by more recent uplifts accompanied by a northward tilting of fault blocks. Steep hills underlain by Vunivia breccias occur along the northern watershed with moderately sloping and steep hill masses adjacent to the Vunivia and Vunivia Lailai rivers. A strongly weathered humic latosol soil of low base status is widespread in the area, with red-yellow podsolis mapped as Dogotuki hill soils located on the more acidic parent materials (Twyford and Wright 1965).

Most of the catchment is covered in natural forest, some of which has been modified by selective logging in recent years (since 1980). There are a number of isolated non-

forest parts of the catchment associated with human settlement and land use, where forest had been cleared for gardens and commercial cropping. The vegetation type has been loosely defined as closed canopy tropical rain forest (Berry and Howard 1973c). The specific vegetation, however, is variable depending on soil type, climate zone, topography, and location in relation to village and settlement sites. There is an extensive mangrove system (*Bruguiera* sp. and *Rhizophora* sp.) at the coastal fringe situated in a protected bay reaching inland along the margins of the Vunivia river and the Bourewa creek. The coastal zone immediately behind the mangrove swamp on dry, low nutrient soils is comprised of open, small leaved, sclerophyllous vegetation dominated by *Burckella* sp., *Gymnostoma vitiensis*, *Syzygium* sp., *Homalium* sp., and *Pittosporum* sp..

Low coastal shorelines overlain with coralline dust deposits support a semi-deciduous low forest with *Intsia bijuga*, *Gyrocarpus americanus*, *Terminalia* and *Ficus* spp. Stands of *Pandanus* sp. intermixed with cyperaceous grassland, *Dicranopteris linearis* (a reptant fern), *Spathoglottis* sp. (orchid), and myrtaceous shrubs dominate fresh water swamp land near to the coast. The hill vegetation varies depending on soil moisture and topography. Dry ridge sites tend to be dominated by *Dacrydium nidulum*, *Gymnostoma nodiflora*, *Syzygium* sp., and other myrtaceous tree species. Valley floors support a rich and diverse vegetation including *Dysoxylum* spp., *Endospermum* sp., *Eleaocarpus* sp., *Myristica* sp., *Parinari* sp. *Bischofia* sp., *Burckella* sp., and *Heritiera* sp. in a dense canopy, with a diverse and many-layered understorey with numerous ferns, vines, epiphytes, and climbers. Valley slopes support a similar vegetation to valley floors but in places are characterised by the large emergent crowns of *Agathis macrophylla* over a dense canopy of *Syzygium* spp., *Myristica* spp., *Bischofia* sp. and *Dysoxylum* spp..

The modified vegetation near coastal settlements and villages is characterised by coconut plantations intermixed with food gardens at the edge of cleared dry-forest remnants. Inland settlements have fewer coconuts but maintain large garden areas at the edge of the forest.

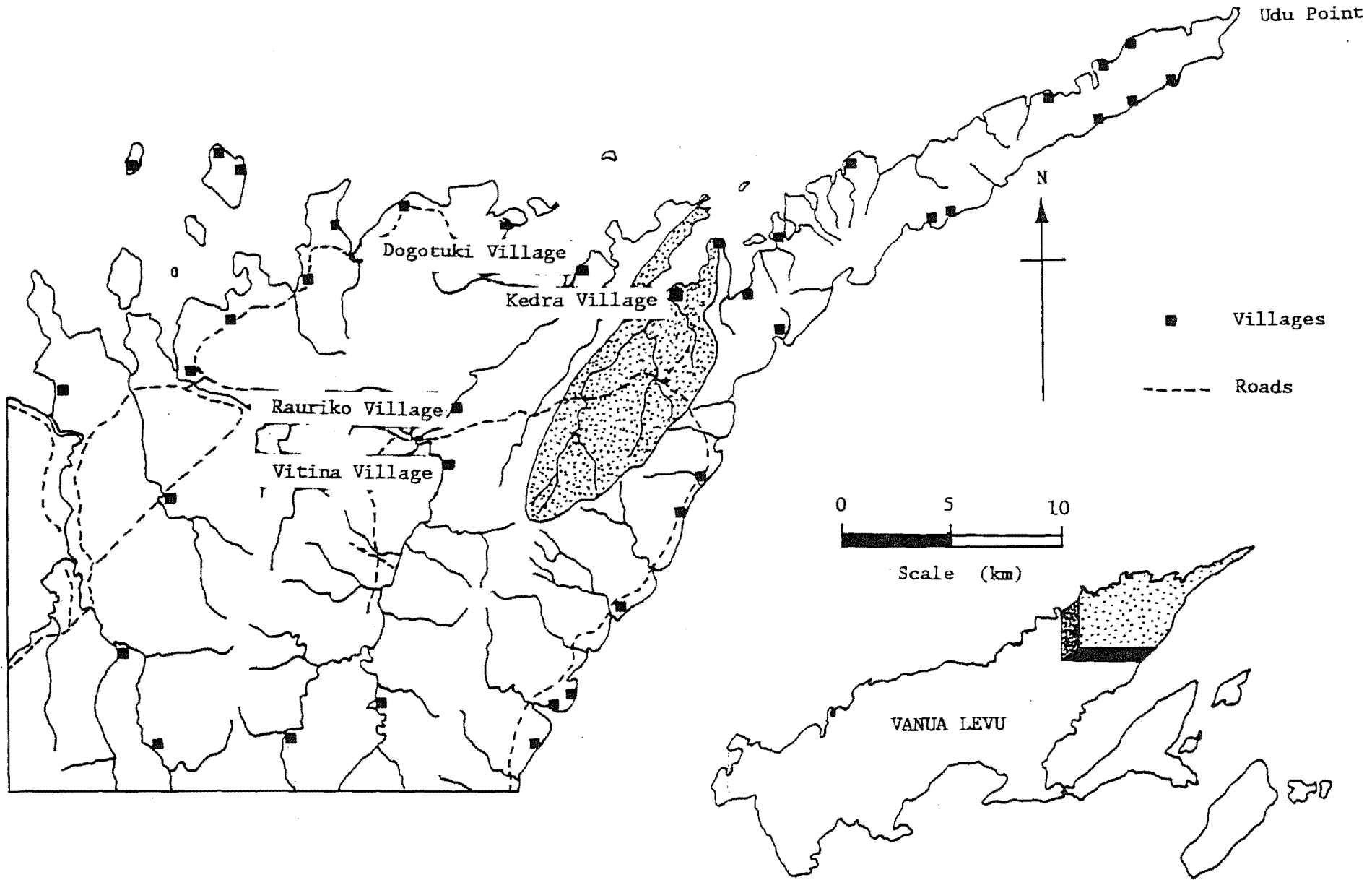


FIGURE 3.1 LOCATION OF THE VUNIVIVA CATCHMENT

As mentioned above, the land under investigation is that held by the *mataqali* Namako. This *mataqali* had a 1992 population of 221 people spread throughout 12 settlements and one village (figure 3.2). This *mataqali* is comprised of four *tokatoka* (sub-clans) including Naqara, Malumusere¹, Bulu and Namako. In addition to these kinship groupings the *mataqali* is divided into five different (Christian) religions: Catholic, Methodist, Seventh Day Adventist, Assembly of God, and Every Home (see figure 3.3). The settlements have tended to be established on the basis of religion. The local economy could be generally described as semi-subsistence, with a monetary component arising from cash-crop agriculture, a limited amount of wage labour (within the catchment), with income also arising from remittances and timber royalties. Small scale traditional harvest (i.e. fish and crabs) for cash provides an income for some families living near the coast.

A commercial cocoa growing project was established in 1986 with government assistance. Commercial timber extraction has been a feature of local resource use since it began in 1980. A timber concession over the entire forest component of the catchment area is held by Fiji Forest Industries Ltd (FFI). Some landowners have participated in the logging operation as contractors to the logging company. Commercial logging came to an end in April 1992 as the result of negotiations I had with the landowners, the logging company, the Fiji Environment Unit (Department of Town and Country Planning), and the Department of Forestry. It was the desire of the landowners that the logging be stopped. A number of different logging coups had been logged at a low intensity. Some of these coups, although partly logged, still maintain a closed canopy. Other coups however, have been more intensively logged and have been opened up to a much greater extent, leaving a discontinuous canopy and a remaining forest that is vulnerable to wind damage on exposed aspects.

¹The *tokatoka* Malumusere is an internal kinship group within the *tokatoka* Namako. It no longer maintains official status of a *tokatoka* but is important to its members. This will be clarified in chapter 4.

FIGURE 3.2 LOCATION OF SETTLEMENTS AND AGRICULTURAL LAND

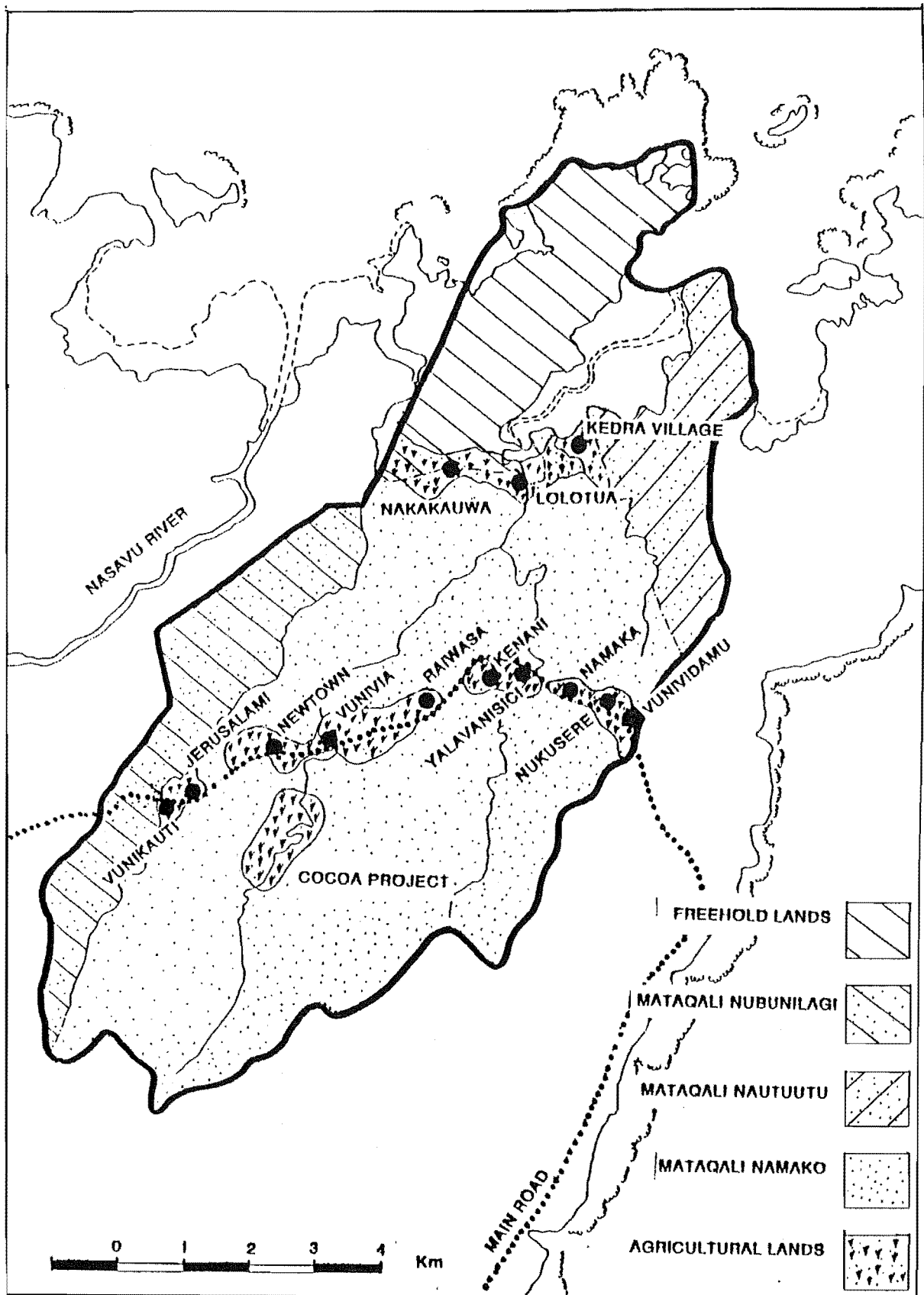


FIGURE 3.3 VILLAGE AND SETTLEMENTS OF THE VUNIVIA CATCHMENT

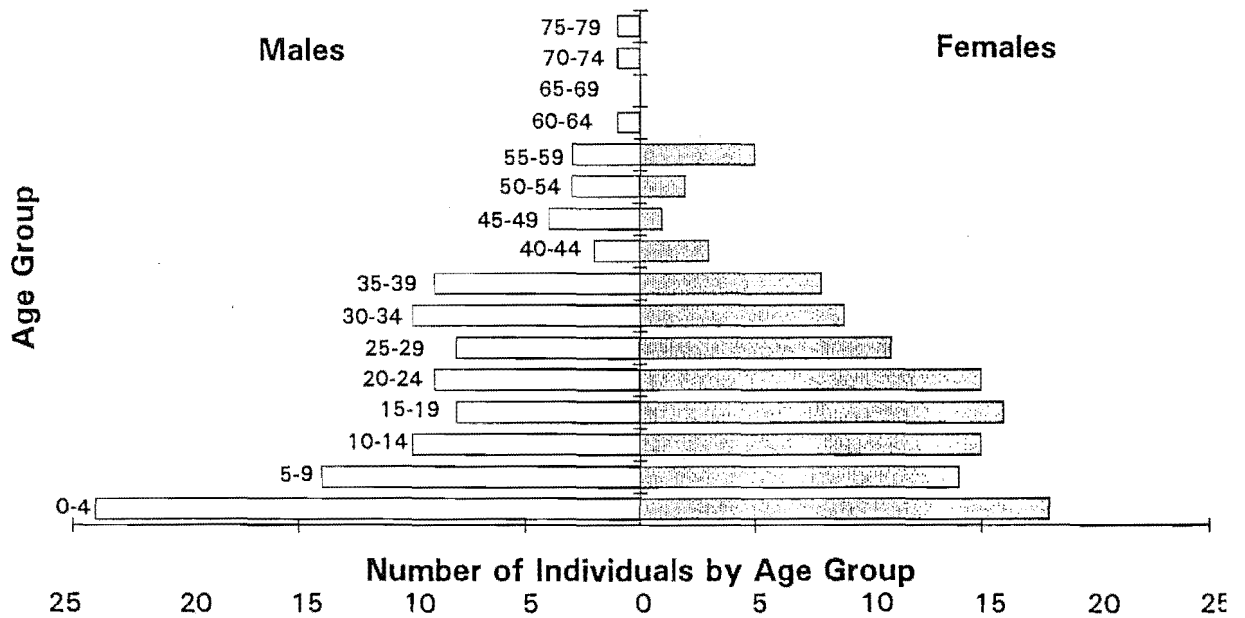
NAME	POPULATION	TOKATOKA	RELIGION
Kedra village	34	N, Q, B	C, M
Nakakauwa settlement	20	N	C
Lolotua settlement	11	X	SDA
Nukusere settlement	35	B	AG, EH
Vunividamu settlement	9	B	M
Namaka settlement	6	X	AG
Yalavanisici settlement	13	B	SDA, C
Kenani settlement	28	B	EH
Raiwasa settlement	4	B	AG
Vunivia settlement	18	B, N	AG, SDA
Newtown settlement	25	B	SDA
Jeurisalemi settlement	5	B	SDA
Vunikauti settlement	13	N	C

KEY

Tokatoka N - Namako
 Q - Naqara
 B - Bulu
 X - Not belonging to the *mataqali* Namako

Religions C - Catholic
 AG - Assembly of God
 EH - Every Home
 SDA - Seventh Day Adventist
 M - Methodist

FIGURE 3.4 POPULATION STRUCTURE OF THE MATAQALI NAMAKO



3.3 TECHNICAL PROBLEMS, TECHNICAL SOLUTIONS

During this research programme the logging of the Vunivia forests was continuing. The immediate threat of forest loss from this operation was a central concern for this research, which was initially being undertaken as a form of action research. Of particular concern was the continued loss of forest by a commercial operation in a area supporting the last remaining example of such a forest type - an ecologically sensitive area. The uniqueness of the Vunivia forest was what originally attracted my attention as a topic for research.

In terms of action research, I undertook to become involved in a real-life environmental management situation which demanded immediate action at a technical level in order to make environmental management gains. By becoming involved in a management situation like this one I was able to obtain an insight into how environmental management operated in a country like Fiji. I had previously been actively involved in a reserve proposal on Viti Levu (the Wabu Creek catchment) which was in the process of being formally protected when the PhD research was being conducted. The Wabu Creek was eventually gazetted as a Nature Reserve under the Forests Act in 1992. The Vunivia situation, however, presented a different set of circumstances relating to environmental management than Wabu. Firstly, the Wabu Creek catchment is uninhabited, and no logging operation was in action, although applications for concessions were being considered by the Department of Forestry and the Native Land Trust Board prior to its protection. Vunivia, on the other hand, had a far more complex social dimension, and the area was being actively logged.

I sought to help to bring about the protection of the Vunivia catchment forests in such a way that the landowners could be actively involved in its protection, and alternative forms of community development implemented as a means of satisfying local development aspirations. The landowner of the Wabu Creek (a single person in this case) received compensation for the loss of income which amounted to an equivalent sum to what would have been received in timber royalties. Instead of compensation, I believed that alternative forms of community development would be more valuable in Vunivia, as it would show that conservation could be achieved whilst maintaining the momentum of development in an area as far as the land owners were concerned. This, in turn, could serve as a test case which, if it succeeded, could be used as a model for similar approaches to environmental protection in other parts of Fiji. It would also help to expose the kinds of social issues that would need to be accommodated in an environmental management situation that was attempting to contribute to ecological sustainability. By changing the context of resource use people could continue to co-inhabit a natural forest area in an on-going fashion. This (I thought) would be a necessary and sufficient basis for ecological sustainability. I have since modified my view, the details of which will become apparent in subsequent chapters.

One of the overriding problems in relation to the implementation of 'sustainable development' as I understood it during the early stages of the thesis, was the differences in financial expectations between land owners and commercial timber companies, for the same area of forest. For example, the Aotearoa/New Zealand Ministry of External

Relations and Trade (1990) stated that sustained yield timber harvesting from tropical forests was generally biologically, but not economically feasible. The rationale supporting this was that industrial forestry operations could generally not sustain a commercial interest at the low extraction rates associated with small scale logging ventures. Research was recently initiated by the Fiji Department of Forestry on the feasibility of sustained yield harvesting of indigenous forests in that country.

My own feeling in this regard was that the task of forest resource management was not solely to serve the interests of a forest industry, but had a much broader mandate. If the local Fijian landowners were regarded as the principle client in relation to forest management, then sustained yield harvesting, or alternatives to commercial timber extraction were economically feasible. This is because the landowners would not have to satisfy the principle of maximising corporate profits in relation to high extraction costs, as would be the case in an industrial forestry company. Furthermore, landowners could conceivably participate in the small scale commercial use of their own resources where their over-heads remained very low compared with a large scale operation. To give an example, Fiji kauri (*Agathis macrophylla*) had a 1991 royalty rate for landowners of FJ\$25-34/M³ (Waqaisavou pers. comm.²). The same cubic metre has a sawn timber value of approximately \$FJ400-500 on the local timber market, if the landowners extracted the timber themselves. On a per hectare basis, landowners could easily run a small scale commercial timber extraction operation whilst using only a fraction of the timber volume used by commercial operators. The milling could be conducted with portable mills and in the process, a small scale social forestry project could be implemented instead of an intensive large scale commercial venture.

Alternatively, timber extraction could be put aside and existing non-forest areas in a catchment like Vunivia could be incorporated into a programme of agricultural intensification in cash cropping, combined with management assistance to bring about a much desired increase in local income, without having to remove any trees at all. Other available resources could also be utilised, such as a fishery resource (currently under utilised in Vunivia), and even the establishment of income generating service operations such as retail or transport services. Lowering the local costs of living could be included in this community development equation. It was these kinds of community development ideas that attracted me to Vunivia, and I went about exploring how such

²Timoci Waqaisavou is the Senior Estates Officer (Forestry) of the Native Land Trust Board.

a form of integrated community development and conservation could be implemented.

As a result of various meetings with officials in government departments and with the Chief Executive of Fiji Forest Industries, the logging company agreed to discontinue their operation in the area and withdrew their contractors. Up until this point my action research was demonstrating that a great deal could be achieved in terms of environmental management at the technical level, within the existing legislative framework, without ideologically challenging anyone. However, the next phase in this research was to strike problems in this regard.

As mentioned earlier, my task was to come to an understanding of the meaning of ecological sustainability. I attempted to do this by ascertaining whether or not ecologically sustainable development of some form was possible, through a combination of environmental management and community development. There was also the broader issue of the protection of natural areas in more general terms beyond a single catchment area.

As such, my next task was to situate the Vunivia example in a more systematic national framework. This necessitated a viewing of the institutional structure of environmental management generally, in order to see if the Vunivia case was an exceptional situation. For ecological sustainability to become remotely meaningful it would at least have to apply at the national level. Furthermore, if a community development dimension was to be added to environmental management it would need to be institutionalised in some way so that it was able to occur in an on-going fashion as part of the general activities of the nation as a whole.

3.3.1 INSTITUTIONAL AND POLICY SUPPORT FOR ENVIRONMENTAL MANAGEMENT

Environmental management will tend to be a role assigned to governments, with a share of the responsibility for environmental management extended to the private sector. However, for the private sector to involve itself in this process it often requires directives and incentives from government agencies which represent a broader public interest. As such, environmental management tends to involve an interaction between policy, planning and law, together with the institutions that are responsible for these governmental roles.

In many cases environmental management is able to be conducted from within the existing framework of policy, planning and law, where efforts are put into implementing a set of management strategies through formal government channels. This is the precise task of government agencies which have a specific mandate for environmental management. In Aotearoa/New Zealand an obvious agency in this regard is the Department of Conservation, which has an environmental management mandate written into the Conservation Act, which it employs as a legal template for conducting its management activities. In Fiji, however, no such department or corresponding legislation exists (as yet), and environmental management responsibilities fall into the hands of a number of different government agencies, in a poorly defined legal and planning framework. In spite of this, Fiji does have a number of policy and legislative instruments capable of being employed in the domain of environmental management of varying forms.

Before looking more specifically into environmental planning it will be useful to situate the environment sector in the general planning scheme. National planning in Fiji was formally organised through the preparation of national development plans, spanning five year periods. The last development plan (DP9) covered the period between 1986-1990. This arrangement has since changed where national planning is now conducted through the yearly National Economic Summits. Here national strategies are formulated together with sectoral plans. The current emphasis is on promoting export led economic growth, particularly through the activities of the private sector. This has been encouraged through deregulation, corporatisation, reforms in the financial and service sectors and the labour market, and a phasing out of tariffs, trade restrictions, and agricultural subsidies (Fiji Government 1990; James 1992). National environmental planning must fit into this overall framework if it is to be conducted in an official capacity.

Fiji's most recent National Development Plan (DP9; 1986-1990), stated that the Government sought to maintain a healthy environment through the judicious utilisation of its resources, thus allowing environmental management to form an integral part of the development process (Fiji Government 1986). A subsequent indication of the Government's environmental mission statement can be found in the Fiji Government's submission to the 1990 Geneva Round Table meeting on national development assistance requirements. The Government's objectives in relation to physical planning, conservation and environment were to:- protect and conserve unique features of Fiji's cultural and natural environment; ensure that environmental management is an integral part of the planning and development process; assess the long term needs for land, and

provide a basis for land allocation among competing uses; and, to strengthen environmental education (Fiji Government 1990). The National Economic Summit of 1991 also recognised environmental concerns in relation to economic planning:

Many countries have found that apparently rapid economic growth has been achieved only at the cost of a serious depletion of both renewable and non-renewable assets and to the detriment of their living environment. It is recognised that measures have to be taken early to prevent these hidden and often inadequately accounted costs...The objective is to promote sustainable development, incorporating a framework of project design, approval and monitoring that ensures the prevention of adverse environmental effects (cited in James 1992:2-3).

At the national level (as opposed to the sectoral level) environmental management is defined in terms of the instrumental value of natural resources for an economy, underwritten by the mission of economic growth. As such, environmental management is legitimate if it serves the interests of the national economy. If it fails to serve this interest it is unlikely to gain support at the national level. This sets the political context within which the environment sector (currently the Environment Unit of the Ministry of Housing and Urban Development) must engage in its advocacy, planning and management activities.

The legal framework, although under review, also provides *prima facie* many opportunities for successful environmental management. For example, biologically defined protected areas can be established in Fiji under at least 3 Acts (Native Lands Trust Act; Forests Act; National Trust Act). This arrangement has been criticised as inadequate for effective environmental management, and was the object of an inquiry into the legal framework for environmental management (Pulea 1991). Existing legislation (other than specific protected area legislation) that relates to nature conservation and environmental protection includes the following:-

1. - The Land Conservation And Improvement Act, Cap 120 Ed 1967
2. - The National Trust For Fiji Act, Cap 265 Ed 1978
3. - The Town And Country Planning Act, Cap 139 Ed 1978
4. - The Subdivision Of Land Act, Cap 140 Ed 1978
5. - The Forest Act, Cap 150 Ed 1978
6. - The Mining Act, Cap 148 Ed 1978
7. - The Birds And Game Protection Act, Cap 170 Ed 1978
8. - The Fisheries Act, Cap 158 Ed 1978
9. - Agriculture Landlord And Tenant Act, Cap 270 Ed 1987
10. - The Rivers and Stream Act 1882
11. - The Public Health Act 1935

Proposed Legislation (yet to be enacted):-

1. - The New Town And Country Planning Legislation
2. - The Water And Land Resources Management Legislation
3. - The National Parks And Reserves Bill
4. - Wildlife Protection Bill
5. - The Environmental Protection And Enhancement Legislation

Source: Cabaniuk (1989) Pulea (1991).

The relationship between agencies responsible for environmental management and the legislation and planning structures they hinge upon, was the subject of a national review undertaken by the National Environment Management Project (NEMP). The task of the Project was to conduct a review of the existing institutional situation in relation to the state of the national environment, and the national environmental management requirements as identified in the Project. The National Environment Strategy states that:

Two principle components of an appropriate institutional structure can be distinguished:

- a high-level component (the Environment Commission) which develops environmental policy; monitors and maintains oversight on the status of the Government's efforts to manage Fiji's environment; and which co-ordinates Government's activities which affect the environment.
- management components which are institutionally and legislatively responsible (and accountable) for specific aspects of environmental management...

[T]he current sectoral...environmental management responsibilities should, in general, be retained. However, in most cases they need to be more concisely defined and clarified and the departments held to be entirely responsible and accountable for their management activity...[M]inistries should be expected to establish their environmental management functions..[where in some cases] departments would [need to be established]. Such moves are already under way, for example, in Forestry, Health, and MPI [Ministry of Primary Industries] (Watling 1992:31-32).

More specific environmental management reforms were also considered by the NEMP including environmental education, pollution control and prevention, ecological economic issues relating to natural resource accounting, agricultural sustainability, marine conservation, protected area legislation, protected area establishment and management, and environmental planning. I was a member of the project team for an eight month period during 1991. One of my roles on the project was focused on the issue of protected areas, with particular regard to the processes of site selection,

statutory protection, and management. My contribution concerned the preparation of a proposal for integrating social issues into environmental management. The Vunivia situation was a case study.

Of particular concern was a broadening of the basis for environmental valuation, incorporating social (as opposed to merely biological) parameters into each stage in the management cycle. The general framework of this planning proposal is presented below. The rationale behind it was that many protected areas could be established using existing legislation in addition to social and economic forms of environmental valuation.

3.3.2 THE FIJI NATIONAL ENVIRONMENTAL MANAGEMENT AREAS PROGRAMME PROPOSAL

A proposed national strategy was developed during 1991 for the identification of ecologically sensitive areas (ESAs), their statutory protection, and their management as Environmental Management Areas (EMAs). The basic principles and structure of this proposal is presented here, and has been summarised from the original report (Weaver 1992d). The proposed programme focused on the protection and enhancement of areas of high or potentially high natural value.

The forms of valuation that underpin the proposed site selection process include the biologically defined value of natural ecosystems as well as the socio-economic or cultural value of natural areas. Such an approach acknowledges the fact that many natural areas, in their intact state, produce a broad range of environmental values to human society.

3.3.2.1 UNDERLYING PRINCIPLES

The proposed programme consisted of a framework for selecting, protecting and managing Ecologically Sensitive Areas (ESAs) as Environmental Management Areas (EMAs). EMAs are areas that require some specific form of environmental management in order to sustain the environmental values they support. For some areas this may involve the implementation of protected area status, while others may require specific management without any change in the status of the area.

The EMA Programme proposal was shaped by a number of underlying principles. These are:-

1. To assist the establishment and maintenance of a national system of Environmental Management Areas in a nationally coordinated programme.
2. To recognise different forms of environmental value for natural ecosystems. These different types of value are reflected in different methods for selecting NEMAs and different requirements for managing them according to their recognised value.
3. To recognise existing protected area proposals or areas in need of specific environmental management and incorporate them into the proposed EMA programme framework.
4. To establish procedures relating to the selection of sites, the implementation of appropriate protection, and the subsequent management of sites. Such procedures form separate, related, components of the proposed programme.
5. To recognise the social character of Fiji as a central factor in all stages of the programme. ESA tenure and the social conditions that this dictates were built into the EMA programme at each level of organisation.

3.3.2.2 CONCEPTUAL FRAMEWORK

The context of this proposed programme was originally based on the principles of ecologically sensitive areas (ESAs) as described in the National Environmental Management Project Inception Report using a definition developed by the Asian Development Bank. An ecologically sensitive area (ESA), according to the Asian Development Bank, is an area "of outstanding natural value for hydrological, geological, scenic, wildlife, or vegetation reasons and which should be converted [into economically productive uses] with great care or not at all" (Asian Development Bank 1989:8). This provides a framework for the development of a site selection process that is capable of recognising such areas according to those values. This provides for sites to be selected for purposes of nature conservation as well as the conservation of ecological goods and services provided by identifiable ESAs.

The site selection process should, therefore, be able to encompass a range of site types selected from a range of site selection criterion that reflect different forms and scales of environmental valuation. Biologically defined value (e.g. biodiversity), as well as a variety of social and economic forms of environmental valuation should be included. Site selection should reflect site value. For purposes of a strategy a number of site types were identified. The following site types and sub-types were identified:-

GENERAL SITE TYPES

Biological	Socio-economic (Resource)
Genetic	Water/soil quality
Vegetation	Agricultural/harvest
Wildlife	Food/nutrition/medicine
Corridor/ buffer	
Geological	
Socio-economic (Recreation/Tourism)	Cultural
Direct commercial resource	Traditional harvest
Indirect commercial resource	Spiritual
General scenic/ Recreation	Archaeological
Wilderness	

Each type of ESA could then be sub-divided further according to the range of ecosystems held within that particular type category. An example of this is presented for the 'Biological - Vegetation' category.

Here a selection of terrestrial ecosystem types based on the character of the vegetation communities form part of the classification process. Listed below is an example of vegetation community types:-

Cloud forest	Grassland community types
Ridge thicket	Coastal vine thicket
Dry montane forest	Special parent material
Moist montane rainforest	Wetland (a variety of types)
Lowland dry-zone forest	Dune vegetation
Moist lowland rainforest	Coastal wet forest
Deciduous dry forest	Coastal dry forest
Mangrove (a variety of types)	

In addition to this there are many examples of biologically based environmental site selection procedures that could be adapted to this programme. The South Pacific Regional Environment Programme (SPREP) is running a major Pacific wide biodiversity programme. The techniques and standards being developed by SPREP could be incorporated into a Fiji national programme thus remaining compatible with regional initiatives (e.g. South Pacific Regional Environment Programme 1989, South 1993). In Aotearoa/New Zealand there is the Protected Natural Areas Programme run by the Department of Conservation, which has a conceptual basis that could be adapted to Fiji. In Western Samoa a national lowland and coastal biodiversity survey was undertaken (Park et al 1992) which employed a site selection procedure that could easily be adapted for Fiji and fit into the EMA programme framework.

The way my proposal differs from the biodiversity approach is its inclusion of a number of non-biodiversity criteria as central components in the site selection process. This framework allows established resource classification systems to be built directly into a broad based national environmental planning process. Classification systems for non-biodiversity values, which have already been developed both in Fiji and in other countries could be used in the EMA programme site selection process. For some site types (e.g. those falling into the 'Socio-economic (Resource) - Water' category) there are likely to be existing data bases and site selection criteria already in use in other government departments (e.g. Ministry of Primary Industries, Mineral Resources Department). These data bases could be used by the EMA Programme and incorporated into a national data base for sites of significance.

3.3.2.3 BIOLOGICAL VALUE AS A BASIS FOR SITE SELECTION

The biological value of natural ecosystems has been used extensively as justification for creating protected areas throughout the world. Such sites tend to maintain very high value for scientific research as well as the protection of unique plant and animal habitats which, in their aggregate contribute to the biological character of a nation. Sites of this type tend to be managed as nature reserves where the integrity of natural ecosystems are protected from human disturbance as far as possible. Fiji has a small number of reserves of this type (e.g. the Ravilevu, Wabu Creek, and Yadua Taba Nature Reserves).

Part of a site selection procedure has been prepared by Gillison (1992) for the National Environmental Management Project (NEMP) involving the use of a survey design which integrates plant functional (dynamic) attributes with perceived physical environmental gradients. This site selection procedure will be useful in identifying sites of high biological value under the vegetation category. Other site types of high biological value (such as breeding grounds for rare sea bird populations) will need to be identified using alternative site selection techniques. The identification of ESAs of all site types will need to be carried out using different techniques for site selection appropriate to the value in question.

3.3.2.4 SOCIO-ECONOMIC VALUE AS A BASIS FOR SITE SELECTION

Under existing legislation (e.g. The Preservation of Objects of Archaeological and Paleontological Interest Act 1940, Town and Country Planning Act 1946, Forests Act 1953, Native Land Trust (Leases and Licences) Regulations, Land Conservation and

Improvement Act 1953) ESAs can also be legally protected for conservation purposes other than biologically defined value (Pulea 1991). Such areas may maintain high conservation value due to their role in the production of environmental goods or services, or sites of cultural significance. But these areas may not qualify as sites requiring some form of protection under a biologically defined site selection process. ESAs of this nature may consist of an ecosystem type that is already represented within an existing protected area.

ESAs of this nature may include sites that are of high value in their intact state for such purposes as soil or water protection due to some important economic activity nearby. For example, the Vaturu Dam catchment is an area of high conservation value in its intact state even though it is extensively modified. The principle conservation value it sustains is the ability to protect the water quality within the reservoir which in turn is of great social and economic value to the human population of Nadi and Lautoka. The area should be protected and managed as an EMA justified principally through socio-economic site selection criterion.

Other examples of the need for a site selection process that encompasses social and economic value of ESAs include sites that have high scenic and/or recreational value for the tourism industry, or a local human population. The Colo-i-Suva Forest Park consisting largely of a mahogany plantation would be unlikely to qualify as a site worthy of protected status under site selection criterion based on biodiversity index. However, the recreation and education value of this area is extremely high, as there are many indigenous plant and bird species in this reserve, and it is situated very close to Suva. Similarly, many other sites of value to recreation and tourism are likely to be excluded from a protected areas system justified solely on biological value. This may be because the ecosystems they support are already represented in existing reserves, or they may consist of modified habitats. The Vaturu Dam catchment again provides an example of an ESA that may fail to qualify as a site worthy of protection on the basis of biological value, and yet its value to the tourism industry as an EMA is potentially very high.

3.3.2.5 MULTIPLE SITE VALUE

It is likely that, in many cases, sites that maintain a high value according to one set of valuation criterion also maintain significant value under different site selection criterion. Areas that may be selected for their biological value, for example, may also be of high

value for purposes of soil and water quality protection, or direct economic value to a non-extractive industry such as tourism. The Wabu Creek *Agathis macrophylla* forest provides an example of this. Similarly, an area that is selected primarily for purposes of water quality protection may (at the present time or some time in the future) maintain high biological value as a habitat. The Monasavu Dam catchment is a good example.

An important administrative aspect of site protection involving the implementation of protected status through the planning system concerns the form in which a site is formally presented for protection. A site of high biological value may also have other values that warrant protection. Other such values might include the ability of a site to produce important environmental goods and services, or may be a site of great potential for use in the tourism industry. A site selection process that formalises the presentation of multiple site value may facilitate the process of implementation of protected status. Such an approach recognises that a multiple value approach is likely to lead to conflicts of interest. However, a central aspect of this proposal is a recognition of the need for negotiation in the process of determining site value. Such negotiation needs to be conducted by all parties that maintain an interest in the site.

3.3.2.6 ESA SCALE

Different scales of valuation and management can be separated into a number of geographical categories. These include national, regional, district, and local scales. These scales do not correspond with existing administrative structures although they follow a geographical sequence of classification. This framework could be further developed into a set of regions and districts as with the New Zealand Protected Natural Areas (PNA) programme.

A site of national significance should be managed at a national administrative level where benefits of the conservation of such a site accrue to the nation as a whole. Sites that are of regional significance are those where the direct benefits of conserving the particular attribute (e.g. a water catchment) accrue only to that region. Similarly, sites of district and local significance are those where the direct benefits of conserving the identified attribute (e.g. a drinking water resource for a village) accrue only to that district or locality.

A variable scale site selection framework is able to justify the protection of ESAs that may be important in their own right, but may not qualify as being of sufficient national

significance to be protected in a system of protected areas justified only at a national level. It is vital that sites of high local value are incorporated into a national strategy for ESA protection. A water catchment for a village or villages will be of very high social and economic value to the people who use that water. However, an ESA such as the Saniqari Creek catchment that formally supplied drinking water to the Dravuni villagers in Tailevu would not show up as an ESA of any significance based on criteria of biological value or at a national scale of significance. Also, a site may have a low local value in a protected form but may consist of a highly significant ecologically sensitive area at the national level.

3.3.2.7 ADVANTAGES OF MULTIPLE TYPE AND SCALE

A multi-tier and multiple type approach to site selection as described above has many advantages. Some may be useful immediately while others may prove their usefulness in the future. One advantage is the identification of multiple value sites from a number of data bases which communicate the conservation message in many 'valuation languages'. This has obvious political advantages as conservation proposals are not restricted to biologically defined value as a basis for environmental management. Environmental management proposals are able to be justified in a way that is more tangible to the lay person, and more importantly, the decision maker (neither of which are likely to be ecologists). This also has obvious benefits in the area of environmental education.

Local initiatives in environmental management programmes can also be catered for within the above framework. In many cases conservation efforts aiming at sustainable development combined with the protection of biodiversity are most appropriately undertaken from a local perspective. A good example of this form of localised environmental management has been explored by Thaman (1985) with the concept of localised micro-parks. In their aggregate, locally inspired environmental management initiatives combine to form a national system. The importance of a bottom-up approach that take account of the needs of local people has been repeatedly stressed by those with experience in the actual implementation and management of environmental programmes (e.g. Lees 1991; Thorpe and Humphreys 1991; Park et al 1992; Reti 1985; Singh 1985; Cox and Elmqvist 1993).

3.4 SOCIAL ASPECTS OF PLANNING AND MANAGEMENT

Many parts of the proposed EMA Programme described above have alluded to social issues. Social concerns in environmental management in Fiji have, until recently, been conspicuous by their absence. In some cases there is an active physical requirement in environmental management involving the rehabilitation of ecosystems and the management of endangered wildlife populations. However, environmental management requirements in Fiji tend to involve the need to modify the way people interact with the landscape. This may include the need to control the environmental impacts of a local population or industrial activity of some form. In order to carry out this kind of management a firm understanding of the social and economic circumstances that underpin environmental degradation is essential.

Most of the Fiji landscape is owned by tribal clans (83%), as mentioned in chapter 1. Most Fijian landowners are endowed with natural resource of some form. These resources (either marine or terrestrial) are used by them in many ways. In the absence of any form of environmental management in Fiji, much of the tribally owned resources are likely to be used for economic development of some form if possible. Forest areas are valued highly for their ability to generate a cash income either through royalties or from a landowner operated commercial venture. Land that is not forested will often be used for agriculture. Some areas are valued by customary owners in their intact state for the provision of environmental goods and services but the vast majority of natural resources held in customary tenure are valued as an economic resource for the owners.

The willingness of customary owners to allow their resources to be managed for purposes of environmental protection may, in many cases, involve conditions set by owners, as was the case with the Wabu Creek, and the Vunivia catchment. Such conditions may involve compensation of some form, to offset the lost opportunity to use their resource for economic development as they had planned. It may also be possible to assist the owners to gain equivalent income through the implementation of some development alternative. However, to carry this out there needs to be a significant community development aspect in most forms of environmental management. The provision of community development assistance for the owners may form the essential component of negotiating protected status over an area. But it is important to realise that this approach can only be successful if the community development assistance does in fact arrive and is able to satisfy the owners. This, in turn, may lead to problems in

relation to the successful implementation of community development itself. This is an issue of great concern for many different non-government social justice agencies in and around the Pacific, for example - CORSO, World Vision, UNICEF, Council for International Development, Catholic Commission for Justice, World Council of Churches, Pacific Partnership for Human Development, Solomon Island Development Trust, South Pacific Action Committee on the Human Environment and Ecology (SPACHEE), Oxfam, Pacific Institute for Resource Management, Trade Aid, and Water for Survival, PIANGO, and the Foundation for the Peoples of the South Pacific International (FSPI).

A national environmental management programme must take socio-economic aspects of management seriously, as the success of the programme hinges on it. If this part of a programme is poorly carried out, the effort put into the site selection process will be wasted. Furthermore, if a national environmental management programme were to involve an explicit socio-economic component vis-a-vis community development, it is likely to receive a broad range of support. The kind of support it could gain could include national budgetary support normally associated with community development in the absence of any environmental component. Financial support through international aid will be easier to attract as there is an explicit development component in the programme.

The point behind this overview of environmental management is to critique its ability to (a) be effectively conducted, and (b) deliver ecological sustainability. What will transpire as a result of the following critique, is that the existing official structure is quite incapable of even achieving (a) let alone (b). The reason for this stems from the innate weakness of environmental concerns when they are placed under the eyes of development from start to finish - development defined by the current ideological framework of late 20th century capitalism. The task of the critique to follow is to declare that the reader has been misled, as I was, which necessitates a more closer look at the social dimension beyond the administrative framework.

3.5 CRITIQUE OF THE TECHNICAL APPROACH

Through the course of the thesis I became increasingly uncomfortable with the technical approach to environmental management and the issue of ecological sustainability. There needed to be a meaningful social justice dimension to ecological sustainability. One of the reasons for this is that many of the problems relating to effective environmental

management were structural, relating to the framework of government planning in general, and social. Among the many problems with environmental management was the basis of environmental valuation, the need for effective community development, the problem of ideological obstructions ingrained in government policies, the economic pressure on local resources relating to international economic issues, and the need to situate environmental concerns in a holistic framework that was not isolated in an environment sector. Many structural problems also hinder the possibility of effective community development so necessary as part of the equation of sustainable development. But this then raises a crucial question: is effective sustainable development going to foster ecological sustainability? This necessitates an inquiry into the ecological dimensions of the meaning of 'community' and 'development'.

3.5.1 THE POLITICAL NATURE OF THE SUSTAINABILITY DEBATE

The remaining pages of this chapter asks the reader to step out of the official government frameworks into a broader, and more critical domain which is explicitly political. I gradually came to understand that the question of ecological sustainability was a deeply political issue, and that avoiding this political dimension would undermine any inquiry wishing to understand ecological sustainability. Also, I became vividly aware that the existing political and economic status quo is thoroughly underwritten by subjective ideological views. Because of this, any tacit agreement with an existing political regime, through exercising conservative or 'non-political' standpoints in environmental management, amounted to a defacto vote of support for such an ideology and its ecological consequences.

If the overall ecological character of a political economy is incommensurable with ecological sustainability (as is the case with contemporary Fiji) then any government sponsored environmental management would be equally unsustainable. It may have the appearance environmental benevolence, but it will be constrained by the innate ecological and social character of the broader system of which it is a part. As mentioned in chapter 2, environmental management can often be guilty of sweeping the symptoms of an unsustainable culture beneath the carpet. This is conducted through the cleaning up of isolated environmental damage after the event, whilst leaving the causes of such damage unconstrained. Such causes are, in many cases, inextricably linked to the very basis of the economic system that sets up shop in a country like Fiji.

3.5.2 THE PROBLEM OF INSTRUMENTAL VALUE

The National Environment Strategy, developed in 1992 by the Environment Unit, has a number of major objectives including:-

to protect ecological processes and life support systems... on which *human survival and development depend*;

to provide for cultural, spiritual and other non-material needs of society by protection of, and development of diversity *in the use of natural resources*;

to preserve genetic diversity... on which depends the functioning of many life support systems and actual and potential *commercial, medical and scientific uses*;

to ensure the sustainable *use of renewable resources... on which the Fiji economy is overwhelmingly based*;

to ensure that non-renewable resources are depleted at a rate that enables transition to the use of more abundant materials and ultimate sustainable *use of renewable resources* (my emphasis; Kalou 1992).

Reference to the implied purpose of environmental management is highlighted in the above statement in order to show that official environmental concerns tend to focus (almost entirely) on the instrumental (utility) value of Nature as a resource for the use of a human economy. This ethical stance will be shown in later chapters to comprise a major obstruction to the possibility of ecological sustainability. In spite of this instrumental emphasis, the National Environment Strategy provides much in the way of opportunities to pursue the implementation of environmental management programmes through official channels. The question is whether such management is capable of delivering ecological sustainability. As Watling (1992) has stated in the National Environment Strategy:

The challenge is to create an effective management capability largely within the existing legislative framework for the short term, while more fundamental reviews of all the resource management legislation are undertaken. [The Fiji] Government's policies with respect of its activities and the civil service have been actively considered in the preparation of the [National Environment Strategy], these are:

- maximising private sector involvement
- minimising Government's activities
- reducing or at least not expanding the civil service

(ibid.:26)

The challenge for ecological sustainability, however, is something quite different. It concerns the entire relationship between culture and landscape irrespective of government sponsored ideologies. It is also an issue that transcends an instrumental relationship. Recognition that the rest of Nature is more than merely an instrument of a human economy is a crucial step in coming to understand ecological sustainability. The sustainable development debate also provides an interesting example of the difference between environmental management and ecological sustainability. Watling (1992:15) has stated:

development is currently being promoted without due respect for the limits of renewal and replenishment of Fiji's natural resources. Fiji's 'natural capital' is being depleted while measures to manage this 'capital' are poorly developed and generally ineffective.

While this perspective embraces a major shift in thinking about the economic use of natural resources, it falls short of breaking out of the mind-set of instrumentality so central to so many forms of economic theory and practice. Criticism is not directed at Watling, as he was working within the limits of a government sponsored review programme which needed cabinet approval. This necessitates the tailoring of consultancy documents and orientating the content of consultancy advice to a form that is compatible with the existing objectives of the government. To do otherwise would be to put up a direct challenge to the ideologies supporting the government, which will rarely, if ever, be tolerated by any government.

Viewing natural resources as natural capital can greatly assist the movement towards a more complete form of natural resource accounting and non-market valuation. But at the end of the day Nature is still meaningful only in terms of its utility, and as such, valuation of this form is thoroughly anthropocentric in orientation. This raises some major ethical questions relating to the conceptual basis for human relationships with the rest of Nature in any landscape. For ecological sustainability to become possible there needs to be a shift in emphasis where instrumentality is not discarded, but embellished by a conception of Nature as being valuable in an intrinsic form as well. This involves a de-centring of the basis of value away from anthropocentrism, not necessarily to an exclusively biocentric mode, but a mode that is capable of recognising that value and worth are far deeper issues than modern neo-classical economics would have us believe.

3.5.3 ECOLOGICAL SUSTAINABILITY AND COMMUNITY DEVELOPMENT

Even though environmental management gains had been made at the technical level in Vunivua (i.e. the logging had stopped), the landowners there were still wondering what they were going to do with their land and their resources. If logging was to be phased out, something else was going to have to take its place. Some other form of development was needed. The various obstructions to effective community development in general will have to be faced by an environmental management agency if it wishes to ensure that effective community development is able to succeed. In so doing it will align itself with many other development agencies that are attempting to make development work in the rural landscape.

There are many obstructions to community development in countries like Fiji, which often relate to the existing structure of the political economy. Many political battles have been fought in Fiji on the issue of effective rural community development, and many more will be fought in the future. Tackling development problems as part of an environmental programme will tend to shift environmental management into an explicitly political domain. Questions concerning access to government funding, legal issues, privileges of different segments of society, rural versus urban development debates, taxation, transport, distribution, housing, water, markets, prices, wages, discount rates, the role of the private sector, health, education, and community welfare. These all become important for any form of environmental management that ventures into the community development arena.

If an environmental management agency is not well versed in these kinds of issues it is likely to fail to deliver the kinds of riches it promises under the development banner. This is because these are the kinds of issues that are central to the development debate in any country. An environmental management agency could hide behind a 'raise your income' slogan, and even get away with it for a while. But in the long run, which is what sustainability is all about, it will need to ensure that the standard of living that local people are seeking is what actually happens. Simply raising income levels will never guarantee that the kinds of services desired in rural Fiji will be delivered. Education and health services, for example, need to be explicitly catered for. I know there are many sophisticated monetarist arguments that claim *laissez faire* policies are capable of doing wonders in this regard (e.g. Douglas 1980). Yet empirically such an

economic ideology has done little more than increase the gap between the 'haves' and 'have nots'. One of the basic reasons for this stems from the way the free market approach plays into the hands of the biggest and the strongest economic powers in any economy (Schumacher 1973; Daly and Cobb 1989; Meadows et al 1992; Lang and Heines 1993).

Daly and Goodland (1992) have exposed a number of flaws in the assumption of a spiralling positive feed-back loop underlying the free market model for environmental protection, supported by free market economists such as Bhagwati (1988) and Low (1992). The positive feedback loop implies that free trade promotes growth; growth helps the environment; the environment helps growth; which in turn helps trade; which then helps growth again.

The criticism of free market models differs depending on the perspective of the critic. Keynesian and neo-Keynesian critiques of capitalist production (like Daly and Goodland) throw stones at *laissez faire* and develop an alternative based on forms of market regulation. Marxist critiques of capitalism throw stones at all forms of capitalist production (including the neo-Keynesians) by exposing a great deal of social contradictions to the capitalist model of society. Some forms of ecological economics (e.g. Perrings) throw stones at Marxists, and capitalists for the way their assumptions both contradict the laws of thermodynamics. Some neo-Marxists throw stones at all social theories (including traditional Marxism) that reduce reality to economics. Then we have the postmodernists who throw stones at everybody including themselves. What I must do is find an appropriate basis for critique that is capable of authentically criticising the existing situation in relation to ecological sustainability. However, at this stage in the research I was still uncertain as to what this would require.

The Rio Declaration states that: "The right to development must be fulfilled so as to equitably meet the developmental and environmental needs of present and future generations" (Ministry for the Environment 1993:4). But the question remains: what is meant by 'development'; and is effective development in a country like Fiji capable of delivering ecological sustainability? Is poverty really the problem, or is it affluence?

3.5.4 THE QUESTION OF SCALE AND EXTERNAL FORCES

Vunivia is one single catchment in a little country in the vast Pacific ocean. If Vunivia was sucked into a huge hole in the earth tomorrow, very little would happen in Suva,

or in Los Angeles. The impact of Vunivia on the rest of the planet is minute. But the impacts of the rest of the world on Vunivia are great indeed. In fact, external influences on Vunivia are so great that to ignore them would be severely parochial and highly misleading. The same can be said for Fiji in general. What Fiji is today is very much a function of what is and has been happening in many other countries for many decades (even centuries). The Fiji economy is enormously influenced by external factors as is the Fiji political situation (see Crocombe and Ali 1985). The American civil war in the mid 1860s helped to provide the market space for one of Fiji's first agriculturally based export industries - cotton. The Franco-Prussian war that followed soon after helped to end it contributing to the conversion to sugar (Howard and Durutalo 1987). The land wars in Aotearoa/New Zealand during the 1860s influenced the present day land tenure situation in Fiji, as Fiji's first Governor (Arthur Gordon, who had been posted in Aotearoa/New Zealand) did not want the Fijians to suffer the same injustices that the Maori had sustained in losing their land (Campbell 1989). International commodity price fluctuations hold the present day Fiji economy by a string as if it were a puppet (see Fairbairn 1985; Howard and Durutalo 1987).

Not only is Vunivia not isolated spatially, but the issue of indigenous forest conservation must fit within a national framework of planning in general as mentioned earlier. Forest conservation stands along side many other different issues of concern in Fiji today. And many of them are interrelated. This situates the Vunivia forests in a broad spatial and conceptual space. And so, indigenous forest conservation in rural Fiji is not a process that can be undertaken in isolation. Fiji's economy is inextricably linked to international markets and agreements, which means that any domestic activities that involve redirecting the development process must take account of these international influences (see Crocombe and Ali 1985; Neemia 1986). It is in this domain that one finds numerous obstacles to effective environmental management.

International economic relations are so often overlooked by proponents of environmental protection programmes. However, some of the principal causes of environmental degradation lie in the international realm. Many of the world's poorer countries (often called 'developing countries') are, for various historical reasons, locked into a position of international economic subordination by larger, economically stronger countries. To understand this one needs to look into the historical circumstances that led to the establishment of Pacific Island economies. The economic infrastructure that was established in these small island states was designed to facilitate the removal of raw materials produced in the islands at low cost and to transport these commodities to

markets in the metropolitan homelands (Howard and Durutalo 1987). The economies of Pacific Island countries were involved in trade through the colonial era with the colonial metropolitan states, under terms dictated by the latter. Political independence of Island nations over the last few decades has done little to change this (Hau'ofa 1987). Moreover, colonial withdrawal left behind state bureaucracies and administrative infrastructures that were often unsustainable in relation to local resources which, in turn, tied the newly independent Island economies further to external economic powers for budgetary assistance (Bertram 1987).

Although most Pacific Island nations, including Fiji, are now politically independent, as suggested above, their governments have little control over their economies (Sevele 1987; Fairbairn 1985). The economic legacies of the colonial era live on in the current economic order of the Pacific region and perpetuate patterns of colonial hegemony. The subordinated economies of Pacific Island nations are still heavily dependant on aid inputs and market outlets supplied and regulated by developed nations outside the region (Sevele 1987). Australia, Great Britain, and New Zealand, for example, maintain a trading relationship with Island nations that preserves a trade balance in favour of these larger countries and perpetuates their economic dominance in the Pacific. For example, New Zealand sent to the Pacific over \$NZ441 million in exports in 1989 but bought back from the Pacific only \$NZ154 million. In the same year New Zealand spent \$NZ88 million in aid on the Pacific (South Pacific Policy Review Group 1990). This created a \$NZ200 million trade deficit in New Zealand's favour in a single trading year. Such deficits tend to be financed through loans, and loans have to be repaid.

Aid has also been the subject of much criticism from within the Pacific. The way 'aid' is manipulated by donor countries tends to reinforce the dependency of Island economies on the donor economies. For example, aid is often used as a means of opening market opportunities for manufactured goods produced in the donor countries; aid projects create a demand for expertise that is not available in the recipient country; aid projects often involve high operating costs in order to be successful (Sevele 1987).

Problems with aid combine with direct and indirect protectionism in the markets of larger core nations leaving the Pacific Island countries in a weak international trading position (Neemia 1986; Fairbairn 1985; Larmour 1985; Sevele 1987). Because of this, trading agreements and economic development agencies were established following moves to political independence by Island states during last few decades (Neemia 1986). Such agencies and agreements include the South Pacific Forum, South Pacific Bureau

for Economic Cooperation, South Pacific Regional Trade and Economic Agreement, the Forum Fisheries Agency, and the Pacific Forum Line. Some of these structures were designed specifically to increase the bargaining power of Pacific Island nations *vis-a-vis* their trading relationship with larger core nations involved in Pacific trade.

Strategic manoeuvres in relation to international trade have not enabled Pacific island economies to become liberated from the subordinated positions they found themselves in when they embarked on political independence. Freeing up world trade will not help this either. Island nations such as Fiji are still heavily dependant on the exploitation of their natural resources in order to finance their debt servicing, government bureaucracies and their development programmes, as they lack a strong manufacturing base³2 and export markets to receive manufactured products.

Many of the pressures endured by national economies in the Pacific are manifested at the sectoral level, as economic sectors are orientated towards the generation of foreign exchange. Currently Fiji supports 6 principal economic sectors including agriculture, fisheries, forestry, tourism, mineral resources, and manufacturing and commerce (Fiji Government 1990). Fiji's forest sector has recently moved from a phase of exotic plantation establishment and research to one of harvesting and processing for export. In 1989 the Fiji Forest Sector accounted for 1.5% of GDP (Chang 1991), which is expected to rise to a target of 15% GDP by the year 2,000 (Fiji Government 1990). This process of growth in the forest sector, in itself, is not without its problems, as a recent independent review of the forest sector pointed out. A number of specific constraints to successful export led growth in the forest sector have been identified, which include:-

Long standing timber trade relationships in the Pacific Basin region will be severely dislocated as the softwood surplus from the New Zealand, Chilean and Australian plantations come on stream to an increasing degree from the mid 1990's.

Competition in the traditional markets for general purpose and utility timbers will correspondingly intensify and become almost entirely a matter of price.

It will become increasingly disadvantageous for Fiji to continue in its traditional role as a producer of mainly light construction and mass to medium quality furniture grades of timber.

(Leslie 1988:2)

³Fiji, in the last 20 years has made inroads into developing a manufacturing sector, which has recently involved the establishment of tax free zones to attract foreign investment in manufacturing (Fiji Government 1990).

The pressures on the Fiji Government to provide the finance for debt servicing and development programmes within such an economic climate are shared across all sectors with natural resource exploitation being one of the most important forms of industrial activity. What this means for the indigenous forests of Fiji is that they are under great pressure to provide income for the Government. In the short term there will always be markets for the sale of unprocessed timber products arising from Fiji's exotic and indigenous sources. However, Fiji's ability to service this kind of market in a on-going fashion is questionable given the small size of the forest resource base (Byron 1988). The political will within the Fiji Government for any large scale allocation of natural forest for conservation purposes is likely to be low in the light of such pressures on all natural resources. One could argue, for example, that almost every government in the world is under great pressure to generate the maximum possible returns from their natural resources. This may be true but it does not hide the fact that there are far less options currently available to the Fiji Government compared with countries supporting stronger economies.

Due to the nature of the economic pressures on the Fiji economy, the Fiji Government is unlikely to allow large areas of rural Fiji (such as natural forests) to be placed outside the reach of development that is capable of generating foreign exchange. Large scale forestry operations often involve the employment of foreign capital, the generation of company and employees taxes and investment in plant and roading infrastructures that are likely to be very attractive to the Government Treasury.

On the other hand, if Fiji establishes an export led forest product manufacturing industry, either from natural or plantation sources, the timber volume required for such activity would be less than that required for the sale of raw materials. The Fiji Government would then be given more breathing space to plan for resource allocations for conservation purposes. A small scale manufacturing industry will also be needed in order to support small scale community development projects involving the use of low impact logging techniques. An alternative would be the location of niche markets for high priced naturally grown indigenous timber. This would help to conserve extensive indigenous forest resources that are unlikely to ever be placed into protected areas (remembering that just under half of Fiji's total land surface remains under some form of forest cover with the vast majority of this comprising of indigenous forest). These are the kinds of strategies facing environmental protection advocates wishing to take an

adequate (yet uncritical) account of the international economic realities that hold the Fiji economy at ransom.

Even if a community development option were to be pursued as a means of gaining the protection of the forests of Vunivua, there are a number of potential constraints to this process. These constraints include:-

1. Small scale developments that involve the landowners as the principal beneficiaries of economic activity may not appear to be of great benefit to the Government which would prefer to allocate land to forms of development that could more directly provide foreign exchange (e.g. large scale industrial operations).
2. Economies of scale make the industrial processing and the export of timber generated through small scale community development programmes difficult. This is due to the logistics of extraction and transportation of low timber volumes from isolated parts of the country. Low volumes of timber involved in such operations are also unlikely to be capable of reliably servicing the demands of existing export markets. This becomes an important factor if large scale indigenous industrial timber extraction is substituted by numerous small scale operations.

Small scale community development in forestry involving the extraction of indigenous timbers could be channelled into a local timber processing and manufacturing industry such as furniture making. However, a number of problems are likely to arise with this approach. These include:-

1. If undertaken in many parts of Fiji, the local market for furniture and other manufactured products is likely to become flooded, leading to a drop in prices and eventually dissatisfied landowners who are unable to earn an income from their small scale operations.
2. Any moves to channel timber processing and forest product manufacturing into an export market will meet problems faced by any manufacturing industry attempting to export from Fiji to foreign buyers outside the Pacific Islands region. This includes:-
 - A. The lack of suitable local infrastructure and expertise;
 - B. Distance from any potential foreign markets;
 - C. The difficulty in gaining secured access to foreign markets for manufactured products likely to be produced in these nations;
 - D. In order to be competitive in such an economic climate the costs of production would have to be very low, forcing real wages down in that particular industry, thus creating further social problems associated with such manufacturing efforts. Fiji's garment manufacturing industry has been facing such social problems since it began.

Even if community development in Vuniviva did not involve forestry at all, but instead focused on alternatives to timber extraction, it would still become entangled in the basic problems associated with any form of development in a South Pacific island economy. Any moves towards combining development with conservation are thus riddled with economic and political difficulties. Such issues have been an on-going concern for many involved in the international development debate. Fiji and Pacific Island examples of this debate can be seen in Ravuvu (1987b, 1988), Hau'ofa (1987), Trask (1987), Sevele (1987), Shand (1985), Haas (1985), Neemia (1986), Bellam (1981), and Howard and Durutalo (1987).

This general problem was recognised by the World Commission on Environment and Development. Much of their 1987 report concentrates on international economic issues, highlighting economic inequities that have substantial impacts on the environment. The Commission identified some of the principal international economic causes of current phases of environmental degradation in developing countries, which include the following:-

- A deterioration of the terms of trade between developing and developed countries,
- The rising burden of debt servicing in developing countries,
- A stagnation of aid flows from developed countries,
- Growing protectionism in developed market economies,
- An increase in the cost of foreign borrowing.

(The World Commission on Environment and Development 1987)

In recognising the close connections between environmental protection and the process of development in general, the 1992 Rio Declaration stated that: "In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it" (Ministry for the Environment 1993:5). The Rio Declaration is thus a wish-list for reorienting the global economy into such a form that *development* is able to be sustained. The critics of the existing economic climate mentioned above are also concerned about the distribution of development and its riches. But is it all going to contribute to, or contradict ecological sustainability?

3.6 AGAINST THE TIDE

Although many attempts are being made to improve the nature of the development process, in order to bring it in line with social and ecological realities, this is happening amidst a massive international movement in the opposite direction. The kind of gains

sought in the Earth Summit, and the Pacific island critics of the existing economic landscape, are being precisely contradicted by the GATT process. Daly and Goodland (1992) have outlined a number of basic problems with international deregulation or "free" trade as being sought in the GATT negotiations. They show that global economic integration by means of free trade will favour a privileged minority at the expense of the majority in both developed and developing countries. Global economic integration through GATT will move in the opposite direction to the concerns of many of the critics of the existing economic situation in island economies.

If markets were perfect, and capital were immobile internationally, then unregulated trade in products would be to the advantage of all nations. But with prices that commonly do not reflect social and environmental costs, and with highly mobile capital, unregulated trade can be harmful to nations (Daly and Goodland 1992:2).

One of the major problems with the free market model is the assumption of capital immobility between countries. If this were true, international free trade would lead to the distribution of global production in accordance with the principle of comparative advantage⁴, which is 'theoretically' beneficial to all trading partners.

This model of international trade differs from that of Adam Smith, who earlier argued that countries will only export products they produce more efficiently (in an absolute sense) than other countries. Under the Ricardian model of comparative advantage (which is supported in GATT), a country will be able to trade internationally, even when their absolute efficiency is lower than that of all other countries. However, one assumption underlying this model is that the two countries in our example, remain separate as two economies. David Ricardo, who developed the theory of comparative advantage, pointed out, that if capital is able to move across national boundaries, then it tends to move from

⁴The principle of comparative advantage argues for specialisation of production in different countries, producing mutual benefit. For example, assume two countries (e.g. England and the United States), produce the same two products (e.g. wheat and cloth), but England produces cloth cheaper (in units of production cost) than the US. Meanwhile, the US produces wheat comparatively cheaper (in units of production cost) than England. Under the classical Ricardian principle of comparative advantage, both countries will benefit if they each specialise in producing the product which is, for them, relatively cheaper to produce, and trade with each other in the product they don't produce cheaply. In this fashion, a country will tend to export the commodity whose cost (relative to another commodity) is lower than it is in the country it trades with. Both countries will be better off with specialisation and trade. If there are no differences in comparative cost of production there will be no incentive for trade, as each domestic economy will be able to produce each product at relatively the same cost (see Heller 1968; Laffer and Miles 1982).

a situation of comparative advantage (which fosters trade even when the absolute efficiency of a producing country, for all products, is lower than all other trading countries) to absolute advantage (where only absolute efficiency dictates trade in products), as would be the case in a domestic economy (see Daly 1992). GATT is attempting to create a global economy that is effectively the same as a single (very large) domestic economy. This being the case, there will be no meaning in the notion of comparative advantage, as it will all be one economy and capital will freely move between what had been separate economic nations. This is exacerbated by the activities of transnational companies which do most of the trading. Furthermore, countries do not trade with each other - companies do.

Daly and Goodland (1992) pointed out, that if capital is *not free* to move across national boundaries then the principle of comparative advantage holds true. However,

The current celebrants of global economic integration are frequently arguing for the erasure of national boundaries (free movement of goods and capital) on the basis of a doctrine (comparative advantage) whose validity presupposes the existence of those national boundaries! (ibid.:13).

Already doing their best to contradict the assumption of capital immobility and the principle of comparative advantage are transnational corporations, with the top 500 of them now controlling over 70% of world trade (Lang and Heines 1993). Furthermore, 40% of world trade is conducted within transnational companies (i.e. trading with themselves). This makes a laughing-stock out of the entire free market assumption in relation to prices. The market is not dictating price in international trade - transnational corporations set the prices to suit themselves. The activities of transnational corporations also makes a mockery of national boundaries and the fallacy of capital immobility. This is one of the biggest theoretical and practical contradictions in the entire GATT programme and it is a huge environmental threat to every country in the world. GATT cannot even be supported in economic theory. It amounts to a massive game of international manipulation by transnational corporations, seeking to secure their aspirations of economic absolutism. If free trade were to succeed under GATT, the supreme dominance of transnational companies will serve to transform the term 'free' into: 'freedom of the biggest economic powers to dominate global resource consumption, without any regard for social or environmental issues that might stand in the way of corporate profits'.

One of the biggest threats to small economies like Fiji is the loss of capital through the

trading practices of transnational companies operating in that country. Transnational companies are able to manoeuvre capital from one country to another in such a way that corporate profits are made in the countries with the lowest taxation rates. This is achieved by understating the value of raw materials extracted from the source country (thus evading taxes in the producer country) and then selling the raw materials at full prices in importing countries (that have low tax rates). This practice, although predominantly illegal (Daly and Goodland 1992), is well known as 'transfer pricing', but because of its illegality there are few figures able to substantiate the practice with firm evidence.

One way of achieving this in the logging industry for example, is for a logging company in country A (e.g. Fiji) to sell its undervalued timber to an importing company located in a tax haven (in country B, e.g. Vanuatu), where the importing company and the logging company are both subsidiaries of the same parent company (located in country C, e.g. Australia). The importing company (in country B) then sells its supply of timber at its full price to another country (country D, e.g. Japan) thus making its profits on the second sale in the tax haven.

Such practices can easily be obscured by poor (and/or creative) accounting of timber volumes in the source country, which is able to be attributed to inadequate management and accountability of local staff within the company. If such a company operates a transfer pricing scheme it is able to run at a public 'loss' in the supply country and thus avoid the payment of company taxes. The only public contributions that such a company makes to the local economy are employee wages, employee taxes, consumption of fuel resources (e.g. oil, diesel and electricity) and infrastructure such as roading and plant, whilst transforming valuable resources into capital in another country. The capital value of the natural resources are siphoned off and never contribute to the local economy. The World Wildlife Fund (WWF) has shown that this has been happening in Indonesia and Papua New Guinea. Log prices in Indonesia were shown to be undervalued by 40%, and Papua New Guinea by 10%, even when the standard domestic price in no way reflects the costs of production, and the environmental costs relating to extraction (Daly and Goodland 1992).

In spite of these kinds of problems the moves to free up the global economy are getting stronger by the year, taking humanity further and further away from any hope of ecological sustainability.

3.7 IN SEARCH OF A NEW FRAMEWORK

I developed the environmental management proposal presented in this chapter as a means of contributing to the debate concerning ecological sustainability, at a time in which the issue of ecological sustainability remained (for me) substantially under-theorised. The proposal rides on the assumption that ecological sustainability and environmental management are the same. I also remained convinced that community development underpinned the meaning of ecological sustainability. My critique of these standpoints in this and later chapters is not designed to ridicule environmental management or community development as such, as many important gains can be made for society and the landscape through socially orientated environmental management of the form presented in this chapter. However, the meaning of ecological sustainability needed further work, particularly in the conceptual sphere.

Following the preparation of the proposal developed above, I began to realise that environmental degradation was inextricably linked with injustices in the social domain. I could see deforestation and the degradation of village life both arising from a common source - the existing economic system. Social and environmental flaws in this economic and political system led me to conclude that environmental protection must be linked with social justice if it is to succeed even in the medium term (i.e. a time horizon of years or decades). This amounted to a move from a purely technical approach to one that was explicitly social in its orientation and took a more critical view of economic theory and practice.

Viewing the social situation from an uninformed position in relation to social theory (toward the end of the first year of the research programme) led the thesis into a perspective that loosely aligned itself to neo-Keynsianism (i.e. welfare economics). This was supported by an exposure to literature on economic geography (e.g. Knox and Agnew 1989; Wallerstein 1974), resource economics (e.g. Randall 1987; Repetto and Gillis 1988), externalities and discount rates (e.g. Perrings 1987; Baumol 1972; Ayres and Kneese 1989), development economics (e.g. Schumacher 1972; Repetto 1984; Sundrum 1983), macroeconomics (e.g. Daly 1991; Gowdy 1991), environmental economics (Daly 1973; Henderson 1978; Perrings 1987; Georgescu-Rogen 1976; el Sarafy 1991; Goodland 1992), and social forestry and development (e.g. Griffin 1988;

Ives and Pitt 1988; Tilling 1989).

The employment of ecological economic tools for environmental protection advocacy can provide many strong arguments in favour of major reforms in the structure and functioning of economic systems that interact with natural landscapes. Peters et al (1989) had shown that in most cases, the value of non-wood forest products extracted from Amazonian rainforest exceeded the timber value from an equivalent area of tropical rainforest by three and a half times. Odum (1988, 1989) looked into the application of energy transformation 'budgets' in relation to the use or abuse of natural systems as part of the standing capital in a domestic economy. A system of macroeconomic resource valuation based on ecological energetics in transformation (emergy or energy memory) provided a sophisticated means of justifying the adjustment of existing forms of resource valuation on the basis of the energy input in their natural production.

Perrings (1987) reconceptualises economics in general, in relation to thermodynamic and system principles, combined with econometrics, to expose a plethora of contradictions in much neo-classical economic theory and practice. Whereas the major multi-sector models of economic growth developed by Neumann, Leontief, and Solow-Samuelson are constructed on the basis of a description of the physical conditions of production, Perrings developed an alternative model where the assumptions are global and take account of thermodynamic principles. This takes the form of a limited growth-rate model tending toward a steady state (similar to that of Daly 1973), where the assumption underlying the physical rate of growth of the closed global system (in relation to mass) is zero. This leads to the principle that no subsystem (such as an economic system) can expand indefinitely in a finite world. This model sets up a significant challenge to logistic growth models developed in neo-classical economic theory which are based on the misconception that subsystems are able to expand indefinitely (Perrings 1987). Such views of the naive axioms that underlie neo-classical economics are common in the ecological economic literature (e.g. McAllister 1990; Peet 1992; Weissermann 1990).

Some of the alternative economic literature argues for a more effective system of valuation, accounting, and distribution as a means of moving modern societies away from the deepening social and ecological crisis of the late 20th century. Much of this amounts to an improvement in the economic position of the economically underprivileged. Others, however, are arguing that our attention must be focused not on

improving the lot of the 'lower classes', but reducing the affluent positions of the 'upper classes'. Improving the position of the lower end of the economic scale, whilst leaving the affluent to continue their rate of consumption will increase the overall unsustainability of any economic system (see Meadows et al 1992, for example). This is because the problem of unsustainability is not poverty but affluence (Trainer 1985, 1992), as it is driven by the overconsumption of local and global resources. Some theorists have argued that the global economic system has already exceeded the limits of its own sustainability (Meadows et al 1992; Goodland 1992).

The realisation that affluence and not poverty is the problem shifts an analysis away from conservative approaches, that do little more than apologise for the affluent life styles of the world's rich. The flaws of this perspective are not only economic but also social. Such approaches often argue that assigning appropriate property rights to environmental goods and services, and the market will take care of the environment. Scarcity will increase prices, leading to lower consumption, the location of alternative resources and research into alternative technologies. Appropriate natural resource accounting techniques can then be employed to account for the loss of environmental capital, which can be plugged into cost-benefit analyses which can ensure sustainability. One of the biggest problems with this approach relate to the assumptions that underlie the meaning of a 'cost' and a 'benefit'. Also, such forms of accounting rely on microeconomic techniques and assumptions. But environmental goods and services are often macroeconomic in character (see Daly 1991), and frequently do not come anywhere near a market. Environmental degradation is very often manifest at time scales beyond that monitored in microeconomic production functions, and as such, lie outside the reach of the economic system. Because of this, they are often called 'externalities' - external to the economy, but not external to the biosphere or the landscape. Perrings (1987) has suggested that the very existence of externalities is an indication of the innate flaws in the axioms that underlie economic theory and practice.

Another problem with the free market approach is its assumption that every person on the planet is born into an equal position of opportunity to gain access to resources for self improvement as defined in a free market model. This first rides on an assumption that all people are innately equivalent in terms of their psychological character - we are supposedly all varieties of natural economic consumers. Even the definition of 'economics' in text books reinforces this. For example, according to one text, 'economics' "is the study of man's efforts to satisfy his seemingly unlimited, competing wants through the use of the limited, relatively scarce resources of nature" (Brown and Wolf

1971:520). Another text book (Hirshleifer 1984) says that economics "is a science designed to explain the real world". Which world are they talking about: the biosphere or that subsystem of the biosphere - the economy?

In neo-classical economics, human nature is defined according to a sophisticated set of stories concocted over the last few centuries, that tell us that we are all naturally competitive, selfish, individuals, who tend to move away from pain and towards pleasure (see Wiser 1983; Curtis 1981b; Galbraith 1987 for examples of those views of human nature held by theorists such as Hobbes, Locke, Smith, Ricardo, Bentham, Mill, and Malthus; see also appendix 1). This is a natural law they tell us, this is what we are and we have no choice in the matter. We are natural consumers of economic goods and services (which give us pleasure), and we dislike parting with our money (which gives us pain) - we are 'economic man' (see Capra 1982; and Ferber and Nelson 1993 for a counter argument). The reduction of our humanness to this vulgar definition acts as a self fulfilling prophecy. The members of a society driven on the basis of such a definition of human nature are coerced into believing it, as indeed their life has no meaning outside this definition, as far as the economic system is concerned. The education system that rural Fijians are working so hard to send their children into, will teach them the meaning of their life in this 'real world' of the modern economy.

Such a view has been challenged in a variety of ways depending on the depth of the critique. Schumacher (1973), Daly and Cobb (1989); and Peet (1992) look into the social aspects of economic systems and develop creative alternatives to the existing economic paradigm that takes account of the community dimension. Trainer (1985; 1989; 1992) pursues a similar path to an analysis of the existing form of economics in the modern world and argues for substantial shift in our definition of the meaning of humanness seeking a realisation of the community dimension of human life.

Addressing the broader social issues of environmental management was central to the concerns of the thesis, but a major obstruction was met. This obstruction was the social epistemology employed, which served as a viewfinder in terms of a social analysis and as a basis for defining social goals. What are these social goals and are they likely to bring Fiji any closer to ecological sustainability? If the goals are achieved there may be a substantial improvement in the environmental and the social condition of Fiji but, at the end of the day ecological sustainability may still lie out of reach. In fact, it could transpire that the changes made in accordance with the achievement of these social goals may keep ecological sustainability as far from reach as it was in the previous situation.

This is because the changes made may not be the kinds of changes that ecological sustainability demands. Ecological sustainability may end up being something quite different from what we first thought. In other words, if the concept of ecological sustainability remains under-theorised, an analysis may lead to creative alternatives that are incapable of achieving the stated task. There are already many examples of creative alternatives to the existing social and economic situation in Fiji. But which one (if any) is capable of delivering ecological sustainability?

Neo-Keynsian approaches are critical of free market capitalism from within another corner of capitalism. It sets out in search of a creative alternative that remains conservative in relation to capitalism in general, but critical of the form of capitalism that has developed in Fiji and the global economy. In other words, it argues that capitalism in general is capable of delivering ecological sustainability but only if it is substantially reoriented into a socially just and ecologically benign form. This approach appears *prima facie* to represent an exciting challenge to the status quo as it highlights many flaws in the existing socio-economic landscape which manifest themselves in places like Vunivia, in the form of underdevelopment and environmental degradation. Those seeking a framework for criticism of the existing economic system may squirm with excitement with their new found ability to criticize the way Fiji as a nation is currently being run, and the way it is being manipulated by larger economies in the global economic system. Such criticism will tend to find many allies in the party political sphere in other bastions of neo-Keynsianism. Such views are common in the Fiji Labour Party, and the Fiji Trade Union movement (see Lal 1986). Finding such allies is satisfying for the environmental critic, as there is much opportunity to integrate a neo-Keynsian form of ecological economics with a social form of welfare economics and frame a powerful and coherent political message that can easily be pushed at the parliamentary level.

The first conceptual break in this thesis involved the movement from an innately conservative technical approach to one which was openly critical of the existing economic system. My perspective did become aligned to neo-Keynsianism for a brief time, until a social analysis of the Vunivia catchment was conducted (to be described in the following chapter). This led to the second conceptual break which moved beyond an approach that remained conservative to a capitalist framework. At that point I was able to ask a number of far reaching questions.

What happens if we are able to throw capitalism out and start again? Are we then able

to construct an ecologically sustainable socio-economic way of life? This might be true, but where would we start? If we are able to step outside capitalism and into the political and economic wilderness, we might be able to come up with a creative alternative that does not carry with it the clumsy unsustainable baggage that capitalism demands. But what would the basis be? Out here are the Marxists for example. What can we learn from them? Can Marxism give us a hand, or will it give us a different set of problems? Perhaps we could use some Marxian ideas (like dialectics) and embellish them with other wisdom from non-Marxist traditions?

The neo-Marxists with their psychological, and sociological tools have developed a very sophisticated theoretical framework for understanding social reality, particularly in relation to alienation. They are also responding to a late 20th century world and not a 19th century one. Can these models be used for ecological sustainability too? Perhaps some of them are vastly useful. But then again we must ask the question - what cultural baggage do the neo-Marxists carry with them, and is it a baggage that will obstruct ecological sustainability? What about feminist theory in all its diversity, what might it have to offer? After all there is a growing ecofeminist movement. What can we learn from their critique of modern patriarchal society, and do they offer us any insights that may help us in our quest?

What about postmodern theorists, what are they saying about the structure of modern society that might illuminate ecological problems with modernity in general? After all, even the most radical modernist theory will be supported by the foundations of modernity and its ideals which were constructed largely during the Enlightenment? What about these Enlightenment ideals themselves, are they ecologically sustainable? What about indigenous cultures, what have they got to teach us? What about the Maori, the Sioux, the Hopi, and the Yarralin people of Australia. What about the Fijian people and their pre-modern culture, what about them?

In the midst of all this confusion I began to realise that ecological sustainability was really about the social and cultural conception of basic values, the context of the use of resources, political and interpersonal discourse, rationality, and language. To do justice to this realisation I needed take another look at the Vunivia situation with these ideas in mind. But the trouble was that I did not have a sufficient theoretical viewfinder with which to gaze at that peaceful, forested landscape, with its rivers, coastline, and villages. But in returning to Vunivia and looking a little closer at its social character I began to see just what kind of viewfinder I was going to need. Lets revisit Vunivia.

CHAPTER 4 - A SOCIAL APPROACH

4.1 INTRODUCTION

We are seeking to uncover the meaning of ecological sustainability. We know that it is a social issue, but what kind of social world would be necessary for ecological sustainability to be possible? This is a big question. In this chapter we look into the social character of the Vunivia landscape, its social history, local resource use, and the attitudes of local people concerning their lives in this landscape. In addition to this I add my own reflections concerning economic development in this area and the local situation generally, as revealed from my experiences in this catchment.

A prescription for social change becomes necessary which allows an ecologically sustainable community to develop. But at this point we must consider just what kind of social change is warranted and how it might be able to come about. Do the local people want it? What do they want? Why do they want these things? Is their own condition a product of a false consciousness, a misconception of their own condition, which makes them have these wants? If it is a misconception, how did it come about? Have they been coerced, and if so, how did it happen? In the following pages I invite you to meet the people of Vunivia, and learn about their lives, and how their social and cultural situation can help us gain an insight into human ecology.

4.2 SOCIAL METHODOLOGY

The benefits of gathering social survey information in the Vunivia catchment were primarily two-fold. First was the ability to gain an insight into the social dimension of an environmental situation. Secondly, there was an opportunity to reflect on the sociological aspects of my own research methodology and its ability to adequately address the social dimension of ecological sustainability.

The formal PhD field research programme began with a seven day visit to Vunivia in September 1990, which was part of a two month visit to Fiji. This trip to Fiji was designed to serve as an introduction to the study, where I would familiarise myself with the issues which I then thought would need to be addressed in the thesis. My second research field trip to Fiji was from June 1991 until the end of December of the same

year. During this trip I spent three weeks in Vunivia. My third formal field trip to Fiji was from April to July 1992, where I visited Vunivia for one month (April).

The social research in Vunivia took the form of a rapid rural appraisal (RRA) survey modeled on the method of Conway and McCracken (1990). The appraisal was conducted in the form of semi-structured interviews with local people in each village or settlement. Interviews were generally held in the Bauan dialect of the Fijian language, although sometimes the local Dogotuki dialect was preferred by the local people. I had an interpreter but was also able to join in with some of the discussions through my own understanding of the Bauan dialect. Because the populations of the settlements were small and often had the general structure of an extended family, interviews tended to be conducted with the settlement community, rather than on an individual house-hold basis. Although originally designed to follow a general structure (in response to a list of questions), many of the interviews tended to become lengthy unstructured discussions. The topic of discussion sometimes wandered away from the specific questions. However, such wandering discussions tended to raise issues that were important to local people - issues I had not anticipated. These informal aspects of the interviews were a valuable research tool.

4.2.1 OVERVIEW OF RRA STRUCTURE

The RRA methodology was split into two components. The first is an Exploratory RRA, designed to give the researcher a background understanding of the situation under investigation. This allows the researcher to formulate more specific hypotheses to be tested in a follow up Topical RRA. The second component is the Topical RRA which is more specific than an Exploratory RRA, and is likely to reveal more about the situation in question than the Exploratory RRA.

1. Exploratory RRA (national, regional and local perspectives)

This was undertaken in 1990 and consisted of:-

- A. Secondary data review (background reading)
- B. Semi-structured interviews
- C. Direct observation (locally in Vunivia)
- D. Develop a conceptual model
- E. Formulate a set of questions/ hypotheses
- F. Formulate a plan for the following Topical RRA

2. Topical RRA (predominantly national and local perspectives)

This formed the subject of the 1991 field trip involving:-

- A. Secondary data review (background reading)
- B. Semi-structured interviews
- C. Direct observation
- D. Local participation model
- E. Develop a conceptual model
- F. Formulate a detailed hypothesis/ conclusions

The Exploratory RRA was carried out in 1990, the results of which formed the basis of the technical synthesis presented in chapter 3 above. The 1991 and 1992 field trips to Fiji involved the execution of the Topical RRA. A set of socio-geographical investigations was prepared, resulting from the findings of the 1990 Exploratory RRA and the background reading mentioned above.

Topical RRA survey was divided into 8 formal sub-sections. These were:-

1. Basic census data (already presented in chapter 3).
2. General indication of sources of income and costs for each settlement.
3. Background information relating to the history of the *mataqali*.
4. Information concerning existing and recent historical land use patterns.
5. Villagers' personal accounts of previous development operations in the catchment.
6. Local aspirations in relation to development i.e. development needs and wants (personal and collective perspectives).
7. My own observations of local community structure and leadership.
8. A vegetation analysis for purposes of ecosystem classification, and evaluation¹.

4.3 RESULTS

4.3.1 MATAQALI HISTORY

The landowners² of the Vunivia catchment can be separated into two main groups: those whose families have lived in the catchment for most of the 20th century; and those who

¹The vegetation survey was conducted and data collected from the vegetation communities around the catchment. However, the research subsequently changed in focus in such a way that the vegetation analysis became redundant. I did not analyze the data as it was irrelevant to my study as it later developed. I will explain this below.

²Not all of the people living in the settlements at Vunivia are owners of the Vunivia land. Landowners at Vunivia are only those direct descendants of the Namako kinship group. People who have married into the Namako kinship group may maintain title to their own land in some other part of Fiji, and hence be landowners, but not to the Vunivia land.

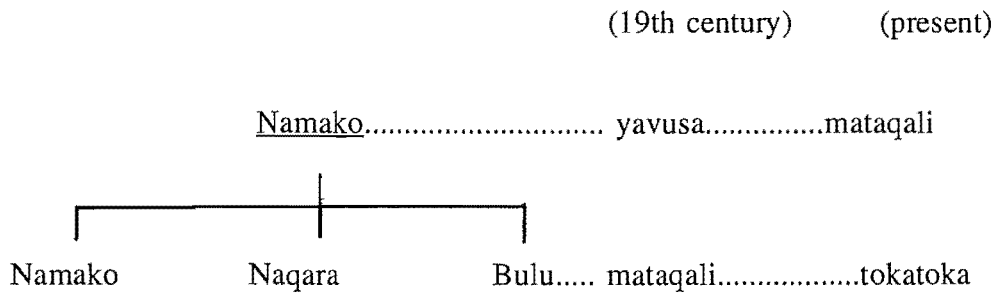
came to the area in the 1980s. They are all landowners, but there are major differences. All of the landowners have no long ranging ancestral ties to the land they live on, except for one or two families. This is because the *mataqali* Namako land was allocated to this *mataqali* earlier this century as part of a land exchange. This exchange was associated with a process of land ownership rationalisation organised by the colonial government.

To further complicate things, the *mataqali* Namako was formerly a *yavusa* (see figure 4.1), where the current *tokatoka* within the *mataqali* formerly held *mataqali* status. What was the *yavusa* Namako was reduced to a *mataqali* during the land rationalisation process. However, at this time the provincial boundaries were being drawn up, and the land held by the (then) *yavusa* Namako lay on both sides of the provincial divide (between Cakadrove and Macuata). A land exchange was organised where the people of the *yavusa* Namako (owning land that lay predominantly in what became the Macuata province) relinquished land that came to lie on the Cakadrove side, whilst gaining land formally owned by a *yavusa* located in Cakadrove. This exchange was with the people of Tawake, a village situated at the base of Udu point near the northern end of Natewa Bay. The land that the Namako³ people inherited in this exchange was much larger than the land they relinquished. This new land lay to the north and east of the Vunivia Levu river stretching to the ridge line separating the Kedra catchment from that of Lagi.

According to Karalo (the rightful heir to the chiefdom of the current *mataqali* Namako), a revolt occurred some 200-300 years ago which resulted in the abandonment of the original village. This led to the dispersal of the Namako people to different parts of the region. The people of (then) *mataqali* Namako, and Naqara went to live on Namukulau Island (situated to the west of Vunivia along the Macuata coast). The Bulu people went to Navetau village situated in what became the Cakadrove province. During this time there were no Namako people living on their own land. The first Namako people to return to the Vunivia area were Karalo's grandparents, probably near the turn of the century. This family came to live at what is now Kedra (pronounced Kendra) village. This land is outside the original land holding of the Namako people, situated on the land gifted by the Tawaki people in the land exchange.

³To avoid confusion, when referring to the kinship structure that was the *yavusa* Namako (now the *mataqali* Namako) the name 'Namako' will be underlined. When referring to the *tokatoka* Namako, the name 'Namako' will not be underlined.

FIGURE 4.1 KINSHIP STRUCTURE OF THE MATAQALI NAMAKO



Traditional Fijian social organisation was (and still is) based on a hierarchy running from the family through to the confederation. At the bottom of this scale is the *tokatoka* (extended family). A number of *tokatoka* make up a *mataqali*, which is the current Fijian land owning unit. A *mataqali* may vary in population from a few individuals to a few hundred, depending on historical circumstances. A number of *mataqali* together form a *yavusa* which commonly forms the basis of a village population. In other words, a village commonly consists of one *yavusa* made up of a number of *mataqali* (often 3-5), where each *mataqali* is made up of a small number of *tokatoka*. Different *yavusa* in a particular area form a *vanua*, and allegiances of *vanua* form a *matanitu* or confederation. At the village level one is commonly dealing with *mataqali* and *tokatoka* (see Bayliss-Smith et al 1988).

The Naqara people returned to the land from Namukulau Island in subsequent years, and came to live at Kedra. Only one family from the *tokatoka* Bulu came to live at Vunivia, while the rest remained at Navetau village. During the late 1970s and early 1980s the rest of the Bulu people migrated to the Vunivia catchment from Navetau. They all originally settled at Kedra village, which became quite a busy place. Kedra is situated some two hours walk from the current position of the main road. However, when the balance of the Bulu people first arrived there was no road at all. As soon as the road came (1986) many of the Bulu people migrated from Kedra to the main road to establish what are now the various settlements (see figure 3.2). This migration was influenced by a number of factors. One was that Navetau village, where they came from is situated beside a main road, and the Bulu people were familiar with a roadside lifestyle, with its accessibility to markets and transport. The *tokatoka* Naqara, and *tokatoka* Namako people, however, had not lived by a road, and most of them were content to remain either at Kedra village or to move to other settlements near the coast. One family of this remaining group (*tokatoka* Namako) did eventually migrate to live at the roadside. This is Karalo's family. Karalo's circumstances are, however, different from the other people of the original Kedra villagers, as Karalo had lived for many years in Suva working as

a civil servant, and his family were familiar with a lifestyle that afforded easy accessibility to markets and towns.

As mentioned in chapter 3 there is another basis for dividing the Namako people into two groups: religion. The original Kedra families (*tokatoka* Naqara, and Namako) are all Catholic, whereas the Bulu 'immigrants' are composed of a mixture of non-Catholic religions which they brought from Navetau (Methodist, Every Home, Assembly of God, and Seventh Day Adventist). As such, what is now the *mataqali* Namako is divided quite strongly into two major groups. This division is very real, particularly in relation to development, the use of local resources, and the organisation of local finances.

4.3.2 PREVIOUS DEVELOPMENTS

The following is essentially a summary of the content of discussions held with local people at Vunivia concerning previous development projects and the problems associated with them. I spoke to many different people about this topic as a way to gain an insight into the way in which development had actually happened in the catchment from the perspective of the local people. It also helps to shed light on the relationship they have with their landscape.

The following short history of development at Vunivia begins with the arrival of the Bulu people from Navetau village. The population at Kedra village had increased significantly (about a four-fold increase), and as such, there was an increase in the labour force of the village. There are a number of different projects worth noting, but each of them have happened fairly recently (i.e. since 1980). Prior to this date life in Vunivia was very quiet with few people living in the area. The only significant place of human settlement was Kedra village and the only people living there were those from the *tokatoka* Namako, and Naqara, and the one family from the *tokatoka* Bulu (about 5 families in total). When the *tokatoka* Bulu people arrived at the village, with them came a need to feed a lot more people from the land around the village. A number of different projects were organised in subsequent years, leaving behind a checkered history of economic development.

One of the first 'development' projects was organised (or at least motivated) by a man from the *tokatoka* Bulu, who was a member of the first Bulu family to settle in Vunivia. His name is Akuila. This 'development' project was essentially a campaign to 1. clean up the village, and 2. to intensify farming in the area and to use this as a means of

raising money from the sale of cash crops. At this stage the only access out of the catchment was by boat along the coast, up the Nasavu river, to the road end. From there a bus would take people to Labasa town and the market. This campaign succeeded in raising the intensity of farming for a short time, and helped the villagers contribute to their formal obligations (tribute) to the provincial Fijian administration (this is standard practice). However, the villagers soon lost interest and it led to nothing of significance. The reason for this was probably due to the fact that the villagers at Kedra were already satisfied with their lifestyle and did not have any substantial need to increase their income. At this stage in the recent history of Vunivia the local people are likely to have lived in what some have called 'subsistence affluence' (Knapman 1987). There were plentiful local resources including a rich inshore fishery, fertile farm land, forest products, and wild pigs for example.

4.3.2.1 LOGGING

A year or more following the decline of the first 'development' project, Akuila convinced the villagers to organise a *solu*, which is a fund raising festival held in a village. In order to finance the setting up of the *solu* Akuila suggested that they log some of their forest. He had negotiated with Fiji Forest Industries (FFI), which held a concession over their forest endowment, to have a barge delivered to the Vunivia river. This logging project was carried out by many of the young men of the village, although they were mostly the new arrivals from the *tokatoka* Bulu. They had no machinery apart from chainsaws, and the logs were hauled by the young men with the help of cattle. One barge was filled with logs⁴. The villagers had no idea of the value of the timber that was taken to the mill as they trusted Akuila to take care of their interests.

On returning from the mill, Akuila distributed mosquito nets and blankets to the young men who were involved in the logging operation. No money was given for the organisation of the *solu*. On the day of the *solu* Akuila brought a large amount of food as a contribution. The *solu* raised \$1,300. The money was banked by a member of the *tokatoka* Namako - Serupepeli. Firstly, Akuila borrowed \$500, and gave \$400 to the young men who worked on the logging operation and they spent the money on a holiday to Kia island. Meanwhile the logging operation was continuing. The young men were now asking for wages for their labour, so Akuila took the remaining \$400 and paid wages.

⁴The actual number of logs is unknown but some villagers suggest more than 100.

Over the succeeding months, a total of six barges were loaded with logs on the Vunivia river. From the sale of the timber from the six barges Akuila bought roofing iron for three houses and built himself a big house in which he and his family currently dwell. The total amount raised from this logging operation remains unknown to the Namako people, apart from Akuila. The logging continued for some years, but only Akuila's family were involved.

4.3.2.2 RICE

The next development project at Vunivia was a rice project, also initiated by Akuila in the mid 1980s. Near to Kedra village is an area of swamp land which was used for the rice project. Akuila approached the Ministry of Primary Industries (MPI) claiming to have a large area of swamp land capable of sustaining a profitable rice growing operation. MPI arranged for two peace corps workers (volunteers from the United States) to assist with the establishment of the rice project. These volunteers lived at the village for two years. The ostensible purpose of the rice project was to finance a housing project for the village. In the early to mid 1980s the Fiji Government made an effort towards establishing a basis for rice self-sufficiency. This programme is likely to have been influenced by these broader developments (Overton and Ali 1989).

Akuila used income from logging to purchase rice farming machinery and the seeds for a rice crop. He then brought the local people together to work on the rice project as he had done for the logging. The first harvest was at the end of the first year. The villagers ate the crop rather than selling it. They had two harvests in the second year with two sales. Akuila sold the first harvest and kept the money, giving \$20 to one villager (Joiti, of the same *tokatoka*) who had helped to take the harvest to the market. Akuila also sold the second harvest, this time keeping all of the money (none of the other villagers know how much this was). The housing project never eventuated and rice project was abandoned.

Akuila was confronted after the second sale in a meeting at the village. His younger brother threatened to beat him up. The meeting was very tense but nothing was done. The same younger brother was interviewed on my last field trip and defended his brother's actions in relation to the rice project. He said that the rest of the villagers had shown little interest in the rice project and because of this his brother was justified in keeping the money, as Akuila had, after all, done most of the work in organising it. According to Akuila's brother most of the money generated from the rice project was

used on the logging operation now being conducted only by Akuila and his brother. According to Akuila he decided that because of the lack of unity in the village, further community projects would suffer the same fate, so he dismantled his house and reconstructed it at the road side in its current location in the Newtown settlement. He continued logging on his own for a number of years as there was, according to him, no community support for his initiatives.

4.3.2.3 COCOA

There is currently a cocoa growing project in operation within the catchment although it does not have a happy story to tell. When the cocoa idea was first put forward (in 1985) there was no road into the catchment. However, some of the *tokatoka* Bulu people decided to set it up. They had asked for assistance from MPI but had been declined (partly because there was no road). The first attempt at establishing a cocoa project took two years but soon failed. The local people blamed a lack of government assistance and an insufficient level of local expertise. An area of forest was cleared for the planting of cocoa seedlings. No wages were paid to those who put effort into the establishment of this project. A further difficulty was struck when the road did finally arrive in 1986. The cocoa plantation lay in the path of the road, and so, when the road was built the young plantation was annihilated. The only benefit gained from this project was the compensation they received from the government for the loss of their cocoa plantation due to the government road.

A second attempt was made at establishing a cocoa project in 1987, this time with the assistance of MPI, which arranged for a field officer to help the landowners with the establishment and running of the project. This is not a collective *mataqali* project as it was established on the basis of ownership by local shareholders (all members of the *mataqali* were invited to buy shares but not all of them accepted). Most of the shareholders are members of the *tokatoka* Bulu. The project is essentially a partnership with the government. The original plan was for the government (through MPI) to assist in the running of the project until the landowners were able to manage it themselves. The project was established from a government loan, which was to be paid back by the landowners as the project generated its own profits. The plan was for the government to deduct a proportion of the profits until the loan was paid off. There was no arrangement for any of the income from the project to go to the *mataqali* in general. The project is being run on land that has been leased from the *mataqali* by those involved in the project. The amount that had been loaned from the government by 1992

was \$70,000, a debt shared by all shareholders in the project.

This project has had many problems from the beginning and is causing a great deal of division within the *mataqali*. Firstly, the project was originally proposed as a collective *mataqali* project which was to use local resources to contribute to community development in the *mataqali* as a whole. It since became apparent to non-shareholders that the project was designed to benefit only those with a share holding. However, there have also been many problems amongst the shareholders themselves. The debt is seen as a major problem, as the shareholders did not foresee that they would initiate a self-help project and then immediately plunge into the biggest debt they had ever dreamed of. The MPI project manager was earning wages and living in a house built as part of the project infrastructure. When the shareholders learned of the size of their debt they decided to work without wages, because to pay themselves wages would increase their debt. There had not yet been a successful harvest. Because they were prepared to work for free they believed that the project manager ought to do so as well, as his wages were also adding to their debt. The project manager (assigned by MPI) refused to work for free, and as a consequence, was chased away from the catchment by the shareholders.

To add to these problems was the inability of the project to generate an income at all, as the cocoa kept getting eaten by rats and parrots. It just so happens that the Vunivia catchment supports a very rich avifauna, which is one of the attractions of the area for conservation purposes. The shareholders have been attempting to gain a gun licence to shoot the parrots but have not yet succeeded. As such, there are many frustrations amongst the local people concerning the cocoa project. There is also little sympathy for them by non-shareholders as it is not their concern.

The cocoa project seems to be merely another chapter in the on-going saga of development failures in Vunivia. But it has not been for any lack of trying by the local people.

4.3.2.4 VUNIVIA FINANCES

The financial woes of Vunivia do not stop with the occasional failed project. It is also complicated by the way *mataqali* affairs are being organised in general, leading to the issue of leadership which will be discussed below. An example of dissent within the *mataqali* in relation to finances can be demonstrated with the handling of timber royalty money that had been accumulating over recent years. Fiji Forest Industries (FFI) had

been logging the area with the assistance of Akuila, who had secured himself and his brother positions as logging contractors. Timber royalties accruing to the *mataqali* as a whole had been accumulating in a bank account, but the local people had no idea how much this amounted to.

In 1986 the *mataqali* decided to look at their bank account, finding it to have a balance of \$36,000 of accumulated royalties. The trustees for the bank account were all from the *tokatoka* Bulu. One member of this *tokatoka* was a policeman who lived in the Labasa township. He borrowed \$10,000 without consent from the *mataqali*, but gained consent from the trustees. This was supposedly to enable him to attend a training course of some form in England. He was to pay it back after returning from his trip. The trustees did not inform the *mataqali* about this loan. The policeman used the loan to start a local business. The loan was never repaid.

A *mataqali* meeting was held in 1987 where the rest of the *mataqali* discovered that they had lost \$10,000. At this meeting the trustees revealed the story of the policeman in Labasa, although this was well after the event. Upon learning of this 'loan', the rest of the *mataqali* decided to share the remaining money out equally to all members of the *mataqali*. This was not a standard practice but was carried out to prevent the trustees from abusing their position further.

These events, together with the previous episodes concerning the logging, rice and cocoa projects, have generated a great deal of dissent within the *mataqali*. There is a lot of distrust, particularly a distrust of *tokatoka* Bulu people by those of the *tokatoka* Naqara and Namako. Most of the problems relate to the activities of the *tokatoka* Bulu people, who themselves are recent arrivals to the catchment. There is little in the way of unity within the *mataqali* as a whole. Some *mataqali* members suspect a conspiracy by the *tokatoka* Bulu people. For example, one man (who I will not name) suspects that the conspiracy has been happening ever since the Bulu people arrived. He believes that the confrontation between Akuila and his younger brother (both members of the *tokatoka* Bulu) at a village meeting concerning the disappearance of the profits from the rice harvest was staged. This would lead the rest of the *mataqali* members to assume that there was infighting within the *tokatoka* Bulu, thus covering over a conspiracy. He also believes that the loan of \$10,000 to the Labasa policeman was possibly for the establishment of a business for the *tokatoka* Bulu, which is why the rest of the *mataqali* were never informed at the time. Whether or not there is or was a conspiracy is beside the point, as what remains important for this research is that there is suspicion and

disunity among the members of this community. This leads to the question of leadership.

4.3.3 LEADERSHIP

The leadership structure in Vunivia is quite different to what might be expected in a rural Fijian community. Under the traditional Fijian structure of leadership a *mataqali* is represented by a chief (the *turaga-ni-mataqali*). The *mataqali* Namako has a chief in name but not in practice. The official chief lives in Labasa and does not function effectively as a chief for the Namako people. According to the traditional leadership structure, the *tokatoka* Namako is the chiefly *tokatoka*. This relates back to the days prior to the change in status from a *yavusa* to a *mataqali*. At that time the *mataqali* (now *tokatoka*) Namako was the chiefly *mataqali*, and as such, the lineage of chiefs would normally be a member of this kinship group. The *mataqali* (now *tokatoka*) Naqara played the traditional role of *bete* (priest), and the *mataqali* (now *tokatoka*) Bulu played the role of *mata-ni-vanua* (spokes-person for the chief). These traditional roles still hold true today, and because of this, the *tokatoka* Namako is still the chiefly group. The existing (non-functional) chief is the head of this *tokatoka*. Since the chief left the catchment in the late 1980s the local people have been trying to restore the chiefly position, either by succeeding in bringing the rightful chief back to the land, or by installing another chief⁵.

The existing chief has no intention of returning to the land, which is well known by the local people. Because of this, there is a leadership struggle going on in the catchment. Should the chief step down, the position should go to the person who rightfully stands to inherit it. Some of the division amongst the landowners relate to this question. At the time of the field research, Akuila was playing the role of a defacto chief, and it is well known that he is attempting to gain the formal title. However, Akuila is not a member of the chiefly *tokatoka*. He is a member of the *tokatoka* Bulu (*mata-ni-vanua*).

So, we have Akuila contesting the leadership of the *mataqali* on the grounds that he is the most appropriate candidate, due to his organisational and leadership skills. He also claims that the *tokatoka* Bulu has the traditional authority to appoint the chief. This is only partly true. The *mata-ni-vanua* (a role held by the *tokatoka* Bulu) is instructed to

⁵There is a *turaga-ni-koro* (government sanctioned village administrator) at Kedra village, but because only a small proportion of the *mataqali* actually lives at this village the position carries little weight and little in the way of *mataqali* organisation is currently conducted through this person.

appoint the chief once the chief has been chosen by the chiefly group (*tokatoka* Namako). If the existing chief does stand down, the rightful heir is a man by the name of Karalo (mentioned earlier). The second in line for the chiefdom is Serupepeli, who, although a rightful *mataqali* member, is part Chinese. He maintains his rightful membership of the *mataqali* even though his father was not a tribal landowner (i.e. he was a Chinese man) This is because his mother was a landowner and he was an illegitimate child. Under these circumstances a person inherits a position in their mother's *mataqali*.

However, the fact that Serupepeli is part Chinese has caused tension in the *mataqali*, particularly from the *tokatoka* Bulu, and Akuila. The claim is that Serupepeli is not a true Fijian and therefore should have no claim at all in *mataqali* affairs, and certainly not as a chief. This racial tension in Vunivia is a small scale example of a massive issue in contemporary Fijian politics at the national level. Who is, and who is not a Fijian is a big question today. But the trouble with this question is that it is being argued on the basis of race and not culture, thus fuelling an enormous political storm which bottoms out in the politics of race, and racist nationalism. Vunivia is not free from these nationally felt tensions, many of which were accelerated by the coups of 1987, and the racist nationalism that has followed.

4.3.4 APPROPRIATE DEVELOPMENT?

With Akuila we have an enigma. He is either a selfish, manipulative, cruel and callous creature, who will use the greater limits of his wit to expropriate the riches from the land and the labour of his cousins for personal greed; or he is simply a motivated person who is genuinely attempting to make development happen in Vunivia, even if this means sacrificing a few of its trees here and there. Certainly there is a lot of resentment towards him from other members of the *mataqali*. He may have been blatantly defrauding the local people. But there is also the possibility that in his genuine efforts to kick-start the community he was met with indifference and a general lack of support. After all, the community development projects he orchestrated did fail, but not necessarily from any premeditated malicious intentions, but perhaps simply because the model of development employed by Akuila was an inappropriate one. He was constrained by the options available to him. There was little outside support available; there was little in the way of alternative options; there was perhaps little in the way of 'motivation' in the local people. They did not want to do what he wanted them to do. Perhaps they were lazy? What Akuila was doing was perhaps all he could have done

given the limitations and the economic framework he had to work in. In the failure of the projects, it is quite conceivable that Akuila became a convenient scape goat for many of the problems in the *mataqali*.

But here we come face to face with a central issue in the entire development debate in Fiji. An issue that had frustrated many expatriate entrepreneurs, and the former colonial government for decades concerned the involvement of Fijian people in modern development. The traditional communal system and the general disposition of many Fijian people towards the prospect of working in a capitalist economic framework, was an obstruction to effective capitalist penetration (Knapman 1987; McNaught 1982; Goneyali 1975). One of the problems for the planter economy of the late 19th century was a lack of cheap labour. The Fijian people have not been forced off their land and into wage labour, as commonly happened in many settler economies, because the first Governor (Arthur Gordon) secured Fijian ownership of land soon after the 1874 deed of cession. This served to forestall major opposition to colonial rule. Because the majority of Fijians still held their land, many of them had no need to work in the plantations. It was this lack of labour that led to the importation of Indian indentured labourers that began in 1879 (see Campbell 1989; Scar 1984). In the 1950s the colonial government commissioned a report by Spate (1959) to review the problems of development in Fiji at the time. Spate argued that the rural Fijian people would be far better off if they abandoned the traditional communal way of life and transformed into small holder peasant farmers who worked for themselves. He, and the government encouraged the abandonment of communal aspects of traditional life in favour of a modern individualistic existence, which would help rural Fijians become involved in the development process and would facilitate the penetration of capitalism into the rural Fiji landscape (see Lasaqa 1980).

For example, one of the obstructions to the generation of savings in rural Fijian communities was the tendency for Fijians to give their belongings away, including their money. Those that worked and raised an income were often asked to give it away by other Fijians in a system of reciprocal exchange known as *kerekere* and in the financing of communal festivals such as weddings, funerals, and births. In the traditional Fijian community, ownership of specific items did not usually remain exclusive. Indeed, property rights were generally communal (see Nayacakalou 1978; Ravuvu 1983; 1987a; 1988). This system forms part of an economy of share and care. However, in the case of money, it is easy for one person to earn money and then pass much (or most) of it on to other people who may not be earning money. Spate (1959:6) patronised the Fijian

way to death by telling us all that "*vaka Viti* [the Fijian way] was designed, beautifully designed, to do quite other things than those now demanded of the Fijians". Demanded? By who? By the capitalists and their apologists. Rural Fijian people could not save their money and accumulate the riches that the economy was capable of delivering if they kept sharing with each other in a communal life style, and spending it on extravagances such as funerals and weddings (Lasaqa 1980). Such "beautifully designed" practices were to be wiped clean from modern Fiji which would not tolerate such unproductive behaviour. After all, the colonial administration needed to generate taxes in order to finance its civil service which was to spend this revenue on sustaining this economic system. To get these potential workers into the economy there needed to be a social transformation away from the communal mode of existence.

Many Fijians subsequently adopted a less communal style of living, known as *galala* (free from communal obligations) (see Overton 1988, 1992). This transformation in the social structure of rural Fiji has served to tear the fabric of the traditional Fijian community, which was held together by the interwoven threads of traditional Fijian culture, including rituals, language, meaning, the role of people in the community, kinship, political organisation, and economic production (see Ravuvu 1987a, 1988; Nayacakalou 1978 for example). The trouble was that this social structure was not an 'efficient' social formula for purposes of Western styled economic production, where the establishment of this form of production was effectively the *raison d'etre* of the colonial administration (McNaught 1982; Knapman 1987; Howard and Durutalo 1987).

By fostering the removal of individual Fijian families from their traditional communal society, the development process would benefit, and supposedly the Fijian people also. This is because, of course, they would have higher incomes, and would be able to pay taxes and buy consumer goods thus contributing to economic growth. But the cultural and ecological cost of this transformation was very dear. The traditional community social structure was based on reciprocity, and mutual care, organised through a system of social interaction that fostered social unity. The new way forward, however, was impeded by these structures, which were seen as a hinderance to the transformation of Fiji into a modern nation. Even the last remaining vestiges of Fijian communal life are being slandered by modern on-lookers, Fijian and non-Fijian alike. Brown (1989) informs us that communal land ownership has been a major impediment to agricultural investment and growth.

The activities of the Fiji Native Lands Trust Board (NLTB) reinforces this. The Native Land Trust Act (1940) section 4 (1) states that: "The control of all native land [83% of Fiji's land surface] shall be vested in the Board and all such land shall be administered by the Board for the benefit of the Fijian owners". However, the interpretation of: "for the benefit of the Fijian owners", is currently one that falls into line with productive expansion at the expense of communal impediments to this expansion. The mission of the NLTB is primarily economic development, not the welfare of the Fijian people or the health of the *Vanua* (land). One only needs to look at the annual reports to see this emphasis on development. The 1986 annual report⁶ provides a good example: "[The NLTB] administers 82.9 per cent of Fiji's land owned by the Fijian people and at the same time promotes the development of the nation....The Wailada Industrial estate which was once a swamp area is now a base for many businesses...The NLTB has also promoted the development of a forestry industry on Fijian land. It is involved with [i.e. as a 33% shareholder] Fiji Forest Industries Group⁷ which is processing timber....The NLTB also played a major role in the growth of the pine industry...the Monasavu Hydro Project, the Seaqaqa, Uluisavou and Yalavou agricultural projects....In tourism, the NLTB has been at the forefront...." (NLTB 1986:2). What about the Fijian people, and more importantly, what about the *Vanua*?

The spirit under which the NLTB was originally set up with the help of Ratu Sukuna certainly did not place this emphasis on industrial economic development. The concern was with the welfare of the Fijian people. In 1940 Ratu Sukuna addressed the Legislative Council in the following way:

I have some sympathy knowing that there have been occasions when Fijians have felt that their interests have been insufficiently considered; occasions when they have thought that those interests have been unduly sacrificed; occasions when they have felt that the Government has been perverse and has acted against their true interests. Such feelings produce doubt and suspicion (Ratu Sukuna 1940).

This is undoubtedly how many Fijians feel today about the NLTB. Ratu Sukuna (1940) goes on to say that if the Legislative council enact the Native Land Trust Bill "it will be a monument of trust in British rule, of confidence in its honesty, and of hopes for the

⁶The annual reports carry the title 'Vanua', but the activities of this extremely powerful institution completely contradict the meaning of this word. See chapters 6, 8, and 9.

⁷This is the company that was logging the Vunivia forests initially with the help of Akuila, but against the will of most of the landowners.

future.." The Bill was enacted but the activities of the Native Land Trust Board in recent decades has rendered meaningless the word 'Trust'. It was for this very reason that the 1987 Bravadra Government planned to reform the Native Land Trust Board, in order to reassert the spirit of trust which originally inspired Ratu Sukuna to establish such a Trust Board for the Fijian people (see Bravadra 1990).

The current assumption which underpins the activities of the NLTB is that economic growth will lead to the enhancement of the welfare of the Fijian people and the health of the land. However, the very process of economic development, under the existing model of industrial expansion, creates conditions that directly conflict with many of the traditional Fijian social structures that formed the basis of communal welfare. They also demand that the *Vanua* be conceptually destroyed, and then used as an instrument of industrial capitalism. A paradox?

In the process of dismantling this communal social system, the colonial administration, and later the independent government and the Native Land Trust Board, together with the business interests they serve, sent the Fijian culture further and further away from the kind of lifestyle that could achieve a sustainable coexistence with the rest of Nature. One of the reasons for this also relates to the economic expectations of village people themselves.

4.3.5 CONTRADICTION COMMUNITY

When people are living in a nurturing social environment they have a great deal of social riches. The extended family structure fosters a sharing in many of the day to day activities such as child care, farming, and general welfare. The ties the people are able to maintain with their landscape through the recreation of symbolic relationships by means of ritual and myth, enable a sense of belonging to be sustained. This is a belonging to both the social and the ecological community. Such a sense of belonging gives meaning to social life, and it fosters an existential contentment. To belong is a crucial ingredient in the cultivation of happiness, as one is 'at home' in the world. In this situation, the materialistic expectations of individuals tends to be smaller than in cases of social disintegration, as people have what they need in a cultural, social, and psychological sense. However, once communal societies are splintered into fragments, many of the nurturing aspects social life are unable to be sustained. People soon lose their sense of belonging, as the community is unable to provide the kinds of social, and psychological support that was possible in a communal social setting. This leads to an

estrangement from the world, a psychological vacuum, that needs to be filled by something. It needs to be filled as the loss of belonging leads to anxiety, which in turn can lead to a form of neurosis.

This anxiety can be addressed in many ways. It can be cured by returning to a community life capable of providing the innate social needs of human beings, or it can be suppressed by feeding the individual with countless psychological distractions such as material possessions - hence fostering an inverted form of surrogate belonging. Instead of a person belonging to a place or a community, they come to possess their own belongings, and guard them carefully. The latter condition has been the 'normal' condition of much of Western culture for many centuries, and because of this it appears to Westerners to be the 'natural way' of any society. Indeed, Western philosophy is riddled with countless stories that serve to legitimate this fallacy. This individualism is what modern life is based upon. Modern life is really an unfortunate psychological and ecological mistake (for examples of psychological literature supporting this overview see Fromm 1991, 1988; Wilber 1983; and Maslow 1971. This issue will be expanded upon in later chapters).

This modern psychological condition migrated to Fiji in the 19th century, and the Fijian people have been coerced into adopting it since that time. This coercion is not an organised conspiracy. I call it an unconscious conspiracy of delusion. Individualism, and the social assumptions of competitive selection, which contradict a sense of belonging to a community, gradually became ingrained in the very foundations of modern life through its repeated use and its apparent success in Europe. It crept into the very structure of the economic system and was supported by the content and the style of modern political systems (see appendix 1 for a further explanation of this).

The traditional Fijian social world was not socially or psychologically individualistic. And yet all people in Fiji, regardless of race, are being forced to agree with this model as the only true one. The economic model that Akuila used in Vunivua was one that cut against the grain of traditional Fijian life and there was resistance to it: perhaps not a conscious resistance but an unwillingness to placate to his way of doing things. And yet Akuila was only doing what the colonial administration, and the current Fijian government had asked all Fijians to do. Get into development and do it fast. Government policies concerning rural development in Fiji are generally orientated to raise the income of the local people (see Fiji Government 1986, 1990). But what about their broader social needs? Raising the income of rural Fijians according to the standard

model of social reality supported by the Fiji government, presupposes the validity of a social and psychological model of human societies that (a) is highly questionable, and (b) would tear down the most ecologically sustainable aspects of traditional Fijian life.

Akuila represents a product of a successfully transformed modern Fijian culture. If community development is to work according to Akuila's model, it will require that the rest of the Vunivia people comply with the social structure and the social expectations that such a form of economic production demands. However, this also serves to steer these people away from the possibility of an ecologically sustainable life. So, what is it to be, development or not. Economic production or not? Progress or not? These questions necessitate a deeper inquiry into the meaning of these accepted words. It also takes us back to the issue of leadership in Vunivia.

4.3.6 LEADING FIJI WHITHER?

The leadership struggle in Vunivia is a small scale example of what is happening to Fiji at a national level. Not only are the local people in the rural landscape being manipulated by forces from outside their land (the logging concession held over their land was something they never consented to), but they are being encouraged by their own people into changing more and more into a modern existence, whether by design or by default, often in the name of tradition. Akuila's claim to the leadership of this *mataqali* is based on an appeal to tradition, viz. the claim that the *tokatoka* Bulu has the authority to appoint the chief of this *mataqali*. This would amount to the utilisation of a veneer of tradition to secure his dominant position in the local social and economic hierarchy.

This is an affront to tradition itself, as it pretends that the past can only be used as an excuse for social and economic domination. But Fiji's past also has traditions that move in the opposite direction of domination and coercion. And I believe that a more critical viewing of the meaning of Fijian culture needs to be undertaken by Fijian people before they embrace the hegemonic systems of selective privilege that currently masquerade as tradition (as is the case with a great deal of Fijian racist nationalism). However, in addition to this, a critical viewing of Fijian culture is also needed before the political Left in Fiji throw all of tradition out as a useless dinosaur of domination. This is because there is much in Fijian culture that can be used to save Fiji from the forms of social and environmental deterioration that has plagued Fiji for many centuries.

But before we can do this we need to understand what kind of social and economic world rural Fijians are finding themselves in. What are their personal ideas concerning development and land use. Their own ideas concerning their own condition will help to point to what kind of analysis is necessary in order to see how ecological sustainability might become possible. Are the local people of Vunivia busy fending off modernity in the name of tradition? Are they attempting to resist the structures of social and economic domination disguised as 'development' which threatens to dismantle their last remaining hopes of self determination?

To answer these questions we need to meet the local people. To understand the perceived needs of these people it will be useful to first gain a brief overview of their costs of living and their means of supporting this. I will then summarise the results of discussions held with the Vunivia people concerning their current and future needs and aspirations.

4.3.7 INCOME AND COSTS

I attempted to gather information on costs and income to give an accurate account of the local economy. I struck many difficulties in this domain as 1. local people do not generally keep a good record of their income and spending; and 2. their income and costs vary greatly from month to month and from year to year. The variation in their income and expenditure depends on a number of factors including the specific financial needs at any one time. To conduct an accurate financial survey would necessitate a monitoring of the local economy over a period of years. In some years a family will earn very little whilst in others they will earn a great deal more, perhaps because they are raising money for a specific purpose such as the financing of a house. This is very common in rural Fiji (see Belshaw 1964).

Because of this, any data collected during a rapid rural appraisal can only give a very cursory glance at the local economy. Because of the high degree of variation from month to month and year to year I will only treat my data as inventory, and introductory. I did not run any statistical analyses of the data as to do so would necessitate a more robust sample set for it to be meaningful.

The information gathered was designed to give an indication of the kinds of costs faced by local people at Vunivia. A number of different households were questioned

concerning their basic costs and income. These results are estimates only, especially for costs. The people tended to be more sure about their income than their expenses. There are a number of major discrepancies between costs and income, with the former sometimes grossly exceeding the latter. This may have been partly due to the desire of local people to indicate that their life was difficult financially or simply because they were only guessing when giving answers. The interviews were held with families which were sometimes spread between a small number of different houses. Where two samples have come from the same settlement, an indication has been made of the different households. Some of the settlements are very small and amount to only a few houses in total shared by one extended family.

Costs tended to be separated into 6 general categories including school costs, church, official tribute payments to the different tiers of the Fijian administration (denoted below by the term 'Tribute'), informal community obligations (Community), general living costs including transport (General), and leases. Income tended to fall into 5 general categories including wages, cash crop/harvest (Cash), self employment (Self), royalties, and remittances.

FIGURE 4.3 COSTS AND INCOME FOR HOUSEHOLDS IN VUNIVIA

NEWTOWN (Household #1)

COSTS	
School	\$1,400/year
Church	1,100 "
Tribute	350 "
General	6,700 "
<u>TOTAL</u>	<u>9,550/year</u>

INCOME	
Self	\$ 6,000 "
Cash	1,000 "
Royalty	150 "
<u>TOTAL</u>	<u>7,150/year</u>

NEWTOWN (household #2)

COSTS	
School	\$ 200/year
Church	800 "
General	1,480 "
Community	600 "
<u>TOTAL</u>	<u>2,180/year</u>

INCOME	
Wages	2,750/year
Cash	550 "
<u>TOTAL</u>	<u>3,300/year</u>

YALAVANISICI (Household #2)

COSTS	
School	\$ 800/year
Church	500 "
Tribute	560 "
General	5,000 "
<u>TOTAL</u>	<u>6,860/year</u>

INCOME	
Cash	3,750/year
Wages	1,500 "
Royalty	540 "
<u>TOTAL</u>	<u>5,790/year</u>

VUNIVIDAMU SETTLEMENT

COSTS	
School	\$ 400/year
Church	240 "
Tribute	313 "
General	2,700 "
Community	200 "
<u>TOTAL</u>	<u>3,853/year</u>

INCOME	
Self	1,800/year
Cash	100 "
<u>TOTAL</u>	<u>1,900/year</u>

KENANI SETTLEMENT
(household #1)

COSTS	
School	\$ 100/year
Church	150 "
Tribute	280 "
General	960 "
Lease	150 "
Community	300 "
<u>TOTAL</u>	<u>1,940/year</u>

INCOME	
Cash	\$ 3,000/year
Wages	300 "
Royalty	500 "
<u>TOTAL</u>	<u>3,800/year</u>

YALAVANISICI SETTLEMENT

COSTS	
School	\$ 500/year
Church	500 "
Tribute	263 "
General	540 "
Community	50 "
<u>TOTAL</u>	<u>1,853/year</u>

INCOME	
Cash	\$ 1,100/year
Wages	950 "
Royalty	180 "
<u>TOTAL</u>	<u>2,230/year</u>

VUNIKAUTI SETTLEMENT

COSTS	
School	\$ 500/year
General	1,350 "
Tribute	340 "
<u>TOTAL</u>	<u>2,190/year</u>

INCOME	
Cash	500/year
Royalty	400 "
<u>TOTAL</u>	<u>900/year</u>

KEDRA VILLAGE

COSTS	
<u>TOTAL</u>	<u>\$ 1,200/year</u>

INCOME	
Cash	1,100/year
<u>TOTAL</u>	<u>1,100/year</u>

VUNIVIA SETTLEMENT

COSTS	
Church	\$ 1,000/year
General	10,570 "
Community	500 "
Lease	570 "
<u>TOTAL</u>	<u>12,970/year</u>

INCOME	
Self	15,000/year
Cash	2,500 "
Remittances	100 "
<u>TOTAL</u>	<u>17,600/year</u>

As can be seen from the above survey, costs and income vary considerably from family to family or between settlements, but a few trends can be detected even from such an incomplete data set. A great deal of local spending is related to the financing of schooling for children, and the costs of church funding. The day to day living costs are also a significant expense for some families.

Low incomes do not necessarily reflect a lack of opportunity to raise income levels, but instead commonly reflects the immediate needs of the family group as mentioned earlier. In fact, a lower income may, in some cases, indicate that the particular family is very well off, as they may have little need for cash at all, due to a low financial burden. However, few families are able to live in this fashion, as there are basic costs that few families can avoid. This includes the costs associated with official tribute, and schooling for children and teenagers. Also there is an expectation for many families to provide funding for church projects. These costs are difficult to avoid and tend to tie even very

isolated rural Fijian communities to the need to undertake cash earning activities.

4.3.8 NEEDS AND ASPIRATIONS

Almost every household of the *mataqali* was interviewed concerning their needs and aspirations as families and as a community. It tended to focus on the kinds of immediate and long term needs as the local people saw them. The concerns of local people generally related to economic development.

Most households interviewed stated that their costs of living were increasing. Their means of financing this were increasing in some cases, whilst in others little in the way of improvement in their economic position was happening. The most important needs for most families was the financing of housing. The standards of housing in the catchment were variable, but not unlike many other rural Fijian communities. Most of the houses were constructed from a combination of corrugated iron, and wood, with some traditional houses still being built and used. Electricity was a common item on their wish list, although piped water was a more immediate need.

Another perceived need in the area was an improvement in transport. Cash crops were, for many, a major source of income. However, there were difficulties in getting their produce to the market, as the local public bus was generally their only link with this market. This placed restrictions on the types of crop grown in the area. Those crops that could sustain the journey to Labasa (some 4 hours away) were robust root crops that did not bruise easily. Some farmers suggested that diversity in local cash cropping was hindered by this transport problem.

Many of the interviews were conducted in groups, sometimes with ten or more people (men, women and children). I noticed that the men tended to do most of the talking, and the responses to my questions were often those of the men on behalf of the entire group. In one settlement (Nukusere) I decided to hold a women's meeting concerning the development needs of the community (I did not attend this meeting). In group discussions at Nukusere settlement with men and women present, the highest priority was housing improvements. The women's meeting, however, came up with a different result - piped water was more important than better housing. This probably relates to the fact that the women are engaged in most of the household tasks of cleaning, bathing children, and cooking, and as such, an improvement in housing would not alter their lives very much. It is common for the needs of women to be overlooked in rural

development programmes in the Pacific and has been the subject of a number of different studies (Chung 1991; Va'a and Teaiwa 1988; Amratlal et al 1975; Tongamoa 1988).

All people saw economic development as necessary and valuable to village life. The increasing costs of living generally coincided with increasing expectations for living a more modern lifestyle. There were many modern consumer items that the local people needed or wanted. Development was very welcome, and although they had suffered a number of development failures the local people were seeking an improvement in their socio-economic condition along the lines of an increase in the modernisation of their lifestyles.

Prior to the arrival of the road in 1986, the local people (who were living predominantly at Kedra village) participated less in activities associated with income generation than they do now. Since the arrival of the main road (although still some 2 hours walk from some settlements) there has been a notable increase in cropping and harvesting of local resources (e.g. fish and crabs) for cash. The increase in cash cropping, in combination with the migration of many families from the village to road-side settlements, has contributed to an increase in the clearance of forest land for gardens. This is likely to be exacerbated by population increases.

As can be seen in the census information presented in chapter 3 (figure 3.4) the population structure shows an expanding population with many young children, and a high proportion of teenagers which will soon move into child rearing age groups. The population of the *mataqali* is likely to increase considerably over the coming years (unless migration acts as a counter-balance), and this will place increasing pressure on local resources. New settlements are likely to be established, and existing settlements are likely to grow in size. If the existing patterns of land use continue, there will probably be a steady increase in the clearance of forest for gardens both near the main road and at the coast. A move towards an ecologically sustainable community will need to be capable of addressing this problem. However, as part of this equation, the source of unsustainable influences must be adequately identified, because in many cases, the local people are not solely responsible for their treatment of their local resources.

It was made quite clear that any form of development in the area would need to satisfy the local economy at two levels. There was a recognised need for general infrastructural improvements such as electricity, piped water, housing, and transport, but there was also

a strong emphasis on the access to cash flows that would be capable of improving the day to day lives of people, in terms of their on-going consumption of modern goods and services. In the eyes of local people, any development that improved some of the infrastructure but failed to raise the income of local people would not gain very much support. Most of the local people regarded an increase in income as the most important thing that development could deliver. This may be a reflection of the existing social character of the local population.

All of the local people live in a *galala* situation, as individual peasant farmers where each household or family forms an autonomous economic unit (see Overton 1988). This was also true for those living at Kedra village. Because of this, many of the economic aspirations of local people revolved around the individual household needs of different families. Because the settlements were widely dispersed geographically, it would be difficult to cater for community needs in a collective fashion. Piped water, for example, would need to be organised for each settlement, rather than a single water scheme as would be the case for a single village. The same was true for electricity. As such, the focus of each settlement was on their own localised needs and not the general needs of the *mataqali* as a whole.

This reinforced my conception of the *mataqali* as thoroughly fragmented, where a very low sense of unity existed. This made the area appear very similar to many other modern rural landscapes where individual farms are the basis for social and economic life, as would be the case in a modern farming community in a country like Aotearoa/New Zealand, for example. The Vunivia catchment had many similarities to a modern Western example, even in terms of economic geography. The place of Vunivia on the periphery of the Pacific regional economy, is quite similar to economically depressed rural communities in Aotearoa/New Zealand, which are situated in a marginal position in the domestic economy. The economic relationship between periphery and core (although over-simplified) is quite similar in both countries. An example of this similarity can be seen when comparing a depressed economic region such as the West Coast of the South Island of Aotearoa/New Zealand, with Vanua Levu in Fiji. Both areas are the source of raw materials for the economic core, and both areas are suffering social problems in relation to environmental protection of their landscapes. Local people are seeking economic development on their own terms but are often unable to get it, even though they live near to rich supplies of natural resources. Such a view of the economic geography of rural Fiji has also been noted by Sofer (1985a, 1985b, 1988). Bayliss-Smith et al (1988), however, have cautioned the over-use of this model

demonstrating that parts of rural Fiji have been become a "pampered periphery" through Government efforts at subsidising rural development. This may be true for some areas such as Taveuni, parts of Lau, Cakadrove, Tailevu, and Rewa for example, but north eastern Macuata is located further out in the political and economic wilderness. On the periphery certainly, but not necessarily pampered.

This led me to realise that the consequences of modernity were well established in rural Fiji, and that Vunivia was situated in a very modern economic landscape. It also meant that this catchment was an example of what was becoming a very common situation in that country. Spate had won in Vunivia. The place was socially fragmented, the unifying strength of tradition was long gone, and the area was well on the way to modern economic salvation, if only the local people could rise to the development occasion. But development in a place like Vunivia tended to mean the sale of cheap raw materials and the purchase of expensive manufactured goods. The balance of such trade would always run against the local people as they would always be holding the thin end of the development wedge. Even the logging operations in Vunivia were unable to make any significant changes to the living conditions of the local people. Development had not delivered, even though the local people had tried to make it happen.

The arguments of some might be that the people of Vunivia are insufficiently modernised to be capable of making development work in that landscape (e.g. Tukai 1988; Goneyali 1975; Vusoniwailala 1985). A conservation and community development programme could be organised to achieve this. Training programmes organised through government grants, aid programmes, and extension services could facilitate the rising to fame of 'Vunivia the development success' within a planning framework similar to that described in the national environmental management proposal in chapter 3. But is this ecologically sustainable? Is poverty really the problem. Are the Vunivia people 'poor'? Is the dominant modern economic development model the only option? Are there alternatives? Are they pragmatic? Remember, we are talking about ecological sustainability, not a brief historical moment of 'sustained economic development'. Development itself might be one of the major problems.

What is the task of an environmental manager who is interested in fostering ecological sustainability? Effective environmental management will need to include the catering for local needs and aspirations. But are these needs and aspirations compatible with ecological sustainability? Or do they harbour the very seeds of unsustainability that has led to the ecological crisis in the modern world?

4.3.9 VEGETATION ANALYSIS - SCIENCE AND ETHICS

Many of the environmental problems in Vunivia relate to modern Western influences, particularly in relation to development, the desire for cash, and the desire for resources that may generate this cash. Environmental management is also a modern Western discipline, and because of this it is important that the modern concept of management be included in this analysis. In chapter 2 I suggested that ecological sustainability and environmental management were not necessarily the same thing. I went so far as to suggest that environmental management may be capable of working against ecological sustainability. How so?

As mentioned earlier in relation to methodology, I conducted a vegetation analysis in Vunivia, and I also collected vegetation data from other parts of Fiji. The national data set I collected was part of a national vegetation inventory, under the auspices of the National Environment Management Project. My original intention was to use the national data (with the permission of the NEMP) to form a backdrop to the specific data collected at Vunivia. In this way I could show the uniqueness of the forests of Vunivia as a basis for environmental valuation. However, this assumption had a major conceptual flaw which related to the question of environmental valuation and environmental ethics.

During the course of the research programme I came to understand ethics a little better as will become apparent in Part III. The understanding I gained led me to realise that a vegetation analysis was not necessarily an appropriate basis for determining the value of the Vunivia forests for purposes of conservation if ecological sustainability was at stake. The social aspects of valuation needed to be explicit. Value is a subjective human construct. It cannot be scientifically ordained, it must be socially negotiated, and this process of negotiation is a political activity. If I continued to pursue the scientific basis for environmental valuation of the Vunivia forests I would be asking that value be determined outside the political process.

However, even science and management take place within the context of a social and political domain, even if scientists believe that they are somehow above politics (there is a substantial literature on the sociology of science, some of which will be discussed in chapter 5 to follow). If environmental value is determined by science, and employed in management in the absence of an explicit attempt at engaging in a process of political discourse, it will sustain a political character by default which may turn out to be an unjust form of politics, and could work against the entire possibility of ecological

sustainability. The political character of many different forms of modern management systems (environmental, corporate, social) is, totalitarian. If an elite group of people (scientists) employ a model determined by an elite form of discourse (science), as a basis for determining the cultural value of a natural area (e.g on the basis of the assumed value of biodiversity), it will not differ in type from many other forms of totalitarian political systems. Local people may be instructed to follow a management programme (which has a social and political character), which has been designed in the absence of any discussion or negotiation with these people on the question of value. I moved the research into this domain in chapter 3 when suggesting that a broad basis for environmental valuation needed to be built into a management programme. However, I did not sufficiently develop the social and political aspects of this process. This became one of the main tasks of the thesis and will be developed in later chapters.

The value of the Vunivia forests was not something that I could determine all by myself with the aid of science and a vegetation survey. These forests are part of the lives of the Vunivia people. They have a relationship with these forests which is based upon their own set of values. These values need to be incorporated into the process environmental valuation, even if they are values that would cause the logging of the forests. Asking the local people to participate in the process of environmental valuation does not begin and end with the way local people want to use the resource. On-going discussion may reveal that the local people do not need to log their forests to gain access to the values they seek. They may seek cash for example, but do not realise that there are many possibilities for achieving this without having to cut the forests down. Why do they need cash? They may need to buy consumer goods to satisfy their aspirations for a modern lifestyle. Why do they seek a modern lifestyle? They may have been led to believe that this is the only way to happiness. But there are many ways of gaining the quality of life that many people seek, and for Fijian people there is much to choose from within their own culture that can be employed to achieve this. This is not coercion, it is merely discussion and negotiation. It is part of the process of determining the value of a forest.

In ethical terms, many types of modern environmental management unwittingly become forms of neo-fascism, in spite of the best intentions of environmental managers. A counter argument might be that the various forces behind environmental degradation use totalitarian political structures, and to stand back and attempt to do things gracefully will give these forces a free reign. As such, a heavy handed environmental management style is justified. It may be true that totalitarian political styles are being used to damage society and the environment. But this is not a licence to continue to use these political

structures in defence of Nature. To do so would be using fire to fight fire. What this points to is the totalitarian nature of our modern culture. And culture is where the source of many of our environmental problems lie. To use 'heavy handed' totalitarian political styles to protect the environment may be good for environmental management (what ever that is), but it can never contribute to ecological sustainability. This is because totalitarian structures themselves are innately alienating, oppressive, and unsustainable. They cannot be sustained indefinitely which is what ecological sustainability demands.

I believe that neo-fascism, even in the form of benevolently inspired environmental management (which allows an elite group to dictate social actions), will pose a major obstruction to ecological sustainability, and I will attempt to make this clear in the chapters that follow. In fact totalitarianism itself lies at the very heart of the problem of unsustainability. This will gradually become obvious in later chapters.

Upon realising the totalitarian political character of the management system I was supporting, through the adoption of my vegetation analysis as a basis for valuation, I had no choice but to drop the analysis altogether. This is not to say that a vegetation analysis was not useful. It is. It would help to provide useful information on the character of the vegetation in the catchment. This information could be used in the process of negotiation and education with local people, but could not dictate the political process. There needed to be dialogue, as environmental education needs to be a two way undertaking. The local people may have many things to teach outsiders about the value of their landscape, but can only do this if they are given a hearing. If given such a hearing local people could inform environmental managers about important issues relating to land use that may not be obvious to outsiders.

My priority was to undertake an exploration of the social and political dimensions of ecological sustainability, and because of this I needed to spend my energies and time focusing on social and political issues. In this way I would eventually be able to locate an appropriate social framework, within which a vegetation analysis could fit. But until this social framework was developed I needed to put a vegetation analysis aside. This is because the development of an appropriate social framework capable of delivering ecological sustainability was not a trivial undertaking, as the following chapters will testify.

4.4 REFLECTIONS AND CONTRADICTIONS

Part of this exploration of the social dimension involved a process of reflection that was able to pry into deeper concerns that may not be immediately apparent. One of these concerns related to the perspective of local people and the legitimacy of their own view of their own reality.

I had a suspicion. I suspected that there was more to the Vunivia story than the perspective of the local people themselves. It is a great step to be able to respect the local people enough to listen to them and be told, in their own words, what their condition is, and how they would like it to be. But there is a possibility that their own view of their own reality is the result of some form of ideological manipulation. These are strong words, and they sound like a return to the sinister conspiracy idea raised a little earlier. It is a conspiracy of sorts, and it is socially and environmentally sinister, but it is not necessarily a conscious conspiracy. I called it an unconscious conspiracy of delusion. But it is coercion no less, a coercion that many of us have been taught not to question. This coercion is the absorption of a world view within a culture that tells us that free market capitalism is the only way reality can be. We have no choice, we are locked into this economic regime and it is the best and only way to freedom and happiness. It is an economic regime that has been slowly developing over the last 3-4 centuries and it is a great achievement of humanity. So we are told in the newspapers, on the television, in the schools, on radio, in books, magazines, and universities.

The people of Vunivia have been led to believe it too. They have been taught not to question it, as to do so is to be very silly, dirty and primitive. These were my gut feelings, and yet I did not seem to be justified in saying such things in any formal research framework. But I was to discover that many other people have come to similar conclusions about the social condition of people all over the world. Moreover, I discovered that quite a substantial social theoretical tradition has developed that is capable of deciphering this kind of scenario.

I will discuss these forms of social theory in chapter 5 to follow, but introduce the ideas here to indicate that the analysis to follow in later chapters will take such issues seriously. They are central to the whole debate concerning ecological sustainability, as they concern the ecological character of some of our deepest prejudices. Prejudices that we have been spoon-fed as children in our Western culture, through the meanings behind our language and the basic assumptions that have helped to shape our world

view. A world view that migrated to Fiji in the 19th century. A world view that teaches us to see Nature as something that is separate from ourselves, to see Nature as an instrument of a human economy. To understand the word 'free' as synonymous with 'free market'. To see the self as completely autonomous and divorced from the rest of reality. To see the body as separate from the mind. To see humanity as higher than all other beings. To see Nature as a machine. To see human nature as innately selfish and competitive. To see men as superior to women. To see men as natural leaders. To see reason as a masculine trait. To see intuition and emotion as feminine and inferior to rational thought. All of these assumptions directly or indirectly obstruct the possibility of ecological sustainability.

But is there anyone behind this conspiracy? Who controls what we know and believe? Who determines what is true and what is false? Who votes for our laws? Who educates us as members of a modern culture? Who writes the newspaper articles and edits them? Who takes heed of the mass media? Who participates in and serves the capitalist economy? Who are the evil ones, the enemy? Can we isolate them and be rid of these infidels? Think again. The enemies of Nature can not be identified by the suits they wear, or quirks of their hand-shake. They cannot be isolated as a 'Them'. Instead it is really us. It is our culture, a culture we are happy to defend, and we are all in it together. We are all responsible as the landscape responds to our collective deeds. If we think that we are doing our bit for ecological sustainability by doing it all by ourselves we have failed to realise that we are still members of a society, and it is the ecological character of our society that matters at the end of the day. We are not alone. Whether we like it or not we share our landscape with the industrialists. The landscape cannot recognise you or me as 'the sustainable ones'. It does not care if we sustain the vanity that goes with environmental self righteousness. The message that reads 'unsustainable' is something we all carry in our pockets and pocket sulus. Hiding from it will not do.

And how did it all get this way? We in the West established a basis for legitimating a cultural model, founded upon philosophies that underpin our systems of law, of political organisation, and of economic production. These conceptions became ingrained in our common-sense world view and imprinted into our culture through language and the meaning behind words in language. Some people support this culture by contributing to its design, others simply play along to someone else's tune. Are we free in a Western democracy? Has democracy ever been practised? Pre-modern Fijians participated in a culture that at times was violent and at others was peaceful. Some forms of this culture were ecologically unsustainable, others were not. But now it has all merged into one -

modern Fiji. And this culture in all its diversity shares many traits of a Western origin. But the origin is of little importance. The fact that Fiji is now a modern culture is what matters. And here in the condition of modern Fiji is an unsustainable culture - irrespective of race. This modern culture needs to be transformed if we are still interested in ecological sustainability.

This is certainly a radical turn of events. How could I possibly substantiate it all, and is there a way out? Well, this is the task of the following chapters. And there I will demonstrate the depth of our problems concerning ecological sustainability, and at the end of it describe what kind of things will be needed in order to achieve this condition. In the mean time I will continue to show why there needs to be such a critical turn and what form the analysis will need to take in the coming chapters.

4.4.1 AWAKENING TO MODERN FIJI

The time is long past where those who are friends of Pacific Islanders and islands and those who are enemies can be sorted out on the basis of their genes or skin colours: there are plenty of "insiders", many with Swiss bank accounts, busily selling their forests, their minerals, their fish - the lives and environments of their village cousins and their own children and grandchildren - to foreign interests.." (Keesing 1991:168).

Fiji has come of age. But what is this age that has become modern Fiji? What kind of society speaks these rolling languages, and where are they all going? These kinds of questions toss back and forth in the minds of many people involved in contemporary debates concerning Island life, from the emerging women's movement to conservationists. All are trying to make things better. But what is it that they are trying to make better, and what does 'better' really imply? My own romanticism about Fijian society has been long shattered and in the shifting sands of the resulting confusion I was forced to reorient my thinking in relation to environmental issues in Fiji. Not wanting to succumb to the market driven diatribe that taints so much of the debate concerning the 'development' of natural resources, I suddenly lost forever what had seemed to be a robust counter argument viz.: the need to cater for the needs of local people as they defined these needs, as a means of restructuring a Fijian society into an ecologically sustainable form. By supporting this view I unwittingly voted in favour of a number of assumptions including the popular meaning 'development', 'freedom', 'progress', 'wealth', and 'happiness'. Through the course of this thesis I plan to look closely into what these meanings might be as I believe that they have a great deal to do with the ecology of a culture. A critical review of the meaning of these words also has penetrating

consequences for contemporary political debate in Fiji.

Are the Fijian people still there defending tradition in the face of so much rampant colonialism? One can be excused for holding such a utopian view of Fijian society if one has never set foot in a Fijian village. I'm sure that many tourists who have 'spent time with the locals' over a few drinks at the bar after the traditional dance show has finished, will marvel at how wonderful this culture is with all of its tradition so intact. But whoever ventures beyond that thin facade of pseudo-traditionalism transmuted into a handicraft and culture industry will be confronted by many perhaps unforeseen contradictions. Another Fiji is to be found there. A Fiji that has lost its 'purity'. But one must ask the question - did it ever have this purity?

Many of the current debates concerning 'culture' and 'environment' are little more than window-dressed versions of ideologies that seek to preserve a variety of privileges either in the name of *vaka Viti* (Fijian tradition), *vakatoroicakitaki* (progress; development), or even conservation. Fijians are asked to submit their honour to the Fijian chiefly system irrespective of what this 'traditional' system does to their welfare or their environment. The chiefly system has been used in a variety of ways, by a significant proportion of the chiefly elite, to secure their social, political and economic privileges in a sturdy social binding deemed legitimate by virtue of it having the appearance of 'tradition' - remember *Akuila*. It is true that in the past social and economic hierarchies did exist in Fijian culture, but they were far from universal, and can hardly be used as an excuse for the injustices that are thrown about today. Injustices inflicted on Fijians by others Fijians.

Is tribal warfare and expansionist political hegemony the only legitimate model for traditional Fijian society? It would be a little like contemporary Germans claiming that genocide is OK because they did it in the 1930s. The past can never legitimate the present. A culture must be forever re-negotiated and recreated by its members, by reinterpreting history in relation to destiny where history becomes part of an evolving mythology. This does not throw the past away at all, it simply acknowledges that the relationship between past, present and future is dynamic. In the past the landscape has been used and abused by many different people from different cultures. But our records and memories of such abuse are not a licence to continue to do so. And in Fijian culture there are many elements worthy of reinterpretation that may indeed show us how to avoid environmental and social violence. But as part of this process of interpretation we must respect the myths that we have, enough to seek to understand them as their

meanings were originally intended. Their meanings may not apply any longer as the landscape may be very different now from when they were interpreted in previous ages. But we must seek to understand them all the same, even if only to know precisely what we are throwing out.

Many different cultures have meaningful myths. I believe that in some of these myths we can find a means of moral instruction of how to be. Of how to be ecologically sustainable. But to achieve this we must realise that myths are not always used as they were intended. They are often misinterpreted and misconstrued in order to serve a variety of purposes. Abraham sacrificed Issac, and in Nazi Germany many more of Abraham's children were slaughtered because they were 'dirty' according to a particular mythology (Caputo 1993). In Fiji a similar thing happened with the massacres and cannibalism of the 19th century and before. Is this the way to social justice and ecological sustainability? I think not, and I'm sure that there would have been (and still are) many, many Fijians who would agree. Tradition is diverse. Pre-modern Fijian society was diverse too. To blindly stereo-type the entire Fijian people upon the basis of a single variant would be racism to a great degree. And yet many people are claiming that pre-modern Fijian society was a model that we need to preserve. Which model are they referring to? We must realise that there was, and is, more than one Fiji.

But the other side of this coin asks that tradition all be thrown out, and that Fiji be modernised to the maximum. Many eco-evangelists rush to the Pacific much like the Christians did over a century ago, on a mission to convert these fallen savages to an ecologically sustainable life (as if such a condition has been achieved in their own country), through the saving grace of environmental management as defined by modern science. They are assisted by local 'educated' Fijians who have been taught to see their own culture as backward and in need of a great injection of modern progress. Progress? From what? To where? The application of modern science is supposed to save the day, to clean up the mess, to bring us all home to management. The intentions of environmental scientists are not malicious, but they must be careful not to ask a culture to conform to their scientific model of how the world ought to be. What model are they talking about? A European version of Bauan hegemony under the guise of science? Because, there is science and there is science. We must be very careful how quickly we submit to a framework for cultural change, and I ask the Fijian people to do the same. We must look closely into the culture we have and the alternative offered in the name of environmental salvation, lest we leap out of the frying pan and into the fire. What do people think they mean when they use this word 'sustainability' and who do they think

they are talking to?

4.4.2 THE PROMISE OF INDIGENOUS KNOWLEDGE

What about traditional wisdom? Indigenous knowledge may turn out to be vital. But we must know what we are looking for when we turn to indigenous knowledge and we must be sure we know how to use it.

The gathering of traditional knowledge is perhaps a vital link in this cultural equation. But at the same time we must never forget what is causing our problems in the first place. Traditional agricultural practices can be reawakened, along with traditional forms of resource management. But we must be careful not to think that traditional wisdom will alone save the day. Clarke (1994) suggests that indigenous knowledge has much to offer but it is not a miracle fix. He rightly suggests that focusing too much on the old ways of Pacific peoples may divert our attentions from the broader questions relating to the context of their use. The ecological success of many forms of traditional wisdom frequently depends on their application within the context of a traditional world. Do we think that we can now simply use age-old techniques of agricultural management to set us on the path to a modern form of ecological grace?

When one looks into these traditional technologies, as Clarke did, many of the techniques are indeed management techniques, and in this sense do not necessarily differ all that dramatically from modern scientific equivalents. So, did the techniques of island antiquity create ecological sustainability in the past? No. The techniques are techniques. What is crucial to ecological sustainability is the world in which these techniques are used. By 'world' I mean the world view - the culture, including the economy and the linguistic, conceptual, social and psychological attributes that form the basis of value.

To use traditional techniques successfully, we need to use them in a traditional world context (see Waddell 1977). The intricate dalo gardens of pre-modern Rewa, if plugged into a capitalist economic framework will not be able to be used in the same ways as in the past. The dalo gardens of the past were not situated on the edge of a bottomless market that would buy every root as soon as it came out of the ground. But this is the world in which these dalo are now cultivated. The economic context is very different. Yaqona was not grown as a cash crop in days of old. It was grown for the local consumption of chiefs. And even now, Fijians in many parts of the rural landscape would never be capable of drinking the volumes of yaqona that are now planted and

harvested from their own land. Where does it all go now? - to the market where everyone will buy it and drink it, not just chiefs. It is a very different world. Many crops are now grown for sale - not for food, and the volume of produce that now comes off the land to cater for the needs of a single family is far in excess of what it would have been in the pre-modern past. Even in Vunivia the area of land now used for agriculture is far greater than what was cultivated prior to the arrival of the road. The road brought access to the market for the sale of cash crops, and now much of the land is used to produce crops for sale. I am referring to the area of land used by families that always lived in the catchment (as opposed to the consequences of the influx of the *tokatoka* Bulu people).

This increase in the area of land used for cropping is not simply a function of population density, although population density does contribute to the increase. The same is true for environmental degradation in general. It is not merely a function of population, which means that solving the worlds population problems will not necessarily solve our environmental problems as some would have us believe. An extensive international family planning programme will not save us from ecological ruin. In global terms the population debate is a massive red herring which serves to divert our attention from the real social and economic causes of our environmental depravity. It also helps people in the highly developed countries to wallow in a deluded smugness, as they can sit back and blame the worlds poor for both the environmental and overpopulation problems, as Malthus did in the early 19th century.

Yes, population is partly to blame and I agree with Keyfitz (1990) that we do have a major problem. But I disagree with his solution which I believe covers over the cause. He tells us that:

the question each country must face, then, is how to attain a sufficient pace of economic development without destroying the environment...most less developed nations are aware that the pace of development would be faster and the destruction of the environment slower if their populations were to increase more slowly than they do today. Not all of them have the same capacity to formulate and implement policies that will put that knowledge to use (Keyfitz 1990:72).

Keyfitz has the cart before the horse. His argument is upside down. He implies that economic development is what we must placate to. Instead we need less development and need to stop calling these countries "less developed".

A far more important issue is the social and economic systems of selective privilege and greed, that create a global culture of domination that causes both environmental degradation and poverty. Also, as Waddell (1977) has pointed out, we need to look more closely into the distribution of population changes in the modern world which has become increasingly urbanised. Environmental and social degeneration are both symptoms, not causes, of injustice. When one looks a little further into the problem of overpopulation one finds an interesting story waiting to be told. Why do poor people have big families? Perhaps they need an education, and some good family planning advice. "I bet a lot of them are Catholics", some people might whisper. It is well known that increasing the health and socio-economic condition of poor families helps to reduce both the death and the birth rate thereby lowering the overall population growth rate. This can only come about through the breaking of the cycle of poverty and environmental degradation (United Nations 1990). As Meadows et al (1992:26-7) have pointed out:

The growth rate of a population is equal to its fertility minus its mortality. Of course human fertility and mortality are not at all constant. They depend upon economic, environmental, and demographic factors such as income, education, health care, family planning technologies, religion, pollution and the population's age structure.

Blaming the poor is the oldest and most treacherous trick in the book. The world's environmental problems relate more crucially to the intensity of the use of resources for the provision of goods and services that are fed into an economic system that has an insatiable appetite and an unbalanced ledger. For example, poor countries have an entirely different set of opportunities in relation to economic development than rich ones, and this in turn can influence their population structure. Rich countries tend to have a relatively long history of capital accumulation compared with 'developing countries'. Because of this, capital is more readily available for rich populations to multiply their capital, save and invest for the future without having to impoverish the present. In so called 'developing countries' investable surplus is much lower due to its absorption by foreign investors, debt repayments, and the highly disproportionate luxury of local elites. The local population does not benefit from development and remains poor, perpetuating the pattern of population growth rates that are fostered by impoverished standards of living (Meadows et al 1992).

Children bring security to the poor who have little else. These populations are not only estranged from the modern process of development but they have often lost much of their traditional social structure, which in the past was capable of providing the kind of

social security of any well functioning communal society (Goldsmith 1978). Population growth increases poverty, and poverty increases population growth. But how do we break the cycle? With condoms, or with a reorientation of our economy? Contraception and family planning may work for those poor families that do not need the security of children. But for those that do need that security, those whose traditional communal social structure is gone, and who are impoverished by the inequitable economic system itself - they will not use them, even if they were free. To do so would help them become even poorer.

In Vunivia we have many of these very same ingredients: a fragmented rural population that is increasing; underdevelopment; poor living standards; and, estrangement from traditional communal social structures. Vunivia has a collection of peasant farmers living an isolated life in an attempt to use the land as a means to buy them a lifestyle that their education system and the media tells them they should aspire to. School fees, electricity, appliances, piped water, transport, housing, packaged food, better clothes, better furniture, better this, better that. In Vunivia, however, the consequences of a change in lifestyle are more visible, as their income comes directly off the land, and changes in their income are reflected locally and immediately. People of highly developed countries do not reap their riches from their own land. It often comes from foreign shores - like Fiji. Japan has managed to protect so much of its own forests, whilst it annihilates those forested landscapes of South East Asia to satisfy its insatiable thirst for timber (Nectoux and Kuroda 1989).

People living in a modern urban lifestyle consume resources that are supplied from far away, and so it is easy for us all to forget just how much of the earth's resources we use up as a matter of course. This serves to lead people into the misguided mind-set that there is no environmental problem with their consumption of resources. After all, the daily onslaught of media advertising is telling us all to buy more and more. "I shop therefore I am" has become a modern dictum (Gablik 1991). To use 'sustainable' techniques, such as those on display at the traditional wisdom gala, we need to use them in a sustainable world. Changing our techniques will not deliver ecological sustainability - we must change our world.

Clarke (1994) and Waddell (1977, 1994) have recognised this and have been trying to remind us of the expansive gulf that lies between sustainability and where most of us currently stand. Many people engaged in the sustainability debate have failed to realise the significance of the enormous differences between the modern and the pre-modern

world, in terms of their economic, social, cultural, psychological and environmental context. Many advocates of sustainability are wondering how we can use these amazing tools, old and new, for sustainability. But, any knowledge can be a valuable tool, this is what knowledge is - a tool. We must begin to look far more critically, not at the tool, but the world of the hand that holds it.

The Fijian way of the *Vanua*, the Maori concept of *Papatuanuku* (Hopa 1990) and the ecological spirituality of the Sioux in North America (Storm 1972) are examples of pre-modern realisations of the kind of life that Arne Naess' deep ecology (Naess 1989), and James Lovelock's Gaia concept (Lovelock 1987) point to. The land for many Fijians, Maori and Sioux was a living realm where the past, present and future came together in a spiritual coalescence of people and place, rather than being merely a dead instrument of an economy. This traditional wisdom is more than merely a tool or a technique, it is a way of life, a life philosophy, a living mythology.

4.5 REVISITING MODERN VUNIVIA

"What is the biggest overall drain on your finances", I ask one villager. "School fees", is the reply. It is common for rural Fijians to fear the cost of having a family due to the burden that school fees place on a household economy, where cash is not easy to come by. What has this got to do with ecological sustainability? The land and coastal resources are used to finance many different activities in rural Fijian communities, among them include housing, household amenities, transport, food, fuel, machinery, clothes, and school fees. There are many day to day costs of living even in the semi-subsistence lifestyles of rural communities like Vunivia, but there are also costs that go beyond the daily pattern of consumption. Costs concerned with community projects such as the building of a new church (Vunivia has five different religions), or a community development project can be substantial. All of these costs come back to the land, as this may be the only source of income. Where these costs are high, the pressure on the land increases. But what lies a little more hidden in this equation are the changing patterns of land use, the changing expectations and aspirations of local people in terms of life style and culture, the changing context of social and political organisation, the changing of meaning of words in language, the changing nature of external pressures on rural resources, and the changing technologies that may be employed as a means to these ends.

Many Fijians desperately want a place on the escalator of modern development. The cultural vertigo experienced when first stepping onto this trajectory has been felt by many Fijians in past decades. As such, an increasing number of contemporary Fijians will not experience such a transformation. They have grown cash crops to pay for an education that has taught them to believe that 'development' is the normal state of affairs. Development will bring riches, and development will deliver happiness, nicely packaged for their convenience. So what? Development is happening every where, all over the world and has been for centuries, it is a natural condition, this is what being human is all about...Isn't it??

Development is one of the most over-used words in countries like Fiji. It has gained almost religion status. It is even there in the subtitle of the nation - a developing country. It dominates the national political sphere, government planning, monetary policy, aid and international relations. The Fiji government does all it can for this thing called 'development', and as Luckett (1987) has pointed out; "Fiji's annual budget is specifically designed as one of the instruments used by the government for putting its development program into practice" (ibid.:5). Behind the need for school fees in Vunivia is a demand for 'development'. But what about this 'development'; can it really do what it claims to be capable of, and at the same time can it also be called sustainable?

The issue of sustainable development is one of the biggest in the world today. Many different industries are trying to prove their ability to be 'sustainable', because 'sustainability' is now a trendy word, and the need for development has long been accepted as universally true. "Development needs to be sustainable", people are saying, and then it will all be safe and just. As if a 'sustainable' epilogue to the volumous development story is sufficient for the sustainable life. But development. What is so universally true about this idea, and can ecological sustainability have anything to do with sustainable development? I will show in subsequent chapters that the word 'development' and its meaning is best deleted if we want to come to an understanding of ecological sustainability. To insist that ecological sustainability must include 'development' is to set an analysis in conceptual concrete where the only thing able to be sustained is delusion.

In 1986 the road came to Vunivia, and with it the great expectations of the fruits of development. The arrival of the road had significant impact on life for the people of Vunivia. The *mataqali* Namako is a fragmented rural community with little of tradition remaining in terms of their actual economy. It has developed into a cash cropping

economy of small rural settlements hanging by a thread to the periphery of the Pacific regional economy. And yet their gaze is focused on the promise of riches and the good life that development is supposed to bring. But development has tended dissipate like a cloud formation that forever evaporates as it approaches. But the sight of it is enough to whet their appetites and so, the promise of development is what they live for.

Forests can be used for development, and the *mataqali* Namako people have been happy to watch them fall to the ground to the sound of chainsaws and heavy machinery. The local people clear and burn their forest to make room for more cash crop gardens with little regard for the lowland dry zone forest, the uniqueness of which so touched my heart. "What about their innate love for the *Vanua*?" I kept thinking. "What about the irretrievable damage that is being inflicted on their landscape? Surely there is wisdom here to see beyond this." But the opposite seemed to be true. The ruthless neglect that the *Vanua* seemed to be subjected to horrified me, as I had hoped that the rural Fijian people with all their tradition would mimic those people I had read about in so many environmental magazines. But romanticism does not help much when you are there at the 'scene of the crime', when you go with a landowner to who invites you to watch him set fire to his forest. But what can you do? What is it all about?

A knee jerk reaction might be to try to awaken the local people to the injustice they are inflicting on the good earth, and explain how the greenhouse effect demands their attention. But one soon realises that such 'advice' is patronising, naive, and way off the mark. You are talking to the wrong people if you are asking the locals to stop wrecking their landscape. "Ecological sustainability, what is that" they reply. You could try window-dressing your story in their language "*e na kena taqomaki na Vanua*" and they still look at you in bewilderment. "What does this foreigner thing he is doing coming here and asking that we stop doing things the way we want to. Furthermore, his culture is the one that came here a little over a century ago and converted us all to Christianity and then modernity. Is he asking us to turn around and go back?" It begins to sound like a massive practical joke that took a century and a half to tell. "Be modern your people say. Change our whole way of life to one that is underwritten by modernity. Then ask us not to do what your people are doing all over the world. Make up your mind".

I was caught up in this kind of double bind, although I was not asking the people of Vunivia to do anything. I was attempting to learn about their situation so that I might begin to understand what life is like for a rural Fijian community living out on the margin of an economy that does not care. I went to Vunivia for this PhD to learn. And

in the process I discovered many different things. I realised that people out there in the rural landscape do want development to come their way. I learned that in spite of the promises that development makes, it rarely delivers, and in the process breeds a pessimism in rural Fijian communities about their own abilities as people and as a culture. They begin to think in the wake of all their development failures that they are failing badly as a people.

In Vunivia I learned about the pressures on rural resources from outside interests. I learned that the local people were far from unified and mutually supportive. Indeed there were many antagonisms between local people, people of the same kinship group, people of the same community. Colonisation was not reserved for outsiders, it was being carried out in this catchment by the landowners themselves against each other. I also learned that the *mataqali* were already significantly modernised even if it was not obvious at first. Tradition, in terms of the actual use of resources, was a long way away. And in this I learned about the magnitude of ecological sustainability. It is not as simple as I first thought, but still worth pursuing. However, to do so meant that I would need to reconstitute my research methodology entirely, as the non-critical approach was incapable of taking me very far. What I needed were tools that would facilitate a deep and far reaching inquiry into culture.

4.6 SOCIAL THEORY AND SOCIAL TRANSFORMATION

The interaction between the social dynamic and the ecological dynamic is an interaction that is of central concern to this research. The social realities that affected the relationship between the people of Vunivia and their landscape was the main target for my case study of this catchment. I wanted to understand this relationship to see how it might be able to become compatible, ecologically sustainable. The question that kept returning to my mind was whether or not the existing *cultural* setting was capable of achieving an ecologically sustainable existence. In other words, is ecological sustainability a social issue, or is it really deeper, i.e. cultural. If it is only a social issue then it could conceivably be achieved without too much of a radical change in the foundations of the way people think and the way they recreate their world through language. It may necessitate a major social revolution, especially in regard to the type of economic system being used, but it could be achieved without a major overhaul of language and the cultural meaning of life.

A significant social transformation could then be planned and implemented. It might involve the fostering of community, it might be a form of socialism, a green socialism. If this were true then there would be much in the way of existing tools for social change that could be employed in order to bring about such a transformation to an ecologically sustainable society. It may involve the reorientation of economic value systems, much of which is being conducted in the discipline of ecological economics. Economics could become scientific at long last instead of merely a sophisticated system of exchange founded upon gross and naive assumptions that serve to legitimate greed. Economists could be informed by the knowledge gained by ecologists and physicists. Economics could comply with the laws of thermodynamics instead of blatantly contradicting them. We could have an 'economics, as if people mattered' as Schumacher (1973) had suggested. We could value our resources in terms of the costs of their natural production instead of merely the costs of their extraction. Value could be socially and scientifically determined, instead of set by the whims of the market. Value in exchange would not contradict value in use.

The original ideals of the cultural ancestors could be reawakened and reasserted. In Western culture we could look to the great Western thinkers like Socrates, Aristotle, Descartes, Newton, Kant, Marx, Russel, Popper, and Hawking for guidance, instead of merely making it up as we went along. In modern life we could look to the ideals that underpinned the modern project which rose from the ruins of the medieval world. A project where science was able to inform society of how we ought to live as Francis Bacon dreamed in his utopian novel 'The New Organon'. We could aspire to a project that was able to recover the spirit of true democracy. The serenity of reason might then be able to mediate our political debates, rather than the illogical political tyranny that has so characterised the 20th century. In the Fijian context the ideals of their cultural ancestors could be re-awakened and traditional wisdom could be part and parcel of resource management. In this way Fijian life could become an integration of the old and the new to help to shape a society that cared for the land and used its resources sensibly and rationally.

This is a big task, but is it ecologically sustainable?? I seek to demonstrate that, attractive as it is, such a social utopia would not carry any society to ecological sustainability. The reason for this will become apparent as the following chapters unfold. But it relates to the assumptions and ideals of these ancestors, and a series of debates that these precursors of modernity have been having with a lesser known assemblage of Western cultural predecessors - a heritage that has consistently been covered over.

4.6.1 THE NEED FOR FURTHER THEORETICAL DEVELOPMENT

In the process of investigating the local situation at Vunivia I discovered the consequences of modernity in relation to the community structure, economic production, local needs and aspirations, and the acceptance of the existing development model. I began to realise that the condition of the local people was a product of a social and cultural transformation that has taken these people a long way from pre-modern times. As such, their own view of their own reality was clouded by a false consciousness. This false consciousness concerning their own condition is the product of the dominance of the European social structure, the knowledge systems that legitimate it, the economic system that underlies it, and the political structures that support it. It amounts to the successful usurping of the Fijian culture by a modern Western world view. Furthermore, this world view itself is anti-ecological, and modern Westerners too have grown to accept it as a natural human condition. In this way, many Westerners have also become victims of a false consciousness that rural Fijians are finding themselves in today, although this process took longer in the West than it did in Fiji.

This suspicion of coercion needed to be investigated further, as it became obvious that the world view of modern Fiji, and other modern countries, was a very substantial obstruction to ecological sustainability for a number of reasons. There is the assumption of the autonomous individual which seeks out a selfish existence amidst a social backdrop of competitive selection. Another assumption is that humanity's place separate from and above Nature. There is the assumption that individualistic material wealth based on instrumental reason underlies the meaning of happiness. There is the assumption of the validity of capitalism as an economic system capable of being sustainable. There is also the assumption of the universal nature of Western rationality, which is supposedly capable of solving all of the worlds problems through modern science. All of these things stand in the way of ecological sustainability as an adaptive relationship between culture and landscape.

These suspicions necessitated a more sophisticated analysis that was capable of analysing the assumptions that form the basis of some of the deepest prejudices in the modern world. This included the need to critique:- (a) the basis of the dominant modern model of social reality (social ontology); (b) the basis of modern systems of knowledge which legitimated the assumptions described above (social and natural science); (c) the basis of modern rationality which claims to be universal (philosophy); (d) the notion of the self in relation to the assumption of autonomy (psychology); (e) the linguistic basis

of the formation of a world view (mythology), and; (f) the relationship between all of the above to the ecological character of a culture.

This leads to the need to identify an appropriate methodology capable of conducting such an analysis. To do this I must review existing epistemologies (means of gaining knowledge) and either adopt an appropriate one, or develop a new one. I end up doing a little of both and in the process identify an approach which I call 'transcendental cultural ecology'.

This process of identifying and developing an epistemology will be undertaken through the course of chapters 5, 6, 7, and 8 in Part III to follow. The refinement of the epistemology simultaneously serves the purpose of defining a framework for posing our question concerning ecological sustainability. This is because the development of this methodology is also able to be employed along the way in the form of analysis, thus gradually uncovering more and more about the meaning of ecological sustainability. As mentioned in chapter 2: a speculative problem is solved as soon as it is properly stated. It is the framing of the question that is all important, and this comes about through relentless questioning, until our questioning folds back upon itself at the limits of our ability to ask. But what are we asking? We are asking about the meaning of the landscape. A meaning that is being rapidly lost in modern Fiji - even in Vunivua.

If Nietzsche's madman (from *The Gay Science*) were a Fijian, and were to run through the forested tracks of Vunivua, he would arrive at Kedra village, walk around the village green calling out, "*Sa evei na yalo ni Vanua? Sa evei na yalo ni Vanua?*" (Where is the spirit of the land? Where is the spirit of the land?). The people of the village would look at him strangely, wondering where this madman had come from. One villager replies "*Baleta? Sa yali na Vanua?*" (Why? Is the land lost?), and they all laugh. But then the madman would look at them again and morosely pronounce: "*Rogoci au - sa mate na Vanua. Keimami sa labata na Vanua*" (Listen to me - the land is dead. We have murdered the land). But they misunderstand him and their laughter continues. Shaking his head, he then says, "*Isa, e rui totolo na noqu lako mai. Kemuni sa bera ni vakarau mo ni rogoca na noqu vosa*", (Oh dear, I come too soon. You are not yet ready to hear my message). Because indeed, the spirit of the Fijian culture, held in the life-breath of the land, has long since died in many parts of Fiji, but few Fijians realise this. I intend to demonstrate in the remaining chapters that it is the very spirit of the land, that lies at the heart of the question of ecological sustainability.

PART III

ECOLOGY AS SCIENCE, METAPHYSICS, AND BEYOND

Through the course of Part II it became obvious that much of the current environmental problems in Fiji are a product of social conditions. Because of this I agree with Bookchin (1986), Fox (1990), Plumwood (1992), and Wright (1992) that the solving of environmental problems are dependant on social changes that are capable of removing oppression from the dominant modern mind-set. This call for a removal of the source of cultural domination in modernity is also a central theme in ecofeminism (Daly 1978; King 1989; Merchant 1980, 1990; Salleh 1992, 1993; Plant 1989). However, in analysing these modern social conditions, as they currently exist, one must not assume that they can all be reduced to a single story line, such as a class struggle (Steel 1990; Peters 1991). The problems of modernity are being expressed in many different ways and must be addressed in a fashion that takes adequate account of this diversity in what has been called a politics of difference (e.g. the work of Foucault, Deleuze and Guattari, see Best and Kellner 1991; Cheney 1989a).

Environmental issues are not necessarily more or less important than other struggles such as indigenous rights, gender, race, or class issues. They exist on a spectrum and are often thoroughly interrelated (Peters 1991). Gains made in one area e.g. indigenous rights, without sufficiently dealing with others e.g. environment, may serve to undermine those very gains. There needs to be a recognition of the different identities of different social concerns (including the environment), together with a sense of unity capable of bringing these concerns into a coherent framework for cultural change (Mathews 1992). Moreover, achieving the forms of egalitarianism sought in so many different interest groups demands a substantial shift in the social and political character of the dominant modern culture itself (Young 1990; Best and Keller 1991). Such changes in the dominant modern culture of most capitalist countries will also facilitate egalitarianism in other directions including the relationship with the landscape (Bookchin 1986; Naess 1989). Social concerns in all their diversity, must get a hearing along side environmental concerns if ecological sustainability is to become possible (Birkeland 1992), because we are talking about a cultural condition, a collective relationship with landscape. This relationship will outwardly reflect internal relationships within a social community (see

Adair and Howell 1989). If these internal social conditions are unjust, they can hardly be sustained.

In this chapter I will explore different approaches to the question of social reality and social transformation in relation to the landscape. This involves the reviewing of different viewfinders (social theories) in the process of constructing one that is capable of seeing what ecological sustainability might look like without it being an illusion. I believe that theoretical frameworks that serve to legitimate capitalism and/or industrial socialism fail to see what ecological sustainability is, and furthermore, are incapable of delivering any society into an ecologically sustainable field of existence. This is not to say that Marxism is completely without merit. Neither does it imply that notions of freedom should be discarded. Instead I seek to search widely from different traditions, learn from their wisdom, and avoid their mistakes.

The problems associated with the structure and social contradictions of capitalism has been the subject of heated debate (and even the occasional revolution) over the last few centuries. Marxism, however, was only one wave of a growing movement which could recognise the social oppression inherent in capitalism (see Wiser 1983 for example). The creative alternatives arising out of the various critiques of capitalism were also varied. However, few of these creative alternatives fully addressed the contradictory *ecological* character of capitalism. The ecological contradictions of capitalism lie not only in the structure of this economic paradigm, but in the very fabric of Western culture in general.

'Development'¹ implies 'progress' and 'progress' implies historicism, and linear time². Modern development also implies that the land is separate from humanity and that the landscape is a passive surface full of resources which can be employed for the benefit of humanity. Development is utilitarian as it places value on resources in a instrumental fashion, in terms of their ability to be transformed into benefits for the human

¹The word 'development' has only been in common usage in its current form since the 1950s (see Nandy 1988 for example). 'Progress' was an idea invented during the Enlightenment (see Wiser 1983; Peters 1991; Doherty et al 1992) based on the historicism of the time which has since become entrenched in the minds of Westerners and modern people of non-European races. These words are reified through their role in language in modern life. I will explain this linguistic phenomenon in later chapters.

²An account of the relation of conceptions of time to historicism can be found in many of the works of Heidegger, specifically Heidegger (1962, 1977, 1985). See also Heine (1985), and Dostal (1993).

community. Some forms of environmentalism make the same mistake of seeing the landscape as merely a natural factory of goods and services (Fox 1990; Birch 1992; Naess 1989). The dominant Western mind-set also assumes that reason is the basis for truth (Best and Kellner 1991; Graham et al 1992; Kenney 1991; Lyotard 1984), and in some cases believes that truth can be discovered through one particular form of knowledge - science (Habermas 1975; Carr and Kemmis 1986; Connolly and Keutner 1988). Another major assumption of the dominant Western world view is the assumption that the individual, autonomous self or ego-self is real (Fromm 1988; Jung 1959; Maslow 1971; Fox 1990; Sutich 1976; Thetford and Walsh 1985; Walsh and Vaughan 1980). It is individualistic. Western rationality sustains a notion of property rights made possible by this notion of individualism (Lerner 1986). Property rights are extended to the land which is owned by people as opposed to people belonging to the land (Shields 1992). It also sees Nature as something separate from humanity - an alienated 'other' (Daly 1978; Plant 1989; Merchant 1980; Salleh 1990; King 1989).

Because of this, an environmental programme that sought to bring on ecological sustainability, through even the most egalitarian form of modern development, would carry with it all of the above mentioned cultural baggage. This baggage, I believe, is precisely what stands in the way of ecological sustainability. It is the underlying rationality of modern culture which is ecologically dysfunctional. What is needed for ecological sustainability to become possible is a fundamental metamorphosis of the very basis of this entire cultural system, a cultural system that set up shop in Fiji nearly two centuries ago. This view is shared by many theorists in the environmental debate, particularly those involved at a more philosophical level including, deep ecologists (e.g. Naess 1988; Devall 1990, Fox 1990, Zimmerman 1983), social ecologists (e.g. Bookchin 1986), ecofeminists (e.g. Daly 1978; Merchant 1980; Griffin 1978; Salleh 1993; and King 1981), postmodern environmental theorists (e.g. Cheney 1989a; Hallman 1991; Frodeman 1992; Kenney 1991; Shields 1992; Griffin 1988), spiritual ecologists (e.g. Radford-Reuther 1988, 1989; Birch 1984; Hein 1984; White 1967; and Nollman 1990), and scientists (e.g. Sheldrake 1991; Waddington 1977; Prigogine 1979; Davies 1987; Capra 1982; Lorenz 1987; and Bohm 1980).

Some critiques of modern culture, developed during the last three centuries since the industrial revolution, may not have been recognised as worthy of consideration in terms of social change. This is because their complaint was not with economics but culture in general. Aspects of the Romantic movement, arising in the wake of the Enlightenment is an example, where a rebirth of art and even mysticism in the basis of modern culture

was sought. The poetry, plays, and novels of Goethe are an example of this, as were the post-impressionist paintings of Cezanne (Honour and Flemming 1982), and the symbolism of Runge, Carus, Friedrich, Gauguin, and Baudelaire (Cassou 1979). In addition to this was the poetry of Wordsworth (Blyth 1942), Stefan George, Walt Whitman, the operas of Wagner (Cassou 1979), and the theology of Keirkegaard (Kaufmann 1992). The philosophical works of Schopenhauer, Nietzsche, and Thoreau are another example (see Thoreau 1980; Nietzsche 1969, 1973, 1967; Schopenhauer 1965, 1966; Hallman 1991 for example). These people recognised fundamental flaws in the Western world view in general, on the basis of morality and rationality, on the loss of spirituality and connection with the landscape.

In the twentieth century a number of theoretical schools have emerged that carry a similar message including existentialism, feminism, phenomenology, hermeneutics, critical theory, and postmodernism. This is a continuation of the line of argument initiated by those of previous centuries, particularly in response to specific problems with modernity in its current form. There is the philosophy of Bergson, Whitehead, Heidegger, Lyotard, Foucault, the linguistics of Wittgenstein, Chomsky, and Derrida, the social theory of Gadamer, Habermas, Winch, Rorty, feminist theory in the wake of de Beauvois and ecofeminism, and some forms of the ecology movement, such as social and deep ecology. In the light of these critical movements, the task of the remaining chapters is to a. undertake a critique of the ecology of culture in modern Fiji; b. develop a creative alternative which might be capable of bringing us to an understanding of ecological sustainability; and, c. shed light on a possible prescription for cultural change that may be capable of bringing ecological sustainability into being. It is perhaps useful to view a quote from Nietzsche at this stage to show what form of analysis is to follow in the coming chapters.

If we look about us today, with eyes refreshed and fortified by the spectacle of the [ancient] Greeks, we shall see how the insatiable zest for knowledge, prefigured in Socrates, has been transformed into tragic resignation and the need for art;... At this point we find ourselves, not without trepidation, knocking at the gates of present and future. Will this dialectic inversion lead to ever new configurations of genius, above all to that of Socrates as the practitioner of music? Will the all-encompassing net of art (whether under the name of religion or science) be woven ever more tightly and delicately? Or will it be torn to shreds by the restless and barbaric activities of our present day? Deeply concerned, yet not unhopeful, we stand aside for a little while as spectators privileged to witness these tremendous struggles and transitions. Alas, it is the spell inherent in such battles that he who watches them must also fight them (Nietzsche 1956:95-96).

In chapters 5, 6, 7, and 8 I will attempt to clarify all aspects of this quote that I wish to focus on. The preceding chapters have remained concerned with the first part of the first sentence "*If we look about us today,*". They have made it possible to ask deeper questions which leads to the next part viz. "*...with eyes refreshed and fortified by the spectacle of the [ancient] Greeks...*" What I hope to achieve in chapter 5 is a demonstration of the need to take an historical glance over our shoulder and view *inter alia* our Greek heritage which pervades so much of modern life, a modern life which also exists in Fiji. Chapter 6 will begin to unravel the next part: "*...we shall see how the insatiable zest for knowledge, prefigured in Socrates, has transformed into tragic resignation and the need for art;...*The cultural and ecological implications of the heritage of the Greeks in the rationality of modernity is called into question.

This will be followed in chapter 7 by an inquiry into the ecological dialectics of reason and intuition, of science and art: "*At this point we find ourselves, not without trepidation, knocking at the gates of present and future. Will this dialectic inversion lead to ever new configurations of genius, above all to that of Socrates as the practitioner of music? Will the all-encompassing net of art (whether under the name of religion or science) be woven ever more tightly and delicately? Or will it be torn to shreds by the restless and barbaric activities of our present day?* Chapter 8 looks into the possibilities of, not a "dialectic inversion" as suggested here by Nietzsche but, a renewed dialectical balance between knowledge and intuition. A key aspect of this lies in the next sentence from Nietzsche: "*Deeply concerned, yet not unhopeful, we stand aside for a little while as spectators privileged to witness these tremendous struggles and transitions. Alas, it is the spell inherent in such battles that he [sic] who watches them must also fight them.*" This helps to point to the necessity of personal involvement in the process of achieving ecological sustainability which will be discussed in chapter 8.

Chapter 9 completes the process by moving from culture once more to ecology where the various threads gathered in previous chapters is finally woven into a fabric called 'transcendental cultural ecology'. It is at this point that the question concerning ecological sustainability is finally posed as it is only at this point that I have the sufficient grounds to do so.

CHAPTER 5 - BECOMING CRITICAL

The task of chapter 5 is primarily two-fold:-

1. To lay the foundations for a critical social analysis. This involves a critique of the heritage of empiricist (positivist) science, which is simultaneously a critique of the dominant form of rationality in the West since the 17th century. This critique brings us to the point at which alternative forms of rationality can be introduced;
2. Alternative forms of rationality that have developed in the social science in response to the failings of positivism are introduced, and reviewed. This serves as an introduction to the postmodern approach to be undertaken for the remainder of the thesis.

5.1 THE DIALECTICS OF ALIENATION

The need for an account of the intellectual and cultural heritage of modernity stems from a need to demonstrate the cultural character of what may seem to many as a natural or even universal state of affairs. It allows modern science to be seen as developing in parallel with other intellectual traditions such as political and moral philosophy, economics, and the institutions that support them which, in their aggregate, have helped to shape the meaning of modern life. Modernity plays a substantial role in setting the context for the relationship between society and landscape in Fiji today, and has done over the last 150 years. The social, political and economic events of Europe and their cultural consequences have so greatly influenced events in Fiji that to ignore them in a critical analysis of a society in that landscape would ignore a crucial aspect of the ecology of that society.

Modernity, as influenced by modern science and its political and economic offspring (see appendix 1), must trace a significant part of its heritage to late medieval influences (Doherty et al 1992; Oldroyd 1986; Lyotard 1984). One prominent figure was Francis Bacon. Although Bacon claimed to be starting his scientific project from a clean slate (Wiser 1983), he inherited the cultural milieu of the West which reaches back to the ancient Greeks (see Kenney 1991 for example). These cultural influences shaped by ancestral figures, penetrate the consciousness of practitioners of modern culture - including its scientists, as Heidegger (1977) reminds us. The modern Western world view was not a spontaneous natural event emerging deterministically from natural laws

of human nature as thought by Hobbes³, Locke and later Turgot, and Comte (see Curtis 1981b; Oldroyd 1986; Dunn 1984; Wiser 1983, and appendix 1) but have been historically constructed by people.

The philosophical assumptions made by the ancestors of modernity are critiqued in the following chapters in relation to human ecology. Philosophy and/or science do not necessarily drive a culture but they can and do serve to legitimate certain forms of cultural life which become so common that they are reified as unquestionable norms (Habermas 1975; Kuhn 1970; Feyerabend 1981; Lyotard 1984). It is these 'unquestionable' norms of modern culture that I wish to question in relation to ecological sustainability. I do this because I believe that some of these fundamental truisms are responsible for obstructing human evolution in relation to landscape.

5.1.1 CULTURAL CRITIQUE

This exercise in cultural critique is not merely a critique of modernity or Western culture, but is a means of opening a critical cultural analysis which unravels what any culture may need to do in order to achieve a condition of ecological sustainability in any landscape. Modernity provides a very useful model, because it embodies perhaps the most unsustainable culture the planet has ever seen. Furthermore, I contend that it is not the particular form of modernity that is at fault, but rather modernity itself.

By inspecting the anatomy of this meta-culture, in relation to its ecological character, we might be able to gain a view of what it takes to achieve ecological sustainability. I believe that modernity is able to help uncover just what to avoid if ecological sustainability is sought. What we now witness is merely the inevitable consequences of an unsustainable prescription for cultural life, an unfolding of an ecologically dysfunctional cultural formula which was being defined by the Greeks some 2,500 years ago.

An advanced stage in the evolution of this meta-culture is what we see before us in the rule of modern technology (Heidegger 1977). Furthermore, the way this technology has developed, in parallel with a social system ingrained with structures of political domination, has brought humanity to the point of being capable of annihilating life on

³In the introduction to *Leviathan*, Hobbes begins by telling us that (according to him) the body is merely a machine - "For what is the *heart* but a *spring*; and the *nerves*, but so many *strings*..." (see Cahn 1977).

the planet with nuclear weapons. This is an ecological and evolutionary situation of massive proportions. It is not an accident. It is the reality of modern technology. But as Heidegger (1977) warns, technology itself is not to blame. The problem lies in the culture that enslaves itself and others to the essence of domination where technology and people become resources that serve the interests of an economic system. This domination underlies the human ecology of contemporary life in modern countries, including Fiji. A domination which takes humanity further away from ecological sustainability than it has ever ventured.

What we have is a dialectic⁴. The more unsustainable the cultural system, the easier it is to see what ecological sustainability means. The manifestations of an unsustainable way of life in the global environmental crisis, serve to demonstrate the deep structural flaws in a culture. The flaws dialectically come home to roost, and facilitate the overcoming of the flawed cultural system. This is very similar to the Marxist view of the social character of capitalism (see Bottomore and Rubel 1961; Marx 1967; Giddens 1980; Bilton et al 1986). The oppressive social character of capitalism, if left unchecked, serves to dialectically create the very agents of its own downfall - the proletariat. The same is true for the ecosystems of the earth. An ecologically dysfunctional culture, if left unchecked, will dialectically create the conditions that make its downfall inevitable (see Goldsmith 1988; Bahro 1984⁵). This is precisely what is happening with modernity. The dysfunctional ecological character of this cultural system is furnishing the planet with environmental and social conditions which will serve to bring it to the point of collapse⁶. Such a collapse is predicted by many different brands of environmental

⁴A 'dialectic' is an interplay between two opposites. Dialectical rationality, as a means of understanding holism and non-linear causality will be explained further at the end of this chapter.

⁵Whereas some theorists such as Grundmann (1991) and Levins and Lewontin (1985) support a Marxist approach to environmental problems, Bahro (1984) along with many others, argues that Marxism itself is insufficient as a theoretical basis for understanding the ecological problems of modern life (see Perrings 1987; Waddington 1977; Henderson 1978). But rather than discarding the massive contribution of Marx, Bahro describes Marxism as a valuable quarry from which many useful theories can still be gained. Similarly Waddington (1977) argues for the employment of dialectics but not the materialism of Marxism.

⁶Meadows et al (1992:275) define 'collapse' as "An uncontrolled decline in a population or economy when the population or economy overshoots the sustainable limits to its environment and in the process reduces or erodes those limits. Collapse is especially likely to occur when there are positive loops of erosion, so that a degradation of the environment sets in motion processes that degrade it further".

theorist including Ehrlich (1968), Lovelock (1987), Meadows et al (1992). Such a collapse is already a possibility when we consider the nuclear situation we are in (see Capra 1982). The Hegelean and Marxist dialectic is a valuable tool in coming to understand this, only I do not see it in the same historicist light, and certainly not in the materialism of Marx.

5.1.2 A MODERN CONDITION

What I believe we are witnessing is the product of alienation, an idea which I will spend the next 4 chapters explaining. We are observing the consequences of the alienation of subject from object, subject from subject, humanity from landscape, knowledge from intuition, science from art, man from woman. My task is to explain what I mean by this. But first I must prepare the ground in order to do so. I will do this by first introducing positivism, and then showing why and how different alternatives have been developed. This genealogy of positivism will begin with the rise of modern science from the ruins of the Medieval world. Some critiques of positivism trace their genealogy back to this point and develop a creative alternative which is still modern - simply a different modern possibility. Examples of this can be seen in the hermeneutics of Gadamer (1975), Geertz 1973, and Ricoeur (1973, 1981), the critical theory of Horkheimer (1974), Habermas (1971, 1975), Fay (1987), and Outhwaite (1987). In some cases these radical modern theoretical developments sought to re-address the philosophical and social aspirations which emerged from the Enlightenment (late 18th century) and bring them to a fruition which has yet to be fully realised (e.g. Habermas 1983; Giddens 1990). Some of these theoretical frameworks seek the fulfilment of Enlightenment ideals such as progress, democracy, and liberty thus completing the modern project.

However, some critiques of positivism go far deeper by questioning even the basis of Western rationality, inherited by people like Bacon, Descartes, and Locke, which were revised in the subsequent centuries, particularly during the Enlightenment. Later incarnations of this form of rationality was also inherited by those who critiqued positivism and established radical creative alternatives within the modern framework. These modern alternatives are also critiqued by postmodern theorists who reject the basis of modernity itself, the Enlightenment ideals (or at least their means), and their deeper heritage in that runs back to the ancient Greeks (e.g. Kenney 1991; Foucault 1982; Heidegger 1962, 1959, 1975; Pfeffer 1972). I present an account of this heritage as it developed since the fall of Medieval Europe in relation to the rise of capitalism in appendix 1. The context of my own critique of modern Western culture draws upon the

analysis of the basis of modernity developed by postmodern theorists. The reason for this stems from my interest in the ecology of culture and culturally determined standards of rationality in relation to the human relationship with landscape. I believe that forms of postmodern theory provide (as yet) the most effective forms of cultural critique necessary for an understanding of ecological sustainability and providing a framework for an ethics of ecological responsibility.

My critique of culture at this level enables a focus on 'generic' cultural tendencies with regard to language as opposed to specific manifestations of these general tendencies. By 'generic' I mean a broad cultural lineage (meta-culture) that shares a common basis for rationality but which may have different specific tendencies within that general rational grouping. An example could be given as the specific differences between different forms of modern culture, such as the cultural differences between modern Fijian culture and modern Japanese culture. They share a common rational basis in modernity, although their particular manifestations are quite different (see Gunn 1992 for a similar account of Japanese culture). The culture of modernity lends meaning to cultural life in modern Japan and modern Fiji in terms of their economy, for example. Japan is a capitalist nation (a modern phenomenon based on modern ways of thinking about land and resources), and so too is Fiji. The Fiji economy, however, is quite different in the particular form which capitalism has taken in that country as a product of its position in the global economy and effects from local influences (see Fairbairn 1985, 1987; Neemia 1986; Howard and Durutalo 1987; MacNaught 1982; Knapman 1987). Another example of a generic cultural grouping may be cited in the meta-cultural group of pre-modern Polynesian cultures which, although specifically (i.e. locally) distinct, they share a common rationality and language structure (Grace 1959; Geraghty 1983). These generic groupings have a generic ecological character as the standards of rationality which underlies meaning in language will be recreated in cultural life and have material influences on their surroundings. A modern industrial culture will have a generically different relationship with its ecological surroundings than a pre-modern Polynesian culture. The rate and type of resource use and its impact on the landscape is one example (Weaver 1992b). This is due to the cultural context of social life.

As mentioned in chapter 2, some theorists have suggested that the differences between pre-modern Pacific Island cultures and modern industrial cultures are not different in type from each other (differing only in degree), and do not differ in type in relation to their environmental impacts (e.g. Blaikie and Brookfield 1987; Brookfield and Overton

1988; Clarke 1988⁷). This implies that they are of the same generic grouping and have a similar ecological character. I tend to disagree with this conclusion as indicated earlier. I do not suggest that all pre-modern Pacific cultures were all ecologically sustainable, but instead seek to show how some pre-modern cultures may have been capable of ecological sustainability, whilst others were positively unsustainable.

I will endeavour to explain this theory of ecological sustainability in the following chapters, and eventually arrive at a conclusion in relation to language groups depicted in a politico-linguistic taxonomy. This taxonomy will serve to organise a cultural theory of ecological sustainability in relation to linguistic systems. Before launching into an analysis of culture it will be useful to briefly explore the forms of modern science that have greatly influenced modern ways of coming to have knowledge (i.e. epistemologies) about social reality. This will serve to introduce the dominant form of modern scientific rationality, a rationality which has crept into the common sense world view of many modern cultures. This will be followed by a brief review of alternative epistemologies based on alternative conceptions of social reality (ontology).

The overview of alternative forms of social science will focus primarily on those which have emerged as a reaction to positivism, but which tend to remain loyal to the modern project⁸ in general. They embody dramatic advances in social thinking since the late 19th century and have introduced social science to a valuable set of epistemological frameworks enabling social understanding to move beyond the tunnel-vision of positivism. Such frameworks include the recognition of the need to adequately account for subjectivity in the social reality being studied and the necessary subjectivity in the methods of study. This opens social epistemologies to notions of intersubjectivity.

⁷These authors are not necessarily defending the existing industrial status quo. Instead, I merely seek to point out that there are major differences in the overall ecological character of the rational context of cultural life of tribal societies in the Pacific, compared with that of modernity. Here the capacity for environmental damage is far higher in an industrial society compared with a tribal society, and it is not merely a function of the scale of these societies. I also acknowledge that Clarke in particular, is well aware of the substantial ecological differences between the pre-modern tribal cultures and the modern West (e.g. Clarke 1994). However, a reading of his earlier work did not make this point as explicit as it is in his more recent works. The same is true for John Overton (e.g. Overton 1993).

⁸By 'modern project' I refer to the ideals of modernity as generally defined during the Enlightenment. These ideals include a commitment to a rational basis for legitimate knowledge, individualistic liberty, the achievement of universal human progress, and a scientifically (as opposed to a mythically) defined culture.

Understanding intersubjectivity extends to the need to take account of the subjective perceptive experience of scientist and the social group studied.

This introduces the notion of hermeneutics, phenomenology and self reflection as part of a social methodology. Such self reflection may include reflection on the contingent cultural inheritance of the scientist, in terms of their own rationality as a viewfinder, and the way that the structure of the viewfinder might influence their findings. The world the social scientist sees is a product of their cultural and social inheritance, a product of language. This is also true for the people of the societies under investigation. This leads to the need to furnish social understanding with open discourse and conversation as a means of interpreting the intersubjectivity of scientist and community. It also removes the social scientist from an elite position (where the scientist assumes that they have a privileged access to truth), to one of group learning where understanding comes about through discourse, and is determined socially. This leads to the notion of social praxis and action research where theory and practice interact in a dialectical fashion, as opposed to theory dominating practice.

The perspective developed in this thesis does not discard the advances made in these radical modernist social theories and must not be regarded as a thoroughly polemical position in relation to modernist social science. It simply takes the critique further than they are generally prepared to go in the direction of relativism in relation to truth, the limitations of language and the positive role of non-rational 'knowledge', such as intuition and instinct. I will present my own theoretical critique in chapters 6, 7, 8, and 9 which may be regarded as reconstructive⁹ postmodernism.

The dominant Western 'world view' has become so thoroughly institutionalised in the late 20th century, that a review of contemporary modern life in Fiji would be impoverished if an overview of such thinking was overlooked. Because a central theme

⁹There are two major forms of postmodernism. One is deconstructive and the other reconstructive. The former argues against any form of general theory about anything, even against the possibility of mythologies. Deconstructive postmodernism (which I reject) takes us as far as nihilism but no further. Reconstructive postmodernism employs deconstruction as a tool to clear away the foundations of modernity and its influence in the West, followed by a reconstruction of both theories (some general), and a way of life that does have meaning (i.e. is not nihilist). A number of reconstructive postmodern theorists are developing a new basis for reawakening mythical culture, and some can be characterised by the call for a reenchantment of life in general - hence the title of this thesis. See Gablik (1991), and Griffin et al (1989) for examples of reconstructive postmodernism and the way it differs from deconstructive varieties.

in this thesis is the social component of environmental concerns, a view of the roots of the dominant institutionalised social structure is imperative. Such conceptions of society are carried into the environmental arena through both economic and environmental policy and planning.

The backdrop to this entire debate lies in the structure and functioning of capitalism as a political economy. The philosophies and theories that explicitly legitimate this form of political economy are inspected in appendix 1. In this chapter I will overview broader developments in social thinking, some of which are philosophically conservative, others thoroughly radical and revolutionary. One philosophically conservative approach, which underlies the practice of much of modern science (including the 'science' of economics), is positivism.

5.2 POSITIVISM

Positivism is a term first used by Auguste Comte (1788-1857) and refers to a particular movement within the empiricist scientific tradition (Carr and Kemmis 1986; Bilton et al 1986). This school of thought recognises two basic models for legitimate knowledge - (a) the empirical sciences, and (b) logic and mathematics (Bernstein 1976). It fits squarely into the tradition of modern epistemology which seeks to insulate fact from value, a desire that reaches at least as far back as Francis Bacon (see Wiser 1983; Curtis 1981; Oldroyd 1986).

In more general terms, Outhwaite (1987) has identified at least three variants of the positivist view existing in modern scientific thought. The first comes from Comte's work of the early 19th century, the second from the Vienna Circle (1920s), and the third from what has been regarded as the 'standard view' in the philosophy of empiricist science from the middle of the 20th century encompassing the empiricism of Carnap and Popper.

Auguste Comte developed an epistemology for the social sciences stressing the use of methodologies borrowed from the natural and physical sciences. He espoused a faith in the power of positivist science as a way of understanding, predicting and controlling society in order to improve it (Bilton et al 1986). For Comte positive knowledge (as opposed to metaphysics and theology) embraces a methodologically unified and hierarchical conception of science which derives causal laws from empirical data. Comte treated the various sciences as existing in a natural hierarchy moving from mathematics

(the foundation), moving upward through astronomy, physics, chemistry, physiology, and finally sociology (Oldroyd 1986). In his first major work 'Course In Positive Philosophy' he laid out a methodology for a positive approach where:-

- knowledge must be founded on experimentation;
- knowledge must be constructed from evidence available to the human senses and gathered empirically;
- truth cannot be revealed through abstract speculation;
- the laws which govern all events are available to observation;
- laws can be formulated and tested for validity;
- such a method is universally applicable to the natural and social sciences
(Bilton et al 1986).

Those scientists sustaining the positivist line of thought, along with economists such as Malthus, and Spencer (Galbraith 1987), also contributed to what was to become social Darwinism in the late 19th and early 20th centuries (Worsley 1992). As a predecessor of such views, Comte saw humans as progressing along an evolutionary trajectory similar to that described by Voltaire, Turgot, and the French physiocrats of the late 18th century (see appendix 1). In relation to this trajectory, Comte described three stages of human intellectual evolution which are strikingly similar to that of the French Enlightenment thinkers such as Turgot (see Wiser 1983).

1. The theological phase dominated by mythology;
2. The Metaphysical phase leading towards a scientific view. Here truth through reason is revealed and leads to a stage where the intellectual elite are able to rule and dominate social life. Such a view was reinforced by Comte's notion of a hierarchy of the sciences leading from physics through chemistry to biology and sociology. The latter sciences are built upon the laws of the former ones.
3. The positivist scientific phase

Although Marx and Engels held a degree of contempt for Comte's social doctrine (Bottomore and Rubel 1961) they did share his desire for a discovery of 'natural laws' of human social development (Outhwaite 1987). Durkheim also pursued the positivist view in his attempt to establish sociology as a respected academic discipline where functionalism was popularised.

According to Bilton et al (1986) Comte's work was inspirational at a time in which two schools of sociological thought were in vogue. One is the classical conservatist tradition of the likes of Edmund Burke (1729-1797), the other the classical liberalists such as John Stuart Mill (1806-1873) and Herbert Spencer (1820-1903). The conservatist view holds that the key to human happiness lies in a hierarchy of social control mediated by

a strong government. The liberalist view advocates unrestrained competition between individuals in the tradition of *laissez faire* from the likes of Turgot and Adam Smith. The latter see too much government as harmful to society. It is interesting to note that Spencer, who coined the term 'survival of the fittest' was an influential figure in the work of Charles Darwin (see Darwin 1958: 125, 275).

The Vienna Circle of the 1920s was a philosophical movement initiated by Moritz Schlick (1882-1936) who saw Comte's work as metaphysical and therefore in need of modification. Prominent members of this intellectual movement include mathematician Kurt Godel, sociologist Otto Neurath, and logician Rudolf Carnap. It was from this Circle that the term 'logical positivism' was coined. The group claimed to have developed a unified science based on the union of logic and the epistemology of empiricism which served to eliminate all forms of metaphysics (Oldroyd 1986). This group promoted the view that propositions that could not be tested were literally meaningless according to their 'principle of verifiability'. Here the meaning of a proposition is equivalent to the method of verification. They also developed Comte's hierarchy of the sciences into a form in which even the social sciences could be analyzed in terms of physics. They saw the hermeneutic notion of 'meaning underlying social action' as a legacy of metaphysics and therefore invalid in science (Outhwaite 1987). The principle of verification also rules out all forms of ethical propositions regarding them as meaningless.

Although the Vienna Circle venerate empiricism as hallowed in positivist science they were, according to Bhaskar (1975), unable to circumvent the 'problem of induction'. In the tradition of Hume and the law-explanation orthodoxy all we can observe is the constant conjunction of events, which is all we need to know for science to be possible (Bhaskar 1986). The problem of induction has been used by realists such as Bhaskar (1975) and Outhwaite (1987) to refute the epistemology of positivism whilst maintaining a scientific discourse.

The third of Outhwaite's variants of positivism - the 'standard view' is that held by Popper, Hempel, Carnap, and Nagel¹⁰. Here the social sciences were seen to be deficient in terms of laws and explanation. Those supporting the standard view sought to remedy this by providing such laws, so that explanations could be deduced. This may have arisen from a desire to shed an inferiority complex suffered by the social sciences in

¹⁰Popper and Carnap may themselves disagree that their respective forms of empiricism are the same (see Hooker 1987 for example).

relation to their cousins in the natural sciences, which functionalism sought to achieve. Developments in the social sciences that moved along these lines include neo-classical economics and psychology, where methods used gained scientific virtue by being quantitative (supposedly value neutral) rather than qualitative (Outhwaite 1987).

5.2.1 FUNCTIONALISM

A prominent positivist in the social sciences was Durkheim (1858-1917), whose work set the context for much of modern sociological thinking since the late 19th century. A more recent legacy of Durkheim is functionalism (Bilton et al 1986). Functionalism as initiated by Durkheim embodied a reaction to the conflict orientated social theories of Marx and Weber, and the atomistic market model of Spencer (Worsley 1992). Spencer, who developed a conception of sociology based on the psychology of the autonomous individual (like Hobbes, Locke, Bentham, and Mill), saw society as merely the sum of the actions and relations of individuals in an atomist social outlook. Durkheim argued strongly that it was not that simple, and set out to develop a distinct science of sociology that took account of emergent features¹¹ of social reality (Worsley 1992). Whereas the social atomists argued that the individual was 'prior' to society (preceding society), Durkheim argued the reverse - that the individual is a social product (Cuff et al 1990).

Although Durkheim's social ontology was a significant improvement on the individualistic ideas of the Enlightenment, it remains loyal to the Newtonian conception of science modified for application to the social domain. In focusing on interconnectedness and emergent features in the functioning social domain it becomes a form of social ecology - hence functionalism. The positivism in Durkheim's work lies in his conception of sociology as a science of objective social facts, corresponding to a complex social reality that functions according to causal laws, where such 'facts' have a solidity beyond the individual will, similar to the objects of the natural [Newtonian] world (Giddens 1992). Here we get a departure from atomism and notions of 'enlightened self interest' that sustains *laissez faire*, but reductionism, and empiricism remains, which provides an insufficient theoretical viewfinder for understanding the intersubjectivity of social life in the landscape.

¹¹Emergent features are those features of a system that are manifest only by means of the completeness of the whole. The parts cannot independently produce such features. Recognition of emergent features is common in systems ecology.

5.3 OBJECTIONS TO POSITIVISM

Positivism and Cartesian reductionism have come under increasing criticism in recent decades, particularly from the social sciences (see Adorno et al 1976 for a good example of this debate). In Germany during the 1950s the hermeneutic critique (interpretive social analysis) began to have an impact on the methodological debate in the social sciences (Bernstein 1976). According to Bleicher (1980) hermeneutics developed into a method which set a foundation for repelling the intrusion of positivist thinking into the social domain. The German interpretive school was influenced by the work of Weber, Dilthey, Heidegger, and Wittgenstein. Another intellectual movement that emerged as a critic of the positivist approach was the Frankfurt School of critical theory (The Frankfurt Institute for Social Research 1973; Bleicher 1980; Carr and Kemis 1986; Fay 1987). Some objections to positivism focus on perceived flaws in the way it is used in practice, such as its application to the social sciences (e.g. hermeneutics and critical theory). Other objections, however, highlight flaws in the epistemology of positivism, arguing that it is inadequate even in relation to the natural sciences. The realist critique of positivism is an example (see Bhaskar 1975; Churchland 1979; Leplin 1984; McMullin 1984; Outhwaite 1987; Hooker 1987; Aronson 1984 for example). An account of transcendental realism (which I subscribe to) as developed by Bhaskar is presented in appendix 2.

5.3.1 THE SOCIAL SIDE OF KNOWLEDGE

The positivist line of thinking ignores the contention of many social theorists that subjective social and historical factors have played a central role in the history of philosophy and the production of knowledge (Kuhn 1970; Habermas 1968; 1975; Wright 1992; Carr and Kemmis 1986). A notable critic of the epistemology of the positivist approach was Kuhn (1970). He has since been joined by many others including Feyerabend, Bhaskar, McLoughlin, Outhwaite in the philosophy of science, Prigogine, Griffin, Keller, Sheldrake, Bohm, Davies, and Lorenz in the 'natural' sciences, Lyotard, Woodiwiss, Deleuze in postmodern theory, to name a few. Kuhn (1970) suggested that knowledge can be more accurately understood in psychological and sociological terms. He argues that the positivist tradition assumes that scientific knowledge continually grows and accumulates, rather than proceeding in a series of steps involving paradigm shifts. Kuhn (1970) identifies three principle stages in the development of scientific

knowledge¹²:

1. Pre-scientific stage where ideas and methods are disorganised. Following this people involved in inquiry become socialised into a community and adhere to an agreed common paradigm.
2. A scientific phase follows with the production of organised theories within a paradigm. This becomes seen as 'normal science' or puzzle solving. Problems are defined in terms of the accepted paradigm. Anomalies arise which lead towards a paradigm shift. Debates over fundamental issues eventually lead to the adoption of a new paradigm.
3. The stage of the new paradigm. This is supported by an initial minority but gradually develops through conversions into a 'normal' situation. Here reality is interpreted in a new way and problem solving becomes defined by the new scientific world view.

A political issue arises here as a new paradigm must be expedient to the existing norms of society in some way. If new views are not sufficiently expedient they may fail (at least initially) to contribute to a change in the 'normal' situation regardless of their validity (see Mulkay 1991; Aronowitz 1988). Unacceptable paradigms can easily become pushed to the periphery of the scientific community if they challenge any of the privileges of the scientific elite. The validity of the new paradigm is socially denied thus reinforcing the conservatism of socially determined truth. Science in practice can become ideological, in the sense that it involves the protection of theories that serve the privileges of that community and the privileges accruing to those benefiting from such forms of science (see Habermas 1968; Mulkay 1979, 1991; Knorr-Cetina and Mulkay 1983; Lyotard 1984; Cozzens and Gieryn 1990; Wright 1992, for example).

Observations tend to be dependant on accepted theories and interpreted according to such theories (Carr and Kemmis 1986). Radical theories which allow radical interpretations to be made from the same observations may not be allowed to enter into the mainstream of accepted science. This is because radical interpretations of the same observations challenge the adequacy of the theoretical foundations of the status quo (see Rouse 1987; Cozzens and Gieryn 1990; Mulkay 1979; Nandy 1988; Wynne and Mayer 1993 for example). Mulkay (1991) has shown the difficulty with publishing alternative views in mainstream scientific journals. When 'leaders' in the field are invited to referee

¹²It should be noted that Kuhn (1977) modified some of the details of his theories concerning the dynamics of paradigms in response to a variety of criticisms following the publication of *The Structure of Scientific Revolutions*, although these changes do not affect the issues raised in this thesis.

such papers they can easily be rejected, or accepted if challenging views are sufficiently 'watered down'. This indirectly serves to protect the dominant paradigm from outside challenges, which frequently must produce 'alternative' journals to reach the public eye. This essentially amounts to a form of scientific censorship. The controversial and revolutionary work of Rupert Sheldrake (1981) is a good example of this. The editorial of the journal 'Nature' ran a brief critique of Sheldrake's work entitled 'A book for burning?', saying that after reading 'A New Science of Life' "many readers will be left with the impression that Sheldrake has succeeded in finding a place for magic within scientific discussion" (see Sheldrake 1981:11). Obviously Sheldrake's book did challenge the existing status quo so expertly that it roused the old guard into launching an attack on his work. This is very common in contemporary science, where character assassinations are 'run of the mill' in the scientific literature.

Kuhn's view, which has since inspired many in the field of sociology of science, is that all knowledge is an expression of a commitment to a particular paradigm. Because there are no *neutral* criteria for measuring the correctness of any particular paradigm against another (as Wittgenstein showed in relation to language games in general), knowledge cannot be objective, universal or value neutral. Instead it is inherently subjective, context dependant, normative and political (Kuhn 1970). Such a view is reminiscent of Nietzsche in the 19th century. Kuhn, like Habermas (1968), asserts that different vocabularies serve different purposes in different ways. He argues strongly for a revision of the "epistemological viewpoint that has most often guided Western philosophy for three centuries" referring to positivist rationality that claims value neutrality (Kuhn 1970:120).

5.3.2 SELF REFLECTION IN SCIENCE

O'Hear (1989:210) appeals to our common sense by reminding us that "science, being part of the culture produced by human beings, cannot remain immune from other cultural and ideological influences". All research is undertaken from within the subjective context of social communities, which is something we must take account of when conducting research, as our social and cultural assumptions are likely to influence the context of the problems we set ourselves and the way we interpret our results (see Levins and Lewontin 1985; Mulkay 1979; Bhaskar 1978; and Lyotard 1984). Contrary to the views of positivists, scientific knowledge must be recognised as socially determined (Gaston 1978; Pickering 1992).

O'Hear (1989) throws a conservative towel into the sociology of science debate by arguing that the various critical commentators on scientific rationality (such as Kuhn, Feyerabend, and Habermas) "rarely turn their analytical weapons upon themselves". But this acknowledgement of the inherent social and subjective character of science is one outcome of the kind of critical self reflection so necessary in all forms of science. The turning of analytical weapons upon one's own work is precisely what it means to be critical. This kind of self reflection is what made Kuhn's discoveries possible.

A scientific paradigm is often unquestionably inherited by researchers via their education system. These theoretical frameworks are informed by an array of belief systems and values. These values are not always explicit in the theories but they shape the context of theorising. The research paradigm informs researchers to make decisions about (a) what constitutes a valid research problem, (b) what kind of knowledge is appropriate and relevant for use in the research, and (c) the method used in research to obtain such knowledge (Carr and Kemmis 1986). But the subjective character of the paradigm itself can be apprehended by any scientist, once they begin to realise that their work and their education takes place within a culture and a social structure that is not universal.

This is one of the principle reasons for the inappropriateness of many forms environmental research which ignore the social character of *environmental science itself*. Those forms of environmental science that assume value neutrality, and are conducted in a positivist fashion are in danger of providing a source of legitimation for manipulative and coercive forms of social control under the guise of 'management'. It also tends to lead to politically conservative research that reinforces the socio-political status quo. This can happen, for example, when an environmental problem is scientifically reviewed from a technical (supposedly value neutral) perspective, when in fact the problem is explicitly social and political (and value laden).

Such politically expedient forms of research frequently avoid undertaking an adequate critical inspection of the political or cultural system itself, which may comprise the principle source of the problem (as is the case with unsustainability in Fiji). In the process, this form of research serves to divert the attention of environmental agencies into the implementation of 'red herring' management goals, instead of addressing the real problems at the source. Environmental agencies frequently refer to 'ecological sustainability' whilst devising research programmes that look closely at irrelevant aspects of cultural life, irrelevant in relation to the question of ecological sustainability. These 'irrelevant' issues may be very relevant for environmental management, but

environmental management and ecological sustainability are not the same thing.

Environmental management problems of this form (which are not addressing ecological sustainability) might include water pollution in an urban setting, soil erosion in relation to agricultural practices, or indigenous forest loss in relation to the activities of the logging industry. These issues are not irrelevant as environmental concerns, but they are irrelevant to the question of ecological sustainability. This is because they are merely symptoms of unsustainability, the source of which lies far deeper in the foundations of the cultural system itself.

To be capable of addressing the issue of ecological sustainability a research programme must be capable of critically reviewing the context of a social setting, because it is possible that the context of social life is at odds with the ecological character of a landscape. Aspects of the context of social life that need to be critically reviewed include the basis of value, the means and structure of economic production, the distribution of benefits of production, the political framework for social interaction, the basis for the legitimation of knowledge, and the linguistic framework for communication. All of these things contribute to the way a society interacts with their ecological surroundings.

In order to conduct such forms of critical social analysis the research must be able to venture into areas that are politically delicate. If political and social diplomacy dictates a research agenda then little in the way of critical analysis is possible. Furthermore, such research cannot hope to be 'objective' as it is not dealing with an objective reality, but a subjective social world, underpinned by subjective cultural norms. For this reason, positivist science is out of the question if we are attempting to address the issue of ecological sustainability without reducing it to a false question. Instead, a form of interpretation that is capable of dealing with intersubjectivity in the social domain is needed.

Hermeneutic social theory has made valuable steps in this direction. For hermeneutics, social reality does not exist independently of the observer. It is a subjective reality constructed and sustained through the meanings and actions of individuals (both observer and observed) shaped by social norms. The appropriateness of positivist methods in social research is strongly rejected by many in the hermeneutic and critical theory traditions:-

Positivist theories, by failing to recognise the importance of the interpretations and meanings that individuals employ to make their reality intelligible, fail to identify the phenomena to be explained. In consequence, the kinds of theories that are produced are often trivial and useless, even through they may appear to be sophisticated and elaborate (Carr and Kemis 1986: 103).

We have arrived at a point at which a review of social science is possible as we have begun to isolate what is needed in a social theory in relation to ecological sustainability. Also, with the help of appendix 1, we have traced a genealogy of the dominant Western world view which provides the underlying context for social life in the modern world. This is not to say that all social actions in modern life follow the dominant model, although social actions which do follow this model are common and deemed legitimate by the dominant paradigm that supports the existing social and political situation. Such actions include the motivations of local people in modern societies for capitalist forms of economic development, as with the landowners in Vunivia. Other such actions include the modern economic development process, and many forms of science, including environmental science, and management.

5.4 UNDERSTANDING SUBJECTIVITY

Our world is a social world and our world view, and thus our relationship with our surroundings, is a reflection of this social world. Levins and Lewontin (1985) for example, suggest that aspects of ecological and evolutionary theory comprise an expression of social conditions and social philosophy¹³. Some of the social sciences have focused on intersubjectivity as the normal condition in social life and social science. The idea of the objects of study being only objects (as opposed to subjects) is to be called into question in this thesis in relation to the practice of ecology in general and cultural ecology in particular. Objects are acted upon by subjects, have no free will or creativity, and are determined by external conditions imposed upon them by subjects (see Birch and Cobb 1981). The separation (alienation) of subject and object was a major

¹³Notable in this regard are Darwin's ideas of competition, histiography, and survival of the fittest (the latter of which is consistent with liberalist social theory popular at the time of writing the *Origin of Species*). Thomas Malthus and Herbert Spencer were primarily interested in human social conditions, but it was Darwin that applied these ideas to the rest of Nature (Weber 1990). Malthus was preoccupied with the incongruous relationship between population growth and the ability of production to sustain it. Spencer concluded that the stronger pass the test of survival which leads to social and cultural progress. Darwin modified these ideas through the employment of competitive selection in nature and as such these 'laws' were applied with vigour in the social Darwinism of Tille, Ploetz, Gumpowicz, and Schallmayer for example (Weber 1990).

undercurrent in the philosophy of Hegel (see Wiser 1983).

Subjects are indeterminate, and have free will and creativity (Kenney 1991, and Fromm 1991 give good examples of the problem of determinism). Subjects have intrinsic value as subjective beings where the source of their creativity does not lie solely outside their being. Objects are devoid of intrinsic value and creative will. The assumption that something or someone is an object implies that they have no intrinsic value, or creative free will. It implies that they are determined by external forces over which they have no creative influence (see Fromm 1991). However, as Hegel has pointed out, we must learn to "dissolve the opposition of a frozen subjectivity and objectivity and comprehend the origin of the intellectual and real world as a becoming, we must understand their being as a product, as a form of producing" (cited in Feyerabend 1981:74).

The notion of intersubjectivity has been well developed in the some of the social sciences including phenomenology, hermeneutics, ethnomethodology, critical theory, critical social science, and postmodernism. Because of this heritage the possibility of employing notions of intersubjectivity, instead of objectivity, in cultural ecology is explored. However, in order to do this it is appropriate to first consider the way these social sciences have theoretically and philosophically dealt with intersubjectivity in social life.

The remainder of this chapter will focus primarily on reviewing different traditions in the social sciences that will help to form the basis for the type of analysis to be developed in subsequent chapters.

5.5 NEW MOVEMENTS IN SOCIAL THEORY

Challenges to the dominance of positivist approaches to science in general and social science in particular have become prominent since the 1960s. Germany has provided a strong focus point for a revival of classical social theory and philosophy with the schools of hermeneutics and critical theory. In France following the student uprising of 1968, poststructuralist theory has emerged as a significant intellectual force (Best and Kellner 1991). Poststructuralism provides a framework for postmodern theory and postmodern philosophy which focuses *inter alia* on the political structures that underlie linguistic systems of knowledge, ethics, and power (Sarup 1989).

Hermeneutics, and critical theory each differ in their critique of the positivist view and

subsequently develop different creative alternatives. Hermeneutics and critical theory both saw the social sciences as separate from the natural sciences, where the techniques of the latter were regarded as inappropriate for the former. Some forms of realism, however, challenge the epistemology of positivism in general, even as a means of understanding natural and physical reality. The following sections will explore the arguments of each of these different intellectual traditions.

The challenge put up by postmodernism runs far deeper into the fabric of Western culture, where some of the deepest assumptions and prejudices of modernity are rejected. Rather than merely refute the epistemological claims of positivism, postmodernism launches into a direct critical examination of the entire modern cultural framework. As such, postmodernism tends to explore far more than the foundations of positivism and empiricism, but seeks out the very foundations of modern culture in general. This critique commonly extends back to the Greeks and the beginnings of the rationality which underlies Western civilisation.

Postmodern linguistic theory and textual analysis frame all forms of knowledge (including scientific and philosophical knowledge) as 'narratives' which may seek legitimation in a variety of ways. Such narratives or discourses sometimes appeal to deep rooted assumptions of Western rationality, such as the possibility of universal theories, and universal truth. The credibility of such universals (called meta-narratives by postmodernists) are called into question in the postmodern critique. One example is the postmodern rejection of the notion of truth as framed in the modernist setting where all forms of knowledge are context dependant. As such, no epistemology is free to exercise an independent (totally detached or objective) critique of any phenomenon (see Seidman and Wagner 1992).

As laid out in chapter 2, my task is to develop a form of understanding which is able to shed light on the simultaneity of social and ecological reality. What is required is a form of naturalism. 'Naturalism' here refers to a theoretical methodology which studies both social and non-social reality under the same epistemological banner. This is precisely what positivism claimed to have achieved through the employment of objective, quantitative techniques in both the physical and the social sciences (Outhwaite 1987). I seek to develop a methodology capable of uncovering meaning in social and ecological reality by focusing on intersubjectivity as a form of non-positivist naturalism

similar to that developed by Bhaskar (1979)¹⁴. Such a possibility has been considered by Roy Bhaskar who has developed a theory of science called 'transcendental realism' (see Bhaskar 1975, 1979, 1981, 1986). Here the criticisms of positivism put forward by critical theory and hermeneutics are shared by a transcendental realist framework (Outhwaite 1987). Furthermore, Woodiwis (1990) has shown that transcendental realism is compatible with forms of postmodern theory.

In this thesis I adopt the broad framework of transcendental realism but differ in some ways from the approach of Bhaskar, particularly in relation to the question of truth and its definition. As part of the approach to the theoretical developments of subsequent chapters I will present a summary of different theoretical schools (some already mentioned) which provide valuable material. I also present them in order to show why my theoretical perspective might differ. One of the reasons for this difference is that my perspective is postmodern. However, to demonstrate why it differs from a radical modern framework, I must first show what constitutes a modern view. By introducing the arguments of hermeneutics, critical theory, dialectical materialism we can move well beyond the constraints of positivism, to a point at which a postmodern perspective can be framed. Of central concern is the need to develop a theory and practice capable of apprehending the simultaneity of social and ecological aspects of landscape, whilst acknowledging the limitations of knowledge and language, but also accepting the value of intuition, instinct, and creativity.

5.5.1 HERMENEUTICS

As mentioned in chapter 2 the term 'hermeneutics' comes from the Greek god Hermes, a messenger from the gods to mortals. Underlying the meaning of this term is 'understanding' through 'interpretation'. For this reason hermeneutics as used in the social sciences is often called 'interpretive social science' (see Gibbons 1987). This tradition seeks to replace positivist notions of explanation, prediction and control with interpretive notions of understanding, meaning and action (Carr and Kemmis 1986). Those that have contributed to the interpretive school include the late 19th and early 20th century works of Droysen, Dilthey, Windelband, Rickert, and Max Weber, with more recent contributions from Wittgenstein, Heidegger, Gadamer, Apel, Schultz, Berger and Luckman, Taylor, Lukes, Winch, Fay, Geertz, and Connolly. Arising primarily from

¹⁴See appendix 2 for an account of naturalism developed under the framework of transcendental realism.

European philosophy (mainly Germany), hermeneutics is often regarded as part of the tradition of 'continental philosophy'.

This new form of sociology moved away from the positivist functionalism of Durkheim towards the idea of a social reality that possesses an intrinsic structure that is constituted and sustained through the interpretive actions of individual social actors (Ricoeur 1981). Weber (1990) suggests that all social inquiry is concerned with the interpretation of subjective social actions.

Hermeneutics makes a distinction between social action and mere behaviour. The latter is a physical phenomenon while the former is the result of social subjective motives. Social actions are unintelligible unless the meaning behind such actions is understood by both the actors and interpreters. Observing behaviour without investigating the meaning behind actions cannot provide an accurate interpretation of the significance of the actions. The same action may be the result of a number of different motivations by the actor. For example, Fijian villagers migrate from an isolated village to roadside settlements. This is observable social behaviour but cannot be adequately interpreted and understood until the motives behind the migration has been revealed. Their migration could be interpreted as the realisation of a socio-cultural transformation, or the people may have lived at a roadside location prior to the study in another part of Fiji. The two situations have very different implications for understanding the social character of rural Fijian life. Thus the understanding of subjective meaning is a central part of any social research.

In spite of the subjective meanings, the social actions also have material preconditions and material consequences. Understanding the material dimensions of social life is an important part of an environmental research programme concerned with the relationship between a social group and their physical environment. The subjective meaning behind actions are embedded in cultural conditions. Different cultures will have different actions for similar purposes, and will have different meanings for similar actions. The social character of actions implies that actions arise from the network of meanings that are inherited by the actors from their history and the existing social/ cultural context of life. Meaning therefore can be socially predetermined. Thus, another task for interpretive social science is to understand the social and cultural context of life for the actors through their social rules. This is what I was trying to do in Vunivia, although I did not have a sufficient theoretical basis for doing so at the time of the field research itself.

If social actions are interpreted in the positivist fashion, actions are reduced to physical behaviour which is studied empirically and interpreted statistically. In these circumstances physical behaviour is deprived of its intended meaning and substituted for causal explanations derived from a positivist conception of causal law. For example, poor rural farmers are said to cause deforestation in Fiji. This explanation becomes accepted as a truism in management circles¹⁵ in spite of the fact that it takes no account of the subjective meaning that underlies the social and economic actions of the rural farmers. A common causal explanation given is the selfish and ignorant motives of the rural poor (e.g. see Tavaiqia 1988). Such an explanation eclipses issues such as the social, economic and political conditions that place rural farmers into a situation where they have little choice but to clear forest to make a living.

At least two branches have been identified in the hermeneutic approach to social science. One is the hermeneutics of recovery (Caputo 1986) the other is called a hermeneutic of suspicion by Ricoeur (Dreyfus 1987). The former is concerned with the recovery of the original meanings of local social actions as interpreted by the social actors themselves and not merely that of the scientist. These meanings underlie the social actions, and serve furnish an inquiry with a locally specific context, rather than merely assuming that all social actions are attributable to hypothetical causal laws. Uncovering these meanings can come about through exercising a hermeneutic of respect for the localised interpretation of local reality. This is what was happening in the informal aspects of my interviews in Vunivia, although at the time I was unable to substantiate the value of such information, as I had not had sufficient exposure to social theories such as hermeneutics. A standard practice in exercising a hermeneutic of respect might involve the engagement of unstructured discourse with a local community in a local language, without the observer assuming that the meaning of social life being studied is self evident.

The hermeneutic of suspicion, which could be regarded as a neo-Marxist approach, insists that the self understanding of social actors is often clouded by a false consciousness (see Westphal 1986; Hekman 1986; Ricoeur 1981). In chapter 4 I did have quite a suspicion that a false consciousness was a possibility in terms of the local

¹⁵For example the Tropical Forestry Action Plan (Food and Agriculture Organisation 1985) attributes deforestation to the poverty of the rural poor. The key note address to the 2nd (Fiji) National Conservation Congress (1988) by the Fiji Minister for Forests, and the paper given by the Conservator of Forests both held the same view (see Yabaki 1988; and Tavaiqia 1988).

interpretation of local reality. It became clear to me that understanding the motives behind actions may only uncover part of the interpretive picture, as the very motivations of local people may indeed be shaped by historical, economic, cultural and psychological factors. This situation is expected and accounted for in a hermeneutics of suspicion. Chapter 4 begins to look like it is no longer a practice in search of a theory.

In the Vunivia situation, for example, the local people aspired to a certain social and economic condition which, they believe, will be delivered through *veivakatoroicakitaki* (development). This underlying motivation is itself a social product of the very economic system that enslaves their labour and their resources. Their quality of life is supposed to be enhanced through an increase in their material wealth, mediated by their monetary income, and furnished through savings. This assumption is held by most people of modern capitalist nations and serves to ensure that all people (rich or poor) remain subservient to the economic system in general (see Fromm 1991 for example).

As shown in the Marxist critique of capitalism, many of the motivations of workers in a capitalist economy are shaped by a false consciousness driven by the pedagogical (educational) processes that serve the economic system itself (see Freire 1972; Freire and Faunders 1989; and Gibbons 1987 for example). Here the assumption is that a higher quality of life will come about the more closely one is tied to the capitalist system. For Marxism, one of the crucial tasks in the process of transforming society from capitalist to socialist is the awakening of workers to this false consciousness. Once this is achieved, an informed labour force will participate in a political process which is designed to emancipate them from social subordination. Similarly, the notion of false consciousness underlies the project of psycho-analysis where, for Freud, the patient is only able to overcome their condition of neurosis if they become aware that their psychological condition is influenced by their libido (see Dreyfus 1987; and Kaufmann 1980b).

Another notion in hermeneutics is that of the hermeneutic circle. As alluded to in chapter 2, the hermeneutic circle involves the repeated revisiting of a text or social situation where the parts (i.e. details) are reconceptualised in terms of an understanding gained of the whole (i.e. the overall situation) (Wachterhauser 1986). In turn the whole is better understood in the light of understanding gained from a more informed view of the parts. For example, as you watch a movie for the first time, the individual scenes will have a degree of meaning on the first viewing, but once the entire movie has been watched the individual scenes gain more clarity (in retrospect) as their place in the

overall storyline becomes apparent. Watching the same movie a second and third time gives the observer more and more understanding of both the parts and the whole.

5.5.1.1 HERMENEUTICS AND SYSTEMS THEORY

Hermeneutics and the intersubjective social epistemologies developed in the social sciences have also found their way into systems theory. Systems theory is a fairly recent tradition within the framework of Western science having emerged primarily during the 20th century following the efforts of Ludwig von Bertalanffy in the 1940s on biological systems (Koestler and Smythies 1969). According to Weiss (1969) it was developed as a means of "stepping back from the canvas" of scientific analysis of complex reality. The systems view has emerged as a central conceptual figure in the biological sciences in general and ecology in particular. Systems thinking has now pervaded many disciplines including engineering, sociology, physics, chemistry, geography, management science, political science, and economics for example (Checkland 1981).

The criticism of positivism by hermeneutic theorists is shared by Checkland (1981, 1982), who demonstrated how general systems theory had evolved into a positivist (hard systems) framework that did not take adequate account of the subjective character of social reality. The traditional use of systems theory in the physical and management sciences has generally focused on defining a problem in terms of making a choice between alternative means for a given known end. They have since been termed 'hard systems'. Engineers, for example, frequently use the hard systems framework. Hard systems thinking is dependant on defining the system in question and its objectives. This framework has been applied in social fields including public policy and planning but tends to rely on a functionalist (positivist) social epistemology. However, it soon became evident among some systems practitioners that the context of hard systems methodology was inappropriate for solving social problems.

A radical departure from the hard systems approach in the social sciences is seen in the work of Checkland who developed the concept of Soft Systems Methodology (SSM) in the 1970s and 1980s. This conceptual framework for social systems methodology focuses on the notion of human activity systems (as opposed to natural or designed systems) as the basis for dealing with social problems. The perceived problem is defined in terms of structure and process and their interrelation as opposed to hard systems

terms. According to Checkland this helps to avoid the standardising of social problems common in the hard systems approach. As a result of debate and discourse the social actors can agree to some changes in their social condition. Such changes then serve as the new definition of the problem in an on-going learning process.

For Checkland, the hard systems idea that there is a *problem* to be *solved* needs to be replaced by a *dialectical debate* - the notion of problem solving as an on-going process of action and reflection (praxis). For example, the establishment of a development programme in rural Fiji (such as community based agro-forestry) is a 'problem' that does not have a well defined beginning or end. The programme cannot simply be implemented on day 1 and forgotten about. There will be on-going problems that need to be solved by the social actors in the community (villagers) and the outsiders (government extension officers) that are there to assist them. A model for solving these problems is that of on-going critical action and reflection through open discourse. For Checkland, learning from the methodology creates the methodology. It is an on-going learning process where the people of the community in question, and the outsiders there to assist them, must *participate* in the process defined by the methodology.

5.5.1.2 THE UNIVERSALITY OF HERMENEUTICS

A long standing debate in hermeneutic theory revolves around the universality of the hermeneutic method (see Hekman 1986:129-138). Whereas Gadamer argued for the universality of the hermeneutic method, Habermas (1987) claimed that a coherent rational critique is possible and necessary. Gadamer contended that rational explanations must always be grounded in a constant dialogue with past tradition (Norris 1985). In other words hermeneutic understanding claims to have a naturally derived privileged position in relation with rational critique. This is because (according to Gadamer) there can be no breaking out of the hermeneutic circle as rational critiques are themselves interpretations grounded in subjective meanings that the theorist devises as to what constitutes valid interpretation. Habermas (a critical theorist), however, defends his position in criticising the hermeneutic claim to universality by asserting that hermeneutics without rational critique cannot adequately account for ideological manipulation and false consciousness of the interpreter (Habermas 1987). Here the values of interpreters are always open to rational critique.

Some of the critics of the hermeneutic approach claim that it over-emphasizes the way people think rather than the way they act. In situations of conflict the hermeneutic

approach tends to focus on the need for changes in the way people think about their reality and less on changing the actions (Carr and Kemmis 1986; Habermas 1987; Outhwaite 1987; Fay 1987).

The shortcomings of the hermeneutics of recovery, in the absence of a critique of false consciousness, are highlighted with the concerns of the hermeneutics of suspicion as developed by Ricoeur (1973). Here the actual functioning of social life does not correspond with participant's understanding of it, and therefore, recovering the intentions of the participants alone will not reveal the social realities that are hidden from them. The hermeneutics of suspicion goes some way to remedy this by revealing that the context of social life is shaped by ideology or religion, for example. The claim of the hermeneutics of suspicion is that the social actors can be liberated from oppressive situations by becoming conscious of the hidden constraints to their emancipation. However, although these techniques do provide valuable contributions to critique, there are shortcomings (according to critical theorists) concerning the process of social transformation itself. Concern for a theory of social transformation and liberation can be seen in the work of Habermas and Frier, who both emphasise the importance of interpersonal relations and social and political discourse (see McCarthy 1978; Freire 1972).

5.5.2 CRITICAL THEORY

Critical theory has emerged as an alternative to the positivist approach that expands on the hermeneutic tradition and has been called critical hermeneutics by some (e.g. Outhwaite 1987). It rejects the empiricist/positivist notions of objectivity, truth, and rationality and in particular the domination of instrumental reason¹⁶ (Held 1980). Accordingly, it accepts the need for an interpretive approach which encompasses ways of distinguishing ideologically distorted interpretations from those that are not. It claims to provide a means of overcoming the problems associated with distorted self understanding and false consciousness by exposing the social order of both the actors and the interpreters (Fay 1987). Critical theory can be divided into two main branches. One revolves around the Frankfurt Institute of Social Research (Horkheimer, Adorno,

¹⁶Instrumental reason denotes a form of rationality that serves the instrumental goals of the dominant political economic order of capitalism. Science becomes a servant to an economic and political system (see appendix 1 for an account of the parallel development of modern instrumental scientific reasoning and the rise of capitalism).

Marcuse, Fromm) sometimes referred to as 'the Frankfurt School'. The second branch comes with the work of Jurgen Habermas who moved the critical theory framework into critical social science (Held 1980). I will refer to both branches as 'critical theorists'.

The critical theorists tend to agree that all knowledge is historically conditioned and that truth claims can be rationally judged independently of immediate social interests. The latter assumption allows for a notion of false consciousness to be employed, as the source of truth may lie outside the understanding of the social actors (i.e the people under study) themselves. The identification of this 'truth' however, remains an issue of some debate, particularly for postmodern theorists who argue that no rational framework can claim to have access to universal truths of any form (see Graham et al 1992).

The early German critical theorists (e.g. Adorno, Horkheimer) believed that positivist science had become an ideology (as later shown by Kuhn 1970) - a culturally constructed and socially supported dogma, unquestioned by its practitioners and used universally to explain all of reality (Carr and Kemmis 1986; Gebhardt 1978). Rationality had been transformed into conforming with instrumental thinking (Horkheimer 1974), ethics had been removed from scientific practice, and thus science had lost its creative and evaluative scope (Bernstein 1976). Critical theorists wished to retain the rigour of modern science in its application to social reality, but use it within a context recovered from classical philosophy where qualities and values inherent in human life are central (Held 1980). This amounted to an appeal to reawaken some of the Enlightenment ideals and the philosophy that supported it (e.g the influence of Kant). The notion of critique, for example, draws on the work of Kant concerning the limitations of knowledge, Hegel in relation to the spirit, Marx in relation to class and history, Freud in terms of psychology, and Weber in relation to understanding (Held 1980). In the process, social science (transformed into a framework underwritten by critical theory) maintains a privileged position in society as a means of gaining legitimate knowledge about social life grounded in rational critique. Postmodern theorists ask that all forms of 'science' (including critical theory) step down from their privileged positions as a means of gaining legitimate knowledge (see Lyotard 1984).

5.5.2.1 HABERMAS AND CRITICAL SOCIAL SCIENCE

Habermas developed a theory of knowledge that was critical of modern scientific epistemology in two ways. According to Habermas (1968) modern science offered only

one kind of knowledge among many. For this reason, science could not legitimately be used to define the standards with which to measure knowledge. Also, different kinds of knowledge are shaped by the particular human interests they serve. For Habermas, knowledge cannot be produced objectively from neutral observation as was the hope in positivism. Instead knowledge is the product of human activity motivated by particular needs and interests. In this view Habermas does not deny that science is useful for doing things like building bridges but does reject any claims to the universality of scientific knowledge. This embodies a movement in the direction of accepting the innate context-dependency and relative nature of knowledge which was taken much further by postmodern theorists (see Brown 1992).

In relation to hermeneutics, Habermas suggested that the interpretive approach was incomplete. In particular he insists that context of social life must be critically questioned and re-questioned. Here he brings in an emancipatory dimension where practical communication can only be realised once alienating conditions have been removed - only then will the meaning of dialogue not be clouded by false consciousness and oppression (Habermas 1987). Critical social science as developed by Habermas, is essentially concerned with developing ways to create these emancipatory conditions (Carr and Kemmis 1986).

Along similar lines to Marx, Habermas argues for critique as a prerequisite condition in social praxis. According to Marx we must carry out "*relentless criticism of all existing conditions*, relentless in the sense that the criticism is not afraid of its findings and just as little afraid of conflict with the powers that be" Marx (1967). To the Marxian call for critique of ideology Habermas (and some other critical theorists such as Adorno) adds the methodology of (Freudian) psychoanalysis - self reflection. In this way the social actors, through critical self reflection, are able to perceive the distorted nature of their consciousness as manipulated by ideology.

5.5.2.2 THE POLITICS OF DISCOURSE

The aspect of critical theory that I wish to focus on is that of interpersonal and inter-group communication as a political phenomenon. Freire (1972) has shown that interpersonal communication is both political and educational. Where a political structure fosters a coercive communicative (educational) process (through the employment of a political style that excludes some of the participants - women for example) the pedagogy is alienating and innately oppressive. People cannot be emancipated by proxy. They can

only become free if they are also emancipated from those who claim to represent them. Only then can a true democracy come about. And only then can the all members of a society get a hearing, including minorities. The minorities must get a hearing if social change in the direction of ecological sustainability is to be socially just. For any environmental protection effort to be socially sustainable, it must be socially just. There is no such thing as a benevolent dictatorship when ecological sustainability is at stake.

According to Habermas, speech is simply communication which implies the following of norms. 'Discourse', as used by Habermas, allows the norms implicit in speech to be questioned. Both Habermas and Freire hold the view that the conditions of ideal communication represent the pre-requisite conditions for the ideal life, as decisions made in a socially just fashion become the basis for socially just actions. This does not necessarily guarantee that oppressive and alienating decisions will not be made by a social group, but it will guarantee that the decisions made within such a group will not obstruct the possibility of true participatory democracy. The emphasis has shifted from the end to the means and in this regard, Western social theory begins to move into a framework that is similar to the pre-modern Fijian styles of political discourse¹⁷.

This form of socio-political discourse also lends itself to the formation of political structures capable of freeing environmental protection agencies from their socially and culturally naive standpoint. One of the principle criticisms of the environmental movement from parts of the social justice movement is its dominating (often inherently patriarchal) political structure (see Daly 1978; Plant 1989; Birkeland 1992 for example). Extra-parliamentary political struggles are a common feature of modern cultures (Peters 1991) including Fiji, and the environmental movement is a pre-eminent figure. Furthermore, the diversity of different interests does not lend itself to a single form of representation such as a class struggle which tended to dominate extra-parliamentary protest prior to the 1950s (see Peters 1991; Steel 1990; Graham et al 1992). Instead of a unified majority there is a diverse array of minorities including those standing for indigenous rights, environmental protection, feminism, labour relations, development equity, and health for example. These apparently different interests tend to overlap in

¹⁷There are many different forms of political discourse in pre-modern Fijian society depending on the context. Some were despotic, others egalitarian. Within a kinship group open political discourse was commonly conducted with strict protocols of chiefly conduct. Emphasis was, and still is, placed on oratory presentations that enabled speakers uninterrupted access to speech acts with discussions held over lengthy periods. Many hours and sometimes days were taken over political decisions. See Ravuvu (1987b, 1991) and Nayacakalou (1975, 1978) for examples of pre-modern Fijian politics.

many cases. This juxtaposition is sometimes mutually reinforcing, but often contradictory.

For effective representation of these diverse interests there must be an adequate political style capable of giving each group a hearing, and capable of fostering the understanding between different interests. Styles of communication between different interest groups will often affect the way they interact politically. A good example of differences in political style can be seen in Fijian *bose* (village council) on one hand, and the European structure of rules of order on the other. The former political style tends to (but not always) place emphasis on the means of open discussion as a process of building consensus in a local community. Rules of order, however, places emphasis on representation of certain constituencies (which act as a power base); 'efficiency' in the speed of decision making; and the goals of particular interests. Such predetermined goals are pushed through the political process by means of lobbying, in order to gain a majority when a motion is put to a vote (see Estes 1989).

The internal political structures of an interest group (e.g. a village council) will tend to affect the style of their political interaction with other outside groups (e.g. an environmental protection agency such as the Fiji Environment Unit, or a non-government group). Should the internal political style be open to coercion by a dominant group, as is the case with rules of order (Estes 1989) and liberalist democracy generally, then inter-group communication will also tend to follow coercive lines (see Habermas 1985; Mouffe 1988 for critiques of the modern democratic process). This is because inter-group communication will often be modeled on internal political structures as a political culture. In modern group situations, rules of order is a very common political structure, which is used for organising communication within groups and between groups in the process of negotiation. The use rules of order is becoming more and more common in Fiji even in village situations. In Vunivia, for example, rules of order are being employed in mataqali meetings where a particular unified majority is capable of dominating the political process.

The tokatoka Bulu people numerically dominate the Vunivia population, and have tended to push for a majority voting system (similar to rules of order) in local political organisation in Vunivia. This serves to perpetuate the dominance of the Bulu people in that landscape. This form of political structure, including liberalist democracy, has been criticised by Ravuvu (1991) for its coercive character and its ability to serve the interests of the majority (although Ravuvu fails to differentiate between liberalism and consensus

forms of democracy).

Decisions concerning the health and future of the landscape are far from trivial and should never be rushed through any political agenda. Furthermore, social issues (which are also non-trivial) must get a hearing in any environmental decision making process. People and the social communities they participate in are part of the landscape. Furthermore, conservation efforts must be socially sustainable (i.e. socially just) if they are to be part of the equation of ecological sustainability. In a participatory democracy the focus is on a just process irrespective of the goals of any particular interest. The political style of critical social science (to be elaborated on in pages to follow) moves to a participatory democracy by means of open, uncoerced discourse as a pre-requisite to communicative action, which takes into account language styles that obstruct such discourse.

Oppressive forms of communication, in terms of style and content, within any social movement contain the seeds for further oppression even if they achieve their short term political goals. For example, an environmental protection programme that oppresses a social group as a by-product of its management success is an alienating form of environmental management (e.g. Weaver 1993). The social injustices contained within such a programme will work against the on-going success and sustainability of the programme, as it becomes politically and socially unstable and socially unsustainable (see chapter 4). The kind of analysis offered by Habermas and the Frankfurt school allows the focus of social change to shift from the end to the means. This does not discard the end, but forces people to realise that the end and the means are inextricably linked.

Free and open discourse is sought as a first step in critical social science. This is an important aspect of the process of consensus building for social questions such as the causes and possible solutions of indigenous forest loss in Fiji. Part of the process of reaching true consensus requires critical discourse and open communication so that the situation can be critically assessed in spite of ideological views. Consensus is important as it demands that the concerns of all parties are heard and incorporated into action. This is the kind of radical democracy offered by Giddens (1990) under a radical modern framework. This is similar to what Habermas (1983) claims is possible if the modern project is able to be completed. Without this form of communication in, the search for answers to social questions, effective solutions cannot be found. For this reason the method or means is just as important as the content of any study as the method will

determine what is and what is not revealed.

To highlight this view it is worth quoting McCarthy (1975) in full:-

The very act of participating in the discourse, of attempting discursively to come to an agreement about the truth of a problematic statement or the correctness of a problematic norm, carries with it the supposition that a genuine agreement is possible. If we do not suppose that a justified consensus were possible and could in some way be distinguished from a false consciousness, then the very meaning of discourse, indeed of speech, would be called into question. In attempting to come to a 'rational' decision about such matters, we must suppose that the outcome of our discussion will be the result simply of the force of the better argument and not of accidental or systematic constraints on discussion. Habermas' thesis is that the structure (of communication) is free from constraint only when for all participants there is a symmetrical distribution of chances to select and employ speech acts, when there is an effective equality of chances to assume dialogue roles...The conditions of the ideal speech situation must ensure discussion which is free from all constraints of domination.... (McCarthy 1975: xvii).

Critical social science, as developed by Habermas, seeks to move beyond the critique and transformation of consciousness as developed in critical theory. It uses critique to inform the social actors which is used to transform their consciousness, followed by a transformation in social actions. Such a transformation will be necessary if a society is to be capable of transforming from an unsustainable to a sustainable form. Critical social science moves beyond critique to critical praxis. It requires the integration of theory and practice in the dialectical process of reflective enlightenment and political struggle carried out by groups for the purposes of their own emancipation. In a Marxist revolution people are informed and led by the use of slogans on their behalf by revolutionary leaders. In Habermas' view, as with Frier, people must also be liberated from those who claim to represent them. This does not mean social chaos, it is participatory democracy. The liberation theology movement in Latin America also uses this approach (Radford-Reuther 1988).

The relationship between theory and practice becomes central to this form of social science. Theory must not dominate practice but both theory and practice must be able to inform each other. One does not precede the other. In the mediation of theory and practice Habermas identifies three principle functions in which each step leads to the next:-

1. The formation of critical theories which stand up to open discourse - statements arising from open discourse and consensus;

2. The organisation of enlightenment which transforms the consciousness of social actors - authentic insights. This is the learning process of a group and is thus a social and political activity. Participants must aim at understanding rather than have ideas forced upon them. Each person should have an equal opportunity to question or affirm the validity of what is discussed.
3. The selection of appropriate strategies for social change - prudent decisions. The solutions to tactical questions are developed. (Carr and Kemmis 1986).

5.5.2.3 CRITICAL SYSTEMS THEORY

The break from hard systems by Checkland was a significant step in the building of a steadfast systems epistemology for social reality. However, subsequent movements in systems thinking seek to build on the soft systems idea by building on aspects of social theory left out in Checkland's work. Flood and Ulrich (1990) call for a shift from systems science to systems rationality. The latter term refers to a critical (Kantian) rationality. In this sense they move from a hermeneutic perspective to one that aligns itself to critical theory. The departure of Checkland from the hard systems (positivist) framework is regarded by Flood and Ulrich as the first 'epistemological break' in systems theory. They call for a 'second epistemological break' that accommodates the advances on hermeneutics made by the critical theorists.

Their ideal is a merging of sociological and systems epistemologies where issues such as the emancipation of people from domination by people or machines, false consciousness or structural material, historical or cultural constraints to understanding are built into the systems framework. Both Flood and Ulrich (1990) and Checkland (1981) acknowledge that one of the major problems for systems theory and systems practice is that there is often a conflict between the rationality of systems design and the *irrationality* of social reality. It is for this reason that they see the positivist instrumental control methods arising from hard systems theory as inappropriate for use in the social realm. The principle of being critical (as seen also in critical social science, hermeneutics, and postmodernism) is the quality of remaining self reflective with regard to the general methodologies and their particular applications.

5.5.2.4 CRITICISM OF CRITICAL THEORY

Some of the criticisms to the work of Habermas may arise from those in the hermeneutic tradition who reject some of Habermas' criticisms of the interpretive

method. Indeed, Habermas' work could be defined as a development within the rubric of the hermeneutics of suspicion as it tends to build upon existing techniques used in that field (Gibbons 1987). Criticism of a more fundamental nature come from postmodern social theorists that reject that standards of rationality of modernity itself, of which critical social science is merely one breed of modernist thought. In this regard, the style and content of discourse itself may not need to be rational if it is to be truly egalitarian.

If legitimate discourse must be rational, then communication must be mediated by a form of linguistic coherence that is grounded in the rules of the language game itself - reason. However, an important aspect of ethical instruction that should be taken account of, is intuition, and instinct. This is particularly true considering the way in which people come to understand a landscape through intangible forms of 'knowledge' which amounts to a spiritual connection with place. The source of coherence of these forms of communication, or 'knowing' will not lie in the rules of spoken language and, therefore, are unlikely to be rational. But they are important and they are coherent and should not be shut out from the process of discourse simply because they are not rational. I will develop these ideas to some considerable length in chapters to follow, but it is here that my perspective takes leave of even radical modernism and becomes postmodern.

Some of the most fundamental criticisms of critical theory and critical social science come from poststructuralism and postmodernism. Here the debate does not concern particular issues within critical social science but revolves around the rationality that forms that very basis of modern social science itself. There are many differing positions held in what might be labelled 'postmodern theory'. Included in this diverse tradition are postmodern tendencies in feminist theory (e.g. Fraser and Nicholson 1988; Flax 1990), linguistics and literary criticism (Wittgenstein, Derrida), philosophy (Nietzsche, Heidegger), social theory (Foucault, Vattimo, Baudrillard, Deleuze, Guattari). This thesis falls into the broad framework of postmodern, but as mentioned earlier, is by no means in agreement with all forms of postmodern theory.

The postmodern school of thought is a diverse array of social theorists, literary critics, linguists and philosophers (see Tarnas 1991). What tends to distinguish the postmodern tradition from that of the radical modern perspectives is *inter alia* a rejection of the primacy of binary logic, a perspectivistic (i.e. relativist) theory of truth, the rejection of universal theories, the rejection of reason as the basis for truth, a rejection of

historicism, a rejection of the individual social actor as the locus of meaning and understanding (this also applies to authors), and a rejection of knowledge as the sole basis for social organisation and ethics (see Lyotard 1984; Doherty et al 1992; Peters 1991; Best and Kellner 1991). If the postmodern condition rejects so much, what might it accept? It accepts localised identity, an acceptance of difference in terms of social and political perspectives which cannot be reduced to a single issue such as a class struggle. Some forms of postmodern theory accept intuition as a legitimate form of understanding, and as part of this accepts the limitations of language in disclosing the source of meaning in social life¹⁸.

I will not go into any detail concerning a review of the postmodern and post-metaphysical theoretical and philosophical perspectives, as this will come about through the course of the following chapters. What will follow is a brief overview of dialectical reasoning which is included here because it forms a pivotal conceptual tool for the remaining chapters of the thesis.

5.5.3 DIALECTICAL REASONING

Dialectics is a way of thinking holistically. It is an epistemological tool - a way of coming to have knowledge about an interconnected reality. If I were to suggest that an apple was not a single thing¹⁹, but an accumulation of little things, and if this were true, we could explain²⁰ the reality of the apple in terms of the bits. We have two possibilities concerning reality (i.e. ontological possibilities) - 1. the apple is made up of bits, where the bits exist prior to the whole and come together to form the whole; and 2. the apple is not reducible to its bits, because it has characteristics that exist only by virtue of it being a whole (emergent properties), and to conceptually dismantle the apple into bits would paint a false picture of the reality.

The way reality is like determines whether our statements are correct or not, irrespective

¹⁸As mentioned earlier, postmodern theory is not a single group, and remain divided on many issues. The differences between deconstructive and reconstructive postmodern theorists will become important when debating what constitutes a legitimate form of political discourse. If deconstructive postmodernists reject all mythologies, then they are unlikely to agree with the prescription I develop in this thesis.

¹⁹This is a statement about what reality is really like - it is an ontological statement.

²⁰This notion of 'explanation' is a statement concerning a means of coming to have knowledge about reality - an epistemological statement.

of whether our statements are logical. As such, our knowledge must be based on an understanding of the reality - at least a basic understanding. For example, if a certain type of reality were simply not possible then a form of knowledge that assumed such a type would be a delusion - even if the theory was supremely logical. In the above example we have at least two possibilities in terms of reality - the apple is made of bits (and can be understood as such); and the apple is a whole entity (and cannot be understood in terms of a 'bit theory').

If the apple were a whole (which I believe it is) then the 'bit theory' (reductionism) would be sensible but not correct. Instead I need to employ a way of thinking (other than reductionism) that is capable of letting my mind hold onto the general structure of the reality and hence be correct. One such way is dialectics. Dialectical reasoning is a means of knowing about holistic reality. It is an epistemology - a way of thinking. It is a way of thinking that can make sense out of apparent paradox. This is because a paradox may only be a contradiction if we are using an inappropriate form of thinking. Reductionism, which uses a theory of linear causation, cannot make sense out of the question - "which comes first, the chicken or the egg?" But dialectics can. Indeed it is not a paradox if dialectics is used.

Dialectics has been a feature of rationality in Western civilisation since the pre-Socratic Greeks, but has never featured prominently due to the dominance of linear thinking and reductionism. Dialectics has featured in the West in theology (e.g. Thomas Aquinas, Meister Eckhart, St John), philosophy (e.g. Heraclitus, Hegel, Nietzsche, Heidegger, Sartre), and social theory (e.g. Marx, Weber, Gadamer, Habermas). It is also being used more prominently in contemporary modern and postmodern social theory, and more recently with the dialectical biology of Levins and Lewontin (1985) and Sheldrake (1981). It has also been a common feature in quantum physics since Niels Bohr used it to deal with the contradictions thrown up by relativity, and quantum theory of Einstein, although Einstein himself rejected Bohr's dialectical turn.

Asia metaphysics and mysticism is riddled with dialectical thinking (e.g. Buddhism, Hinduism, Taoism). It is also evident in pre-modern tribal rationality such as Fijian²¹, and native American cultures (see Campbell 1986, 1988). I will introduce dialectics by

²¹The notion of the *Vanua* can best be understood dialectally. The ontology of the *Vanua* is holistic where parts and the whole thoroughly interpenetrate each other. Attempts to understand the *Vanua* (i.e. epistemologically) in a non-dialectical fashion will lead to misconceptions.

tracing a brief overview of its use in the modern West beginning in earnest with Hegel.

Georg Hegel (1770-1831) was a German idealist and a contemporary of Kant (also a German idealist). Prominent amongst his works include his *Phenomenology of Mind* (1807) *Science of Logic* (1816), *Philosophy of Right* (1821), and *Philosophy of History* (1837) (see Wiser 1983; Tarnas 1991). The idealism of the time focused on the distinction between reality as it appeared to the human mind and how it really was. For Hegel tensions and contradictions appear to humans from a human perspective. But when this perspective is expanded to include a comprehensive whole the meaning of reality is able to be understood. Hegel suggested that this can be achieved through a condition of absolute consciousness. This achievement of comprehension is seen by Hegel as an historical condition which evolves through time. History is portrayed by Hegel as the march of human consciousness towards an end of history in absolute consciousness (enlightenment). The material world is explained as a manifestation of a transcendent spiritual realm.

At the heart of the spiritual realm is God who, being comprised of pure consciousness (pure subject) is unable to know itself. Thus God created the world through an act of self-externalisation and in this way is able to know itself as an object. This created the separation of object and subject where the object is alienated from the subject. Thus the material world is alienated as the 'other'. This established the dialectical relationship between object and subject, between the material and spiritual world. In order to understand this dialectical relationship one must employ dialectical rationality where two opposites (subject/object, material/spiritual) are one and the same.

With Hegel, as it was with Meister Eckhart in the 13th century, the achievement of spiritual unity with the divine come about through a process of negation (Eckhart called it 'detachment'). For Hegel spiritual self discovery begins with the negation of the ego-self through a process of contemplation. Once this is achieved it is followed by the further negation of this negation of the self. This negation of negation leads to absolute affirmation in the absolute spirit. This spirit is detached from the ego-self but sustains identity as a unique being that is not alienated from the absolute Spirit or God. This is very similar to the negative way of Zen Buddhism which also employs a double negation. The main difference (apart from differences in practice) is that for Zen the result of a negation of a negation in relation to the self is an affirmation of absolute nothingness (as opposed to the affirmation of absolute spirit) (see Abe 1985 for example).

The young Karl Marx (1818-1883) was greatly inspired by Hegelian philosophy particularly concerning dialectics. However, influenced by Feuerbach he rejected the idealism of Hegel and went on to develop dialectical materialism as opposed to dialectical idealism (Schacht 1971). In the early writings of Marx the notion of wholeness survives, as does the concept of alienation. But Marx shifts the emphasis of alienation from a spiritual condition to a material one where people are alienated from their humanness within the material world. For Marx the notion of God is taken from Feuerbach where God is nothing more than "the divinised essence of man" and man created God in his own image (Schacht 1971:68). Marx thus reduces all of reality to the material world and offers no possibility of a reality that exists beyond the human ability to perceive it.

Whereas Hegel saw history as the evolution of the consciousness of God, Marx saw history as an alienated material human struggle which he calls the "real history of man" (see Bottomore and Rubel 1961). For Marx, humanity has never realised its human condition and lives as an alienated animal (Wiser 1983). Alienation is therefore, examined by Marx as a social and not a spiritual phenomenon. The realisation of a truly human condition for Marx is an existence in a non-alienated social world - communism. Here the contradictions of alienated social life are resolved through the endurance of social conditions that embraced the interconnectedness of social reality by means of establishing a collective ownership of the means of production (Mandel 1983).

Capitalism, which supports the ownership of the means of production by an elite group, is, in Marx's view, incapable of bringing about a truly human condition. What will result from the continuation of capitalist production, where value is determined by the market (as opposed to socially determined), and the means of production remains in private ownership, is the inevitable dialectical product of an alienating social system. This dialectical²² product of an alienating economic system is the proletariat (the working class) which will grow to the point of being capable of bringing about its own emancipation by means of a social and political revolution.

²²The proletariat is a dialectical product of capitalism because it is inherent in the character of capitalism to produce such a class. They are one and the same thing - which came first, capitalism or the proletariat? It is a silly question, like the chicken and the egg, because they are merely two sides of the same coin.

5.5.3.1 DIALECTICS IN BIOLOGY

The idea of an interconnected reality understood through dialectics, although expressed in Marx's writings was extended to biology by Engels who wrote the *Dialectics of Nature* in 1880²³. Here dialectical reasoning is employed as a meta-theory in biology thus contributing to the debate on biological and evolutionary theory. More recently the dialectical approach to the biological sciences has arisen in response to calls for an alternative epistemological framework for the practice of ecology than that offered by the Cartesian paradigm as with the work of Levins and Lewontin (1985).

In terms of ecology, dialectics can be seen in the conception of a plant or animal in relation to its environment. Under such a view (which I support) a tree and its environment are aspects of the same whole. They interpenetrate each other in such a way that they do not exist in a linear causal relationship but instead in a dialectical relationship. The tree is a unique being but only as part of the ecosystem which it lives in. Changes in the tree are also changes in the ecosystem.

Levins and Lewontin (1985) are strong supporters of the dialectical approach to biology and have developed a dialectical materialist viewpoint as a reaction against reductionism. The ontological commitments of the Cartesian reductionist paradigm is described as 'alienating'. This is because parts are conceptually separated from wholes and reified as things in isolation. This establishes an epistemological system that rides on the assumption that parts are prior to the whole, and come together to make up the whole. Levins and Lewontin argue that such a view of biological science is a vestige of the socially constructed paradigm of Cartesian and Newtonian science, which they reject. The Cartesian and Newtonian paradigm is also being refuted in quantum physics (see Bohm 1980; Davies and Gribbin 1991; Capra 1975, 1982; Zohar 1989; Zukav 1979, for example), and in other forms of biology (Bergson 1911; Sheldrake 1981, 1991; Waddington 1977 for example). Principles of the dialectical view as Levins and Lewontin use it in biology can be summarised:-

²³Dialectical reasoning in relation to biology and the concept of Nature was used prior to this time in the West by Spinoza (see Delahunty 1985), and later Goethe (see Reed 1984). The difference with Engels was his employment of materialism (whereas Spinoza and Goethe were transcendentalists), and in this way the work of Engels aligns itself more closely to formal modern scientific thinking. Spinoza and Goethe developed more complete theories and my work is closer to theirs than to the materialist dialectics of Engels, but their work (and indeed mine too) may be regarded as less 'scientific' from the perspective of empiricism.

- A whole is a relation of heterogenous parts that have no prior independent existence;
- The properties of parts have no prior alienated existence but are acquired by being parts of a particular whole;
- The interpenetration of parts and wholes is a consequence of the interchangeability of subject and object, of cause and effect;
- Change is a characteristic of all systems and all aspects of systems.

The Darwinian approach to ecology and evolution is called into question in the work of Levins and Lewontin. Under a dialectical materialist view Darwin's theory of evolution by natural selection is valid up to a point, as it uses real material forces among real existing objects, mixed with a theory of change as opposed to stasis. But Levins and Lewontin (1985) disagree with Darwin's notion of adaptation which they assert is purely Cartesian. There have been other challenges to the Darwinian view of adaptation from biologists who disagree with the mechanistic process that underlies the Darwinian and neo-Darwinian model. Examples include the theoretical works of Bergson, Waddington, Sheldrake and Lorenz. These criticisms must not be seen as a total rejection of the Darwinian framework but merely a reorientation of some aspects of the evolutionary story. For example, the non-materialist theories of Sheldrake do not deny that some (even many) forms of evolutionary change are purely mechanistic. He only asserts that evolution is not only of this form and that other possibilities are credible and evidence does exist for such alternatives²⁴.

Adaptation becomes a central theme in later chapters of this thesis and it is worth focusing on it briefly here. I assert that ecological sustainability concerns an adaptive relationship between culture and landscape. As such, the type of adaptive process I refer to needs clarification. I use a dialectical epistemology (theory of knowledge) because I support an holistic ontology (theory of reality). This dialectical and holistic view spills over into the realm of causation, and because of this, any theory of causal relationships (such as adaptation) must not contradict my ontology. If it did my theory of ecological sustainability would be inconsistent. For Darwin organisms adapt to a changing environment which poses problems that they solve through evolution. However, Levins and Lewontin (1985) claim that Darwin separates the organism from the environment

²⁴For example, experiments with fruit flies have demonstrated the possibility of the inheritance of acquired characteristics (i.e. in line with the general contention of Lamarck although different in particular details) which cannot possibly be accounted for in a purely mechanistic genetic model (see Sheldrake 1981). This does not serve as evidence that rejects the mechanistic model, it only shows that more than one process in the adaptive process possible.

thus alienating the organism. "It is the organism as the alienated *object* of external forces that marks off the Cartesianism of Darwin from the dialectical view of organism and environment..." (Levins and Lewontin 1985:5). Darwin's mechanism of evolution can be conceptualised into three parts:-

1. Individuals within a species vary in physiology, morphology, and behaviour - the principle of variation;
2. Offspring resemble their parents on the average more than they resemble unrelated individuals - the principle of heredity;
3. Different variants leave different numbers of offspring - the principle of natural selection.

The problem the Levins and Lewontin have with Darwin's theory is how selection takes place and enables adaptation to occur. In a dialectical view the individual and the ecosystem of which it is a part both co-evolve simultaneously. This is because the part (organism) and whole (ecosystem) are not existentially independent but instead are interconnected. Any changes in the individual and the ecosystem are co-dependant and simultaneous. This view of causation is a major theme in Buddhism where the co-dependence of causality in an holistic (as opposed to atomistic) reality is called *pratitya samutpada* (see Macy 1989; Abe 1985; and Ross 1993 for example).

Under a dialectical framework the organism is not regarded as being inserted into a given passive environment as implied in the Darwinian view. Organisms modify their environment depleting resources, excreting wastes, attracting predators/parasites/companions, and create micro and macro-environments. Organisms respond to their environment where changes in their environment cause changes in the functional life of the organism. If organisms respond to their environment, then the environment may be read through the organism, and units of environment can be measured in units of phenotype. The opposite is also true as the character of the environment responds to the character of the organism. The way in which an organism modifies its environment depends partly on its genotype. Some environmental responses enhance the survival of some genotypes more than others, and therefore, the environment selects the patterns of its own modification (Levins and Lewontin 1985).

The theoretical developments of later chapters, in relation to human ecology and adaptation, will draw on this dialectical view of biology and ecology. Where my dialectics differs from Levins and Lewontin is that my ontology is not materialist but transcendental. This view will be explained in later chapters.

CHAPTER 6 - THE ECOLOGY OF CULTURE

Having passed through a re-shuffling of the priorities of a research methodology we are able to readdress the issue of ecological sustainability in an evolving process of theoretical development. Throughout the course of the following 4 chapters I will prepare the ground for framing my question concerning ecological sustainability in general, and in relation to the Vunivia catchment in Fiji in particular. In preparing this ground I will set out to explore the issue of culture and of cultural adaptation to an ever changing landscape. Chapter 6 re-introduces the questions of rationality, language, ethics, metaphysics, and adaptation. In so doing it establishes a framework for what will be explored in chapters 7, 8, and 9.

Recognition of the international character of the forces of unsustainability point to the need for an international focus for critique. This demands a critique of the ecology of modernity. Such a critique encompasses an investigation into standards of rationality, world view, language, psychology and religion. This leads to the need for a critical inspection of the ecological character of the foundations of modern culture. This involves an exploration of the conceptual, psychological and existential underpinnings of modern life.

A definition of ecological sustainability begins to emerge as an adaptive relationship between people and place. The notion of the 'autobiography of the landscape' is introduced as a defining term for ecological sustainability. However, in order to uncover the meaning of this notion a number of conceptual obstacles will need to be cleared away. I believe that some of these obstacles lie in the very fundamental assumptions of Western rationality. In the process I will explore the domain of moral philosophy and ethics and build a framework for a creative alternative to be presented in chapters 8, and 9.

6.1 THEORISING WITH A HAMMER

To recognise and understand the kind of cultural dynamic that is capable of living in harmony with Nature we must clear away many obstructions. Such a clearing away is a process of deconstruction. A hammer can be used to destroy and to build. In this chapter I do both. With the help of a number of postmodern philosophers I will

deconstruct and then rebuild a metaphysical basis for addressing the question of ecological sustainability. Part of this process involves a passage through nihilism which amounts to a metaphysical cleansing. In chapters 6 and 7 we will explore the possibilities of employing nihilism in a positive *conceptual* fashion in the reconstruction of a basis for understanding ecological sustainability. In chapter 8 we will look at what nihilism can do for us *existentially* and psychologically.

This exercise helps us to wipe clean the slate of knowledge and begin afresh much as Francis Bacon claimed to have done in the 17th century (Wiser 1983). The difference is that Bacon was heralding in a new epistemology, which guided Western culture from the confusion and prejudice of medieval superstition to another tradition of knowledge capable of harbouring an equivalent set of prejudices under the banner of the absolute primacy of truth via reason. The deterministic undercurrent remained the same - the same characters were still on the stage, except they had merely changed their costumes from ecclesiastical robes to the plaid jackets of natural philosophers and the starched white trench coats of the emerging scientific guild. The chancellors of knowledge were no longer priests and the landed aristocracy that supported them, but were replaced by the bourgeoisie and their philosophical sycophants.

God was expelled from epistemology and in God's place a faith in the absolute rule of natural law was instilled in Western culture. This faith in the permanence of natural law, according to Newton and Descartes (who saw themselves as God's barristers), was substantiated in the claim that they were originally drafted by God anyway (see Capra 1982). This faith in permanence (previously that of God's determinism) kept Western culture tied to the never ending search for the one and only, rock solid, all-determining foundation of the entire universe and a similar steadfast rationality to match it (see Kenney 1991). But all that is solid melts into air (Berman 1988), and to paraphrase a zen poem: "The morning glory which blooms for an hour, differs not at heart from the [mountain], which [stands] for [millions of years]" (cited in Watts 1957). Taking this possibility seriously - that, as Heraclitus said: "all things flow" (Kahn 1979), provides a significantly different loom (standard of rationality) with which to weave a story (knowledge about the world). This becomes a rationality of becoming, of flux, of process (see Prigogine 1979). It is not merely a ploy to steal the keystones from the superstructure of Western rationality thus toppling it for the sake of entertainment. It forms the basis for a cultural revolution that is necessary if the meaning of ecological sustainability is to be understood and made possible.

The key to the 'success' of modern Western culture is reason, and so, humanity creates a conception of the entire universe in its own image. If this is not a monumental case of cultural egocentric idolatry I don't know what is. But because the basis of Western knowledge is grounded in a sophisticated system of rules and predicates, it takes on the appearance of wisdom able to describe reality as it really is. But this first implies that reality is indeed logical, and secondly that knowledge is able to match it 'word' for 'word'. The opening words of Faust in Goethe's play of the same name, arrests this precise issue when the hero declares his discontentment with the primacy of reason in Western culture:-

Law, medicine, philosophy
And even - worse luck - theology
I've studied with passionate resolution,
I've learned, alas! from top to bottom;
And stand here now, poor fool that I am,
No wiser than I was before.

(Faust Part I:21)

In this game of catching reality with words (metaphysics) we forget that the earth existed before humans evolved and before they began to do philosophy (see Outhwaite 1987). It also exists when we are not thinking and doing philosophy, and thus exists in spite of language. It also exists beyond human sensory experience and is, in that respect, necessarily unknowable (see Bhaskar 1975, 1978, 1986; Outhwaite 1987; Wright 1992). If philosophers and/or scientists think that reason alone is able to uncover the 'truth' of reality they must find a way of transcending these substantial obstacles. One way is to say that "we do not yet have all the answers, but given enough time we will", or "we know (or nearly know) all that we need to know in order to construct the perfect world (such as an ecologically sustainable culture)". This grotesque over-confidence in the abilities of human knowledge prevents so many members of modernity from realising that there is so much more to it than this. And furthermore, much of it will remain a mystery.

However, an over-confident view was reified with the assumption that because God is reasonable, God created a reasonable universe and also blessed humanity with the joyful gift of an intellect that mirrored it perfectly - hence the rationalism of Descartes and Newton. Alternatively, with God's creative capacity ridiculed beyond redemption, Nature instead spontaneously evolved in a reasonable fashion, and conveniently constructed itself on the foundations of mathematics, which we humans can employ to unlock its secrets - hence the empiricism of many of the world's modern scientists. But what if

evolution itself were to be a constant creative (and hence indeterminate) process? And, furthermore, what if mathematics, logic and reason, are merely a human faculty (Schopenhauer 1965; Heidegger 1959, 1992; Whitehead 1929, 1930; Caputo 1978), where they comprise merely the rules of language in which we humans might employ in our humble attempts to organise our thoughts? Also, if they are really only the rules of language and have only internal coherence, then many different forms of mathematics, logic and reason are possible, housed in different cultures that sustain different standards of rationality. Should this be true then the foundations of the universalist claims of Western metaphysics begin to wobble.

What this means for epistemology in general, and a theory of ecological sustainability in particular, is certainly profound, as it demands that only a coherent perspectivistic interpretation of the world around us is possible. It also shows that this coherence need not necessarily be grounded in the rules of language (e.g. logic) but could be based on experiences beyond the reach of language and its rules, and thus be illogical.

"Sounds like nihilism" I can hear you thinking....that's right, it is precisely that. However, it is only nihilism at the level of language and the level of knowledge about the world. It does not imply that knowledge is not possible, that 'anything goes', or that there is absolutely no meaning to existence (and hence no possibility of a theory or condition of ecological sustainability). It only shows that knowledge, any knowledge, is necessarily subjective. Reality, which also resides outside the reach of language is still there - the sun still comes up in the morning even if we humans have decided to call it the 'moon'. Language is not all of reality, it is only our way of creating a coherent conscious world. This argument lies at the heart of much postmodern philosophy, and lends itself to a thoroughly radical approach to our place in Nature and our ability to have certain knowledge of any form. It does not throw out the baby with the bath-water as ontology, epistemology and language are still with us. So too are things like quantum mechanics, ecological theory, social theory, cultural anthropology, art, poetry, sculpture, dance, fishing, throwing a ball with children in the park. All this is still there - only in a different way. Such a view does not deny the world, it only demands that we begin to view it in a different and less conceited fashion. All this does is give us a different viewfinder with which to interpret the world. I intend to show that this kind of viewfinder facilitates far more coherence concerning the issue of ecological sustainability than the sophisticated sophisms of modernity.

In this chapter, instead of asking "how can this or that form of knowledge be legitimated?" I ask instead: "what forms of knowledge are possible?". This leaves the way open for ascertaining what kinds of epistemological formulas (as a form of inquiry) are appropriate for an investigation into ecological sustainability in any landscape. It also, simultaneously, sheds light on the means of gaining knowledge from a landscape as part of a cultural equation of ecological sustainability. The outcome of this exercise conducted through the remaining chapters is 1. a methodology called transcendental cultural ecology; 2. a theory of ecological sustainability; and 3. a prescription for cultural change that is capable of bringing about an ecologically sustainable existence.

6.2 STEPPING INTO CULTURE

Culture is not a thing, but a name we might give to processes and tendencies which may be recognisable according to certain features. But what features might distinguish a 'culture' from a 'society', or merely the niche of another animal species? The term 'culture' sometimes brings to people's minds notions of ethnic dance, music, various forms of art of a particular generic style for example. But culture is more than this.

Culture is a confluence of many different influences that come from within and outside a human community. Furthermore a culture may have a variety of internal tendencies and forms called sub-cultures and societies. But one important characterising feature of culture is language (see Whorf 1956; Wittgenstein 1953). Wittgenstein showed that logic is the rules of language, where a language operating according to a set of rules is a *language game*. Each language game has its own rules and has its own truths. One language game cannot be the judge of another as neither can claim to be only way of uttering meaningful statements. They only maintain internal coherence. Philosophy becomes the linguistic means of untangling different languages games (Wittgenstein 1953). Because of this, Wittgenstein claims that philosophy leaves the world as it found it because all it can do is organise our thoughts. In his later work Wittgenstein's thinking becomes unphilosophical in the sense that he is attempting (like Heidegger) to identify the very impulse of philosophizing itself (Edwards 1982).

Different societies may exist within the same culture by acting out their social relationships within a single language or a similar standard of rationality or world view. Modernity for example can be seen as a meta-culture in the sense that there are many different languages in the modern cultural condition but a common thread of rationality tends to underlie the modern condition. This may be regarded as a 'genus' where the

particular expression of forms of rationality and language are 'species' within that 'genus'¹.

The character of a culture is influenced by internal and external factors. Internal factors are those that arise from within a culture. Some are conceptual, such as world view, language, and ethics. Other internal factors are non-conceptual such as intuitions, instincts, and feelings. External influences that contribute to the shape of culture include such things as climate, topography, and resources for example. A culture is all of these things as opposed to merely one or other. But the question might then be asked "what of these ingredients differentiates culture from simply the biological character of any animal species?" Animals have all of these ingredients bar one - language as a set of symbolic signs (see Whorf 1956). This condition is not different in type from other animals but merely one of degree, as it is possible that symbolic language may evolve in non-human animals (if it is not already here). If other animals do develop a symbolic language they may be said to have the possibility of culture.

It is important, at this stage, to recognise the difference between culture and race. Race is not, by definition, synonymous with culture, although race and culture can and often do overlap. Race, for example, may refer to the genetic heritage of a people but culture refers to a broader genealogy encompassing social relationships, language, and methods of social and political organisation. This may coincide with, but is not determined by race. The idea that race and culture are one and the same is a fallacy (see Sanday 1989; Norton 1986; Overton and Ward 1989; Sutherland 1989; Linnekin and Poyer 1990; Keesing 1989, for example). People from the same race can and do participate in different cultures even if they themselves have the impression that because their race gives them racial identity it also gives them culture. This is an unfortunate mistake in both intellectual and common sense spheres.

The term 'modernity' is used as opposed to 'Western' culture, because the broader cultural character of modernity is shared between many different races. Japan, for example, is not racially Western (i.e European) but shares a great many cultural

¹This notion of rationality as a genus is not merely a biological metaphor according to the theoretical framework I will presenting in chapter 9. I focus on the 'deeds' of a biological taxa (e.g. species) as a defining feature (as opposed to merely genetic heritage). These 'deeds' refer to what is essentially the functional (realised) niche of a population - which is greatly influenced by the standard of rationality employed in the case of a human community.

characteristics with advanced capitalist countries in Europe, for instance. Maintaining the notion of 'Western' as opposed to 'modern' serves to obscure the cultural character of a nation such as Japan, whose rationality and basis of valuation (as it is practised by its dominant capitalist culture) is not different in type from other capitalist countries. Furthermore, ecological sustainability is about culture not race. The ecological character of your collective relationship with the rest of Nature is influenced more by what you do than what you look like.

6.2.1 RATIONALITY AND WORLD VIEW

As mentioned above, language and language games are essential ingredients of culture. On the question of rationality I wish to focus on the language game and its rules. Modern Western culture nurtures the assumption that there is such a thing as a universal standard of rationality able to know reality with perfect precision. This faith in the existence of a single universal standard underlies the project of modern science and modern philosophy. We saw in chapter 5, for example, that the aims of positivism and empiricism (manifestations of the modern search for universals) were to establish a formula for knowledge of the highest credence able to act as the bench-mark with which to measure all other forms of knowledge. However, such a blind faith in the existence of a universal standard of rationality rests upon the assumption of the possibility of objective knowledge of an objective reality. This points to assumptions that underlie the rationality of a culture or sub-culture.

For example, the assumption of an objective reality, together with an objective knowledge about that reality implies an assumption of an ontological condition of a 'thing in itself' (after Kant) determined by the fixed 'laws' of nature or the will of a deterministic god. This 'thing in itself' is then able to be apprehended, untainted by any phenomenon relating to the subject (scientist). This implies that humans are in some way able to become detached from the world of existence and look upon reality omnisciently. Now, rather than focus on the flaws in this assumption I will instead use it as a way of depicting one form of rationality among many others.

The Fijian culture on the other hand, prior to the arrival of Europeans, developed from quite a different basis for knowledge and rationality than the incoming modern Europeans. Rather than a deterministic steady state rationality the Fijian genus emerged from a rationality of process, similar to that of Heraclitus (5th century b.c. Greek), the philosophy of Schopenhauer, Nietzsche, Whitehead, and Heidegger, and the rational

undercurrents of Taoism, Buddhism and Hinduism in Asia. As such, the meaning of words in the Fijian languages (in their pre-modern form) can only be apprehended if the appropriate standard of rationality is employed.

The meaning of the word *Vanua* is a good example. This term has been translated into English as referring to 'land' or 'region' (Capell 1991). But anyone who is familiar with this language will know that the term *Vanua* actually refers to much more than this, encompassing what in English might be termed 'ecosystem'. However, in addition to this the word *Vanua* also refers to peoples' genealogical relationships with each other, their spiritual connections with place, their social and political organisation, and their relationship with other peoples from other regions (Ravuvu 1987; 1988). Other phrases using this term, such as *lewe ni Vanua* literally translates into 'flesh of the land' but actually means 'the people of a particular place'. The connections between social life and landscape can also be seen in expressions of chiefly title where '*era na kilakila ga na kena qele*' literally means 'they know their soil' but in reality means 'they know their chief' (Kikau 1981).

The point being made here is that no translation of Fijian language into English can capture the meaning as it is intended in the Fijian cultural context without first adopting the rationality from which the language gained its original meaning. If 'land' is seen as the commodity it is in modern culture then the meaning of the word *vanua* will not be understood even if the speaker learns to use the Fijian language. This is because the symbols are of little significance unless the authentic meanings behind those symbols are comprehended. Rather than judge the efficacy of different standards of rationality vis-a-vis our problem of ecological sustainability I only show how different cultures can and do embrace different standards of rationality so that, as Pascal said, what is true on one side of the Pyrenees may be false on the other (Outhwaite 1987).

Another important aspect of rationality as it relates to culture and the question of ecological sustainability is the question of spatialisation. This can be described in terms of cognitive maps. A cognitive map is a term that describes the conceptualisation of the environment as an intricate system of spaces and routes. According to Shields (1992), places and spaces "are hypostatised from the world of real space relations to the symbolic realm of cultural significations" (ibid.:44). The social context of peoples' affiliation to place has been largely ignored in much social theory which tends to leave out of a social analysis the subjective and emotional experience of meaning in the landscape (see Shields 1992; Cheney 1989a; Soja 1989). Jameson (1984) has suggested

that the modernist stance towards social spatialisation is underpinned by the devaluation of the social significance of place or the unique emotions, meanings, and attachments to places in modern Western culture. One reason for this stems from the commodification of land as a social utility in land tenure. This results in a loss of the sense of belonging to a place as the land is divorced from its role as a nurturing realm. The landscape is disenchanting through bestowing upon people the capacity to have exclusive property rights to land. Where landscape is not made alien and reduced to a commodity, the intersubjectivity of people and place is able to be maintained. This allows a sense of belonging to develop.

In spite of the modern scientific ontology of space as a void, people in every day life relate to space that is still filled with emotion, meaning, sacred sites, and living history (Shields 1992). This expresses a contradiction between the scientific world that is used to control Nature and the psychological reality of social life in the landscape. Such contradictions serve to alienate people from the world they live in (this also applies to scientists) which becomes expressed as an anxiety due to the loss of belonging and being alone in the world. This anxiety is suppressed in a variety of ways in modern culture, sometimes through further attempts to control Nature through science, and sometimes through violence and oppression in more general terms (see Fromm 1988, 1991). Fijian racist nationalism may be an expression of this waning of a sense of belonging and loneliness suffered by many people of modern or modernised cultures the world over. I believe that the romantic movement of 19th century Europe was (in part) a Western reaction against this alienation from the landscape.

In much modernist social theory, space is materialised as merely a substrate upon which social relations (such as the relations of production) are acted out. Land becomes a meaningless object in an economy where the only social value it has is its utility. Such forms of social theory ignore the importance of place and landscape in society which results from an over-emphasis of social relations over the relationship between humanity and the rest of Nature. Ecosystems become inert backdrops to revolutions and institutional restructuring, and are completely left out of the modern meaning of a social 'community'. Shields (1992) reasserts the importance of space and suggests that: "[Spatialisation] is a mediator of causality...because it represents the contingent juxtaposition of social and economic forces, forms of social organisation and constraints [and opportunities] of the natural world" (Ibid.:48).

6.2.2 LANGUAGE AND BEYOND

The role of language in relation to thought, world view and reality has become a central component in a number of intellectual disciplines in the 20th century including philosophy (e.g. Heidegger, Sartre, Wittgenstein, Merleau-Ponty, Rorty, Foucault), social theory (e.g. Woodiwis, Gadamer, Adorno, Habermas), anthropology (Levi-Strauss, Winch, Lukes, Whorf), literary criticism (Jameson, Derrida), political science (Chomsky), and psychology (Jung, Campbell, Maslow)². The predominant (positivist) modern scientific view, sees language functioning as a mirror of reality, where scientific words are essentially ontological statements that point (with varying degrees of precision), to reality as it is disclosed in sense awareness. This view of language has become quite firmly established in modern culture as a prevailing cultural paradigm (Wilber 1990). This view rides on some very fundamental assumptions concerning the relationship between thought, language and 'world'. A good example can be seen in the linguistic branch of positivism supported partly by the earlier work of Wittgenstein.

The various meta-theories of modern empiricist science tend to have a definition or theory of language and semantics, in order to set the context for communication of scientific ideas, and establish a basis for the judgement of scientific truth. In these theories of language, various rules are defined as to what constitutes authentic communication and knowledge. In the various empiricist traditions (e.g. classical empiricism, logical positivism, neo-classical empiricism, Popperism) for example, the theories of language restrict scientific (and therefore legitimate) language to what is defined as rational. According to Hooker (1987) positivism³ subscribes to a theory of language such that:-

Every empirically significant concept is derived directly from specific sensory

²For general introductions to these theorists see Naess (1968), Gibbins (1987), Fox (1990), Stevens (1990), Ayer (1985), Best and Kellner (1991), Carr and Kemmis (1986).

³It should be noted that Hooker (1987) does differentiate between the three empiricist traditions mentioned above viz. positivism, Carnapian empiricism, and Popperism. However the latter two differ in their theory of language only slightly, for example according to Hooker (1987:71) Carnapian empiricism states that every "cognitively meaningful sentence is a generalised logical function of the class of observationally basic sentences" [where] "Every observationally basic sentence is a sentence of the positivist language". For Popperism non-logical terms in subjects such as ethics, religion, aesthetics, and philosophy are meaningful but they are not regarded as empirically meaningful in the science he wishes to delineate.

experiences. The remainder of language comprises two disjoint components, the logical and the social-emotive; The logical framework [refers to] a conventional construct of the human mind, devoid of empirical content...; the social-emotive component of language consists of pseudo terms and pseudo sentences which serve to arouse emotion but are devoid of empirical content.

From this it can be said that:-

human beings acquire the empirically significant component of language through increasing sensory experience and the operation of the logic-machine mind upon the resulting imprinted concepts and acquire the socio-emotive component through the non-rational... processes of socialisation in the human community (Hooker 1987:66).

Thus empiricist science has nothing interesting to say about ethics, aesthetics, religion, or metaphysics apart from stating that they are irrational or have no relevance to knowledge or truth. Alternative views, however, have existed for centuries (or even millennia) both in the West and non-Western countries. An example of a valuable contribution to this debate can be found in the work of Benjamin Whorf. Like the latter work of Wittgenstein (see Hanfling 1989), Whorf explored the complexities between words as symbols and the world we create for ourselves through language⁴. The language-as-a-mirror approach is significantly challenged in Whorf's work, as it is in that of the latter Wittgenstein and also Heidegger. In particular, Whorf (1956) shows how linguistic systems create different world experiences of a language user.

To understand this it is useful to differentiate between what Wilber (1990) has called 'mental' and sub-mental' states. Symbols such as words and their meanings do not create the material world, but they do create mental spheres which are themselves symbols. According to Wilber (1990) symbols as words reflect (i.e. mirror) a submental symbolic world but create the mental world. As such, language does not create *the* world, it creates *our* world. This differentiation of representative and creative functions of language in relation to symbolic spheres of the human intellect helps to expose the differences between forms of human knowledge systems. The mirror model is used in

⁴This argument runs in opposition to those found in some forms of cognitive socio-biology (e.g. Weiskrantz 1988) that put up a false argument viz. that philosophers such as Wittgenstein and Heidegger suggest that people actually create their entire world through language. This arises from a misunderstanding of the work of such philosophers, who do not claim that the entire world experience is created through language. Non-linguistic aspects of thinking are crucial and constant undercurrents of Heidegger's work, and one of Wittgenstein's greatest legacies was the emphasis he placed upon the limitations of language.

empirical-analytic forms of understanding, such as positivism, and is sensible on the basis of the assumptions it carries in relation to language. It is still useful but it has many limitations. The 'world' creating model acknowledges the role of language in the creation of a subjective world experience for a language user in a particular culture. This model is employed in hermeneutic and phenomenological frameworks of social understanding.

The problem with positivism is that the scientist denies that the world-creating aspect of language exists and instead assumes that language and logical scientific statements are able to mirror reality as it is. A more enlightened form of science would acknowledge that the world-creating aspect of language exists, and that science is practised within this domain. Here, words as symbols are employed to decipher other symbols. As Wilber (1990:195) puts it:

With empiric [positivist] propositions you are trying to mirror [material reality] in symbols so as to better comprehend them. But in the mental world, where symbols look at symbols, it is like using one mirror to reflect another mirror which reflects the reflection, and so on, in a circle of meaning that you and I cocreate whenever we talk. That is the hermeneutic circle.

It is for this reason that all forms of science need to be embellished with a reflexive phenomenological dimension to take adequate account of the complexity of language and how it functions. Science participates in the subjective world-creating process of linguistic games and for this reason all science should take self reflection seriously. If this linguistic issue is ignored science will proceed (as it so often does) to create a subjective world experience for scientists, and a scientific culture, using a language game that is ignorant of the innate subjectivity of the human world experience as created contingently through language. This will serve to create an alienating world view, alienating in the sense that it creates a 'world' that contradicts a major aspect of our nature as human beings and contradicts much of what is real in our relationships with non-human beings. If science employs a hermeneutical approach to self understanding (acknowledging the way symbols engage in discourse with other symbols in mental and submental spheres of human cognition) then it will be less likely to fall into the alienating trap that has become a signature of modern science.

On more general terms, language and its rules help to create a symbolic world for the culture that uses such a language. Different cultures create different 'worlds' by means of different linguistic systems (Wilber 1990; Whorf 1956). Coming to understand this

aspect of culture will help to bring an inquiry closer to an understanding of the relationship between a culture and the landscape that surrounds it. This latter task is precisely the problem being addressed in this thesis. But to do so "We must find out more about language!" (Whorf 1956:250). This I will seek to achieve through the course of the following chapters. However, culture is more than merely an isolated linguistic phenomenon. Culture is not only that which exists within the world of language. It is also influenced by phenomena which exist beyond the reach of a linguistic world. This includes the biological processes going on in the body, our physiology (which will differ from place to place due to differences in environmental conditions), and the overall relationship that people have with their ecological surroundings.

The impact of a culture on a particular landscape is likely to differ from that of another culture which creates a different 'world'. For example, a culture that sees the land as a commodity with only utility value will treat the land differently from one that sees the landscape as alive, as a nurturer of human and non-human life, as an ancestor and a guide. The different world view will lead to a different relationship with the landscape which will, in turn, affect the human community in terms of the modification of the landscape (e.g. resource depletion and pollution).

The central point conveyed here is that the landscape is also the culture, as opposed to a culture existing on a landscape. The landscape and the culture are one and the same thing and they cocreate each other simultaneously. One is not prior to the other. Instead they interpenetrate each other in a dialectical fashion. Walk on the sand and the sand presents a foot print. Breathe the air and the aroma of the forest is taken in. Cut down a tree and the forest is modified. What humans do they do with the landscape, and the landscape does things to people as well. And it is not merely a one way relationship as the changes in the landscape, as said before, influence the human community again. It is not merely a feed-back loop - it is a simultaneous dialectical relationship. It is the dialectical character of the relationship between a culture and the rest of the landscape that needs to remain at the front of our minds when attempting to understand the issue of ecological sustainability.

6.3 THE QUESTION OF CULTURAL ADAPTATION

I have said earlier (in chapter 2), that I believe ecological sustainability is a synchronous, dialectical, relationship of mutual becoming (change). This becoming will only be ecologically sustainable if the becoming is harmonious, compatible, apt and

hence adaptive. Adaptation is not the modification of one to the other, it is a mutual relationship of synchronous change. All adaptation is necessarily co-adaptation as mentioned in chapter 5 in relation to dialectical biology.

In the light of a general theory of adaptation as the dialectical co-adaptive relationship between species and surroundings, a cultural special theory will be parasitic upon it (unless humans are not an animal species). The task of this thesis is to explain both the general and special theory and demonstrate the efficacy of both in relation to ecological sustainability. I do this by re-examining the notion of indigenusness and show that it does not differ from ecological sustainability - they become synonymous in the synthesis I present. This is undertaken largely in chapters 8 and 9.

In this chapter and in chapter 7 I will establish a metaphysical basis for theoretical reconstruction, after deconstructing the existing dominant metatheoretical foundations of modern science and moral philosophy. These foundations include atomism, reductionism, steady state rationality, determinism, materialism, mechanism, and ontological empiricism. I have found (in modern social, cultural and ecological theory) no existing coherent theoretical basis for what I seek to achieve - understand ecological sustainability (although I have found an alternative basis in other places which I will present in chapters 7 and 8). In the modern scientific sphere I have found some that come close but they fail in one or other aspect which demands a reassessment of the grounds of inquiry. A variety of conceptual imperatives have stared me in the face for the entire duration of this research programme. One is the need to completely dissolve the humanity/Nature dualism, another is to merge this with a form of holism that does not lead to stoicism (to be explained later), and another is the need for an epistemology that does not claim to be capable of achieving more than is possible or desirable.

Critical social science works well apart from its inability to overcome the humanity/Nature dualism, and its assumption of the possibility of a rational formula for emancipation, stemming from a claim of epistemological universalism, thus assuming that the rules of language are more powerful than is possible. The best forms of modern ecological theory I have come across move in an appropriate theoretical direction (i.e. process rationality) but tend to sustain forms of stoic holism (which I reject and will explain why in chapter 7) under the banner of modern systems theory. With all due respect to ecologists, there is also a tendency towards ontological empiricism, naive realism, a correspondence theory of truth (which trivialises ontology), and unqualified

epistemic over-confidence⁵. Like critical social science it is also grounded in the assumption of the competence of reason as the basis for knowledge⁶. Dialectical biology as developed by Levins and Lewontin (1985) provides a major step in the right direction in relation to the need for a dialectical rationality and process, but falls into the same empiricist trap as its liberalist enemies. And, like Karl Marx and Adam Smith before them, they sustain the materialism that denies so much of what is real outside of language and the material domain.

In other words, I will only be capable of weaving a cohesive garment (theory) once I have changed the loom (standard of rationality) by using a metaphorical hammer to demolish the foundations of existing theoretical frameworks (a process which began in chapter 5). I am then able to reconstruct a creative alternative that is not inconsistent with a set of coherent metaphysical assertions. This gives my alternative framework coherence and consistency so that any arguments against it must appeal to metaphysical differences as opposed to incoherence or inconsistencies. In this process of reconstruction I do not discard all of the components of modern epistemology that fall in disarray as the modern loom is dismantled. Some are re-employed in this postmodern alternative although it is quite a different loom.

6.4 THE ECOLOGY AND GEOGRAPHY OF CULTURE

The Fiji landscape currently supports a number of cultural tendencies. At one end of the spectrum lies high modernity which is essentially culturally indistinguishable from high modernity in other countries except that the supermarkets will stock a variety of different brand names. This cultural group is comprised of people of many different races including Fijian, Indian (Indo-Fijian), Chinese, European, and races from other Pacific Islands. At another end of the spectrum lie the remnants of Fijian pre-modern tribal culture (which is also diverse in itself i.e. with many regional variations) and many variances in between. In addition to this, pre-modern Indian cultural influences play a significant role for many Indo-Fijians. The population at the last census in 1986

⁵Ontological empiricism implies that only what is experienced or experienceable by humans is real or relevant. Epistemic over-confidence is when a form of knowledge declares that it is capable of knowing far more than is possible, such as declaring that you have discovered the truth of something in its totality when such a total knowledge is impossible.

⁶I do not reject the value of reason, but see 'irrational' forms of knowledge (derived from outside the rules of language) as a legitimate means of knowing.

comprised of 46% indigenous Fijian, 49% Indo-Fijian, with the remaining 5% made up of Chinese, other Pacific Islanders, and Europeans (Bureau of Statistics 1989)⁷. There has also been some intermarriage between different racial groups which adds to the racial complexity of these islands. However, as suggested above, a break down of the Fiji population by race does not tell us much about the actual cultural situation.

It will be useful to focus briefly on the Fijian culture itself, as this cultural ensemble has been a pervasive factor in the relationship between humanity and landscape in that island group for many centuries. Fiji was first settled by humans some 3,500 years ago by what has been termed an Austronesian culture known to anthropologists as 'Lapita' people. Subsequent arrivals of Melanesian peoples have also influenced the racial and cultural picture (Campbell 1989; Geraghty 1983). Polynesian and Melanesian influences both currently play a significant role in the racial and cultural assemblage of what was to be Fijian, although the former has more influence in the east of Fiji and the latter more sway in the west (Geraghty 1983). As recently as the mid 19th century for example, Tongan influences (Polynesian) comprised a significant social, political and cultural ingredient, especially in the south and north east (Routledge 1985).

With the arrival of Europeans in the 18th, 19th and 20th centuries came an altogether different culture, and like the incoming Tongans, it traced its cultural heritage from a very different genealogy to that of the Fijians. However, significantly different in this European culture (from both Fijian and Tongan) is the dominance of a standard of rationality that differs not in degree but in type from the Fijian and Tongan equivalents. This rationality of modern Western culture developed as a reaction against medieval religious superstition, which, in spite of its best intentions, stripped modernity of the possibility of ecological sustainability. This rationality is paralysed by an attachment to an underlying condition of permanence.

In its latter development in a reductionist, scientific world even non-perceivable possibilities are ruled out of court and scientific humans are able to know (eventually) all of reality (or at least get close). Either rationalism (since Descartes, which is anthropocentric), idealism (since Kant - also anthropocentric) or anthropo-realism (since

⁷Indians were first brought to Fiji in 1879 by the British as indentured labourers (Lal 1983). Following the military coup of 1987 large numbers of Indo-Fijians have emigrated and the ratio of Indo-Fijian to Fijian has since shifted in favour of the latter racial group (Bedford 1989; Watling and Chape 1992).

Hume) has dominated the conceptual foundations of the intellectual culture of modernity. This also greatly influences the common sense views of people living in a culture so inspired and informed by modern science (see Bhaskar 1975, 1979, 1986; Outhwaite 1987; Whitehead 1929 for example). They are anthropocentric because if humans are not able to have cognitive knowledge about something, then it is said to be false. This has led to a disenchantment of Nature where mysteries are deemed illegitimate and have been replaced by mere puzzles solvable only through empirically verifiable or falsifiable reductionist science (Kuhn 1970; Carr and Kemmis 1986; Outhwaite 1987).

6.4.1 THE CONSEQUENCES OF MODERNITY

The Fijian ethos of tribalism is still strong in many villages where ceremony and ritual maintains much of its meaning and purpose (Ravuvu 1987a). However, as we saw in chapter 4, this culture is already different from pre-colonial times, having transformed into a modern version. This is particularly true in relation to economic production and resource use. Whereas many pre-modern cultural structures remain, the context of their use is significantly changing. The use of resources for the accumulation of cash and capital is becoming more important as the basic structure of village economies is becoming more and more cash orientated. Subsistence is being surpassed by cash cropping even in the last bastions of pre-modern Fijian culture. For this reason the actual culture is very different from what it used to be, even though many of the structures of social organisation remain intact.

Modern Western influences are dominant in Fiji when it comes to rationality and all that goes with it, such as morality and economy for example, and the overall relationship between humanity and landscape. As with many other Pacific Island countries agricultural practices tend to be commercially orientated whether they be small scale village farms or industrial plantations (Nayacakalou 1978; Ravuvu 1988; Fairbairn 1987; Hau'ofa 1987; Overton 1988 for example). Forest use is still diverse with many non-wood forest products collected including medicinal plants, pigs and birds as game, wild root crops, prawns, eels and fish from forested rivers. However a dominant and increasingly important use of forest lands is for purposes of commercial timber extraction (often followed by commercial agriculture) formally by Europeans and now by tribal land owners as well (Thaman 1988; Rabuka and Cabaniuk 1988).

In terms of cultural heritage, *modern* Fiji is thereby supported by an intellectual and a

common sense tradition shaped by a confluence of Greek philosophy, Christianity, and modern science. Thus even in Fiji, Socrates, Aristotle, and Plato have contributed much (albeit indirectly) to its philosophical outlook including its philosophical ontology. Moses, John the Baptist, Jesus, St Augustine, Thomas Aquinas, Martin Luther, and John Calvin among many others⁸, have contributed greatly to standards of morality and ethics through the penetration of Western religious influences⁹. Francis Bacon, Rene Descartes, Isaac Newton, David Hume, Immanuel Kant, and Charles Darwin, for example, have helped to shape the form and context of modern science in Fiji evident in education and technology. John Locke, Jacques Turgot, Adam Smith, John Stuart Mill, Thomas Malthus, David Riccardo, and Karl Marx were among those who merged science with politics in the West to set the foundations for modern political and economic theory and practice which is alive and well in Fiji's political arena today. Because of European colonialism the current modern era in Fiji today relies heavily on Western cultural heritage. Tomanivi and Ratu-mai-Bulu¹⁰ are still there but are becoming rapidly eclipsed by the dominant modern Western influences. This points to the need to examine the foundations of modern culture if we are to understand human ecology in present day Fiji.

The need to question the ecology of modernity as a whole also stems from the internationalisation of the forces behind unsustainability. If Fiji was an isolated and autonomous cultural unit it would suffice to reflect on modernity within Fiji. However, over the last 200 years Fiji has been greatly influenced by modern forces that have their loci well beyond the sparkling horizons of this 'tropical paradise'. Ecological sustainability in Fiji therefore depends very much on the possibility of ecological sustainability on a global scale, or on sustainable isolation. Sustainable isolation is

⁸Christianity itself is very diverse, testimony to the many religious arguments (and sometimes wars) over the centuries. Different interpretations of the Christian message lend themselves to different cultural formations. A good contemporary example is the difference between Liberation Theology (Catholic) and Calvinism (Protestant). The former is innately socialist and thoroughly rejects the basic assumptions of capitalism, whereas the latter is individualistic and has, in some cases, fostered the rise of capitalism itself (see Radford-Reuther 1988; Fromm 1991; and Weber 1958). Some forms of Christianity are intrinsically modernist, whilst there is a growing postmodern theology movement (e.g. Holland 1989; Griffin 1989; Taylor 1984).

⁹Hinduism and Islam are also major religious factors in the Fiji cultural equation. However, they tend to be functionally eclipsed by the dominant modern economic activities and thereby still influenced greatly by a European cultural model.

¹⁰Tomanivi and Ratu-mai-bulu are tribal gods (see Ravuvu 1987a).

highly improbable if little in the way of cultural change takes place internationally. This is evident in the nature of the global economy, particularly in light of more recent intensive efforts at completing the project of global capitalist expansion (predicted by Lenin) exemplified in the GATT negotiations in Uruguay. It is for this reason that modernity as a whole must be critiqued, because without this any question concerning ecological sustainability in Fiji (in the absence of this crucial internationalist perspective) will be a false one.

6.5 TOWARDS A THEORY OF ECOLOGICAL SUSTAINABILITY

The notion of cultural adaptation to a constantly changing ecosystem lies at the heart of the theory I have developed on ecological sustainability. What will emerge is a notion of ecological sustainability that is synonymous with indigenesness¹¹, and expressible in a form that I call the 'autobiography of the landscape'. The autobiography is articulated through the human community via primordial¹² language, inspired by real experiences of the landscape (this is discussed fully in chapter 7, 8 and 9).

The aesthetic (artistic) component of this theory comes through primordial language and the experiences that inspire it. The rational component comes in with the recreation of that aesthetic creativity through language itself. It becomes reason - a standard of rationality comprising the rules of language where those rules are also inspired by the landscape itself. I have written a poem to this effect:

Weaving

The landscape gave to me a loom
And bid me to weave a garment true

¹¹I define indigenesness in functionally dynamic (as opposed to phylogenetic) terms. It amounts to the ability of any population (human or non-human) to co-adapt with the landscape of which it is a part. Such co-adaptation is indigenous if, and only if, it exists in a dialectical synchronicity that is able to endure without system collapse. This view is able to regard migratory species as indigenous to the ecosystems it visits without bending the definition. It all depends on the functional ecological niche of the species in question. This will be explained in chapter 9.

¹²I draw upon Heidegger's distinction between primordial and derivative language. The former is inspired by experiences and may be irrational, the latter comprises language operating according to the rules of language, tends to be rational (i.e. consistent with these rules), but is not necessarily connected to real experiences (see Cheney 1989a; Halliburton 1981).

"For who" I asked, as it was not clear
"For me" it replied, "for me to wear"

And so I took the threads of my experience
And lay them together as warp and weft
And because the threads came from this place
The pattern to emerge was one of grace

But why would such a lovely gown
Be woven by me without a plan?
And then at last the answer came:
Both loom and threads came from the land.

The loom is a metaphor for a standard of rationality and the threads are the experiences gained from outside language, which are brought to the loom as the creative inspiration for primordial language (which is also the basis of authentic poetry). In this sense language embodies both a descriptive and a normative form. The rational form capable of fostering ecological sustainability is a rationality of process, providing the back-bone of an adaptive language game.

The specific manifestation of culture in a particular landscape comes through the primordial creative linguistic dimension which must be recreated anew in a constant process of dialogue with the landscape. This specific linguistic component is recreated in a culture as it acts out the language game in social life. The conscious world so created through such language and experience is able to be an adaptive world. It is capable of *moving with* the landscape.

6.6 THE QUESTION OF ETHICS

For a culture to be capable of acting out an ecologically sustainable existence it must be able to exercise a respect for the landscape by fulfilling its ecological responsibilities. It must then be able to establish a formula of responsibility that does indeed deliver an ecologically sustainable outcome. There are two major obstructions to this process which will be dealt with in this chapter. The first is demonstrating that an imperative exists for responsibilities to be met (as there are many sophisticated arguments that contradict this); the second is to show what form of ethical discourse is indeed consistent with ecological sustainability, rather than one that merely claims to be so, and yet obstructs it.

6.6.1 ON DETERMINISM IN RELATION TO ETHICS

Determinism obstructs an ecological ethic in a number of ways. Firstly it negates the possibility of creative responsibility due to the creative agency lying in a non-human agency such as a deterministic deity or a deterministic conception of natural law (Kenney 1991; Fromm 1991). Epistemological determinism is the notion that truth is universal and is grounded in a set of fixed predicates. This can and does happen in relation to logic as a basis for truth in forms of Western metaphysics. Should truth be conceived in this fashion there lies no possibility for truth arising from outside the reach of logic. Truth is thus determined according to the fixed condition of reason and logic which equates with universalism. This rejects non-rational truths and standards of social discourse according to one set of criteria as determined by the standard of rationality of one language game and culture. Ethnocentrism results. Such universalism argues that a single standard of rationality provides privileged access to truth. This is equated with the notion of a totalizing discourse - which is totalitarian at the level of knowledge and language. Politically it is still totalitarian as all social discourse is both an educational and a political act (see Freire 1972)¹³.

The ethical formula developed in this thesis asks for the acknowledgement of the inability of universal, totalizing discourses to legitimate themselves at the level of metaphysics without assuming that language is more powerful than is possible. This will be explained in the following chapters. The failure of universal, totalizing discourses to furnish themselves with an unquestionable metaphysical basis, in the light of substantial challenges to them, demonstrates that any claim to universal privileged access to truth must be discarded. Truth as a linguistic notion cannot be equated with any fixed correspondence with reality as it is. As such, truth at the level of language and knowledge (i.e. epistemology) can only be at best a story, a coherent narrative. Truth as a notion arising from outside language (e.g. intuition) can also take the form of narrative but not a normative one. It is a different form of truth and can be apprehended by many different cultures as it arises from beyond language.

¹³The problems with universalism and totalizing privileged discourses will be explored and explained through the course of subsequent chapters in relation to the question of ethics and moral instruction which may guide social actions.

This can lead to notions of universal 'truths'¹⁴ that are able to be shared by all cultures due to their relationship with our underlying character as human beings as indicated by Lukes (1987). Lukes argued against the notion of absolute relativism in relation to meaning. He suggested that some forms of meaning can apply across rational and cultural boundaries, where different cultures experience the same reality but name it differently. For example, people of any culture can feel 'pain' when they put their 'hand' in a 'fire'. The reaction in different cultures will be similar irrespective of the language they use and the words as symbols they employ to denote what in English we call 'pain', 'hand', and 'fire'. But another culture can experience the same thing even if their language employs utterances such as '*emosi*', '*liga*', and '*kama*' for the English equivalents as is the case with Fijian.

I believe that this form of 'truth' is the only form able to apply across cultural boundaries, as they are not mediated by rationality or language. The locus of their meaning lies beyond language. I believe that the same can be said for the meanings behind words such as 'love', 'happiness', and 'belonging' for example. The difference is, that for such terms to be able to apply across rational boundaries they cannot be defined according to linguistic norms. This is because linguistic norms are culturally specific and contingent. For such notions to apply universally their *meaning* must be located in the *actual* feelings themselves, and not in linguistic norms. They can only be *descriptive* of the actual feelings and experiences we have, and in this sense they are necessarily metaphorical, and poetical. These feelings and experiences are beyond value judgements, beyond concepts such as 'good' and 'evil', beyond language and logic. If this happens then an authentic translation between two different languages can be successful where the authentic meaning is carried across. As such two different cultures are capable of entering into a dialogue that is not dominated by the meanings of one culture alone. But to be capable of this the different cultures must first *locate those meanings* which are common to both cultures *irrespective of the language they use* to symbolise those meanings.

At the level of language itself, in relation to the internal coherence of a language game, all that is possible are relative truths. In other words, if the logic of a language is employed to define truth, the truth can only be a relative truth, as the truth only

¹⁴Universal truths are rejected by deconstructivist postmodernists, but are tolerated by reconstructivists like myself. Such a 'universal' truth may be regarded as a 'meta-narrative' which may differ from place to place but may carry a common ontological undercurrent.

corresponds to the internal coherence of a language game. For this reason all notions of truth, whether they be defined according to the internal coherence of a language game (necessarily relative), or are defined in real experiences that lie beyond the reach of language, can only be established socially through a process of negotiation if they are to be non-oppressive. Any means of determining 'truth' according to a single fixed standard (such as logic or science) will be totalitarian in its political character.

The social consequences of acting out a social life according to such truth (expressed ethically as instruction for 'good' behaviour) will be totalitarian and deterministic. This leads to forms of stoicism which obstruct the possibility of ecological sustainability. I refer to the meaning of stoicism in the classical rather than the colloquial sense. This relates to the philosophy of the Stoics of ancient Greece (influenced by Zeno) whose project was to protect the Athenian state from barbarian influences. This was achieved through the employment of a notion of cosmopolitanism, whereby the people of Athens were subjects of the polis of the cosmos (universe) - hence cosmopolitan. This notion was underwritten by a totalizing form of holism that saw the whole (the cosmos) as able to be captured by the universalistic net of the language game. This implies that the cosmos is able to be apprehended in its totality by the language game and its rules - logic, which amounts to a form of cultural solipsism. Such a notion sits firmly within the Socratic and Aristotelian tradition that creates a conception of the cosmos in the image of the rules of its own language, which is what most of Western philosophy has been doing since it began. But as Nietzsche (1973) argued - "is not the Stoa [also] a piece of nature?". See Cheney (1989b) and Jonas (1963) for a fuller account of the nature of stoicism and its use in Western culture.

In deterministic (stoic) cultures, social life is conducted through the following of laws of moral behaviour, where those laws are determined by an elite discourse (theory). This is what is so wrong with salvational ethical systems including many forms of Christianity, which defines 'good' behaviour according to a totalitarian formula. It will be necessarily oppressive in spite of its best intentions. It is for this reason that Jesus argued (contra Moses) for the pursuit of grace and not merely law, as did Sidatva Gautama (Buddha). Grace (like mana) is not grounded in linguistically determined codes, but in one's actual behaviour in relation to the divine. For me the divine is expressible *inter alia* as Nature, Evolution, the Landscape, the *Vanua*, which cannot be defined simply according to human knowledge systems. My reasons for this will become apparent in chapters to follow, particularly chapter 8.

The philosophical views presented in this thesis, which will unfold through the course of the following chapters, provides a basis for the coherence of this narrative and substantiate the ethical system to be developed in later chapters. This is an ethical system which I believe is capable of delivering ecological sustainability simply because it dismantles the obstructions to human adaptation. Such obstructions have also covered over the meaning of ecological sustainability and obscured it from Western society. It has been obscured by this very notion of determinism and its psychological consequences. But how might determinism come about in a cultural rationality?

Determinism arises out of a search for universals (Fromm 1991), which (I believe) are sought by people who harbour anxieties that foster the need for a solid 'thing' to psychologically grasp hold of. Alternatively people seek to legitimate their social and political actions by appealing to an absolute, universal authority that is supposed to give licence to such actions. When no solid, unmoving authority is discovered in Nature (because none exists) it must then be invented. The invention is made possible by the capacity of reason (i.e. language and its rules) to prove its own internal coherence. This formula is then legitimated by a culture that enshrines reason as an unchallenged and unquestionable path to authority. The problem is that this absolute authority can never be *discovered*, as all of reality is in a constant state of flux¹⁵. For even the biggest mountains erode, even the brightest stars explode. This is why a universal foundation of permanence must be *invented*. When such an authority is invented the culture moves away from the possibility of ecological sustainability. This is because the source of ethical instruction, the standard of 'right' behaviour, is grounded in an invented authority, instead of something real like the landscape itself.

This normative authority may take many different forms in different cultures. Examples include the Calvinistic conception of the Christian God (see Kenney 1991), fixed natural laws (Bhaskar 1978), the nation state (as it was in Nazi Germany), enlightened self interest within a free market (Fromm 1991), or the Fijian chiefly system (as it is currently portrayed). Each of these expressions of an imaginary authority amounts to an all powerful agency outside ourselves to which we must all submit as deterministic

¹⁵I do not completely discard the idea of permanence but redefine it in terms of theology where the permanence is a constantly evolving dynamic that underlies the adaptive process and forms the basis for aptness, compatibility and hence evolution and sustainability. It is not a fixed 'law' of Nature but a constantly moving transcendental (as opposed to transcendent) undercurrent of Nature. I will endeavour to explain this in chapter 8.

fundamentalists. It asks us to forgo our own creativity and free will, where the locus of meaning and creativity in our lives is vested in the higher authority. Fundamentalism of this form is common amongst those enslaved to deterministic systems such as Calvinism, capitalism, Stalinist communism, Nazism, and other forms of totalitarianism (see Fromm 1991).

This submission to an 'other' immediately alienates the individual as an object (when all individuals are really subjects), and negates the innate indeterminacy and creativity of all beings. It also arouses a psychological condition of perpetual alienation from ones true nature as a human being leading to anxiety. Such a condition of anxiety becomes ingrained in such deterministic societies where it feels safe to maintain this determinism. Fromm (1991) calls this the 'fear of freedom'. But any tramper knows that if you carry a burden for long enough you forget that it is there. It becomes safe to keep the burden, especially as your apparent meaning of life depends on it. But in casting off such a burden people can begin to feel that true freedom is also safe. Modern society is a long way from feeling such freedom, simply because a plethora of obstructions stand in the way.

The canonization of reason as the only legitimate form of discourse in a modern culture has rendered illegitimate all meaning in ritual, rites of passage, instincts and intuition, which have all been neglected in modernity. Where they are able to survive they do so in spite of modernity not because of it. The expression of this creativity in a modern culture is relegated to the subordinated realm of art. This domain of art is subordinated to that of science which is supposed to be more 'real' and have more authority than 'mere art'. Modern culture has lost sight of the value of art. But the challenge, as articulated in the romantic movement in paintings of Cezanne, Runge, Carus, Friedrich, Gauguin, and Baudelaire; the poetry of Goethe, George, Blake, Wordsworth, and Whitman; and the philosophy of Schopenhauer, Nietzsche, Thoreau, Heidegger, and Foucault: is to cast off the shackles of modernist predetermination and re-learn to recreate our culture as a work of art.

I believe that this challenge can be met without having to discard Western cultural heritage. Indeed, it is precisely the non-modern West that is capable of engaging in meaningful discourse with pre-modern Fiji in the kind of partnership promised in the 1874 British Deed of Cession. This does not require any retrogressive step backwards through history in the opposite direction of 'progress' as the idea of 'progress' itself is a fallacy concocted in the French Enlightenment as an excuse for *laissez-faire*. Instead

it asks for a re-legitimation of the unknown and the unknowable, an acceptance of mystery, a mystery which is enchanting. The task of this generation and those to follow is to uncover the hidden meanings from within the deeper folds of Western and Fijian culture and with it the means of making ecological sustainability possible. To achieve this, determinism must first be overcome.

6.6.2 OVERCOMING DETERMINISM

Searching around the dark corners of language led people to discover its rules - logic, and claim that because they have found the source of linguistic coherence within their own language game, they think they have found the answer to the ultimate meaning of life. Logic becomes an all empowering authority, a court of justice, established for all eternity (see Whitehead 1929; Wittgenstein 1953; Heidegger 1992). Heidegger (1959) explains how the fundamental rule of scientific speech is logic, and anyone who speaks illogically is unscientific. However, as Heidegger points out, this only demonstrates that illogical language is not scientific; but scientific discourse is not the only way of speaking, and furthermore, a statement does not have to be scientific or logical in order to be true (especially if Nature, of which our statements refer to, is not organised according to logic). Speaking about nothing is a good example. To speak about nothing we are being illogical. But much of reality is not a thing (as all is interconnected), and hence much of reality is no-thing, nothing. To speak about this logically is impossible without conceptually destroying what it is you are speaking about. Logic began towards the end of the creative phase of Greek philosophy, when thinking was being conducted as a formal technique. "Logic arose in the curriculum of the Platonic-Aristotelian schools. Logic is an invention of school teachers, not of philosophers" (Heidegger 1959:121), and as such, logic "relieves us of the need for any troublesome inquiry into the essence of thinking" (ibid.:120).

The rules of logic and language appear to be fixed as one uses them in order to find them (it is thus a grand tautology). It is a cat that eats its own tail and then pronounces that the universe is nothing but cat. Most of Western metaphysics since Socrates has behaved quite similar to this metaphorical cat.

Once the rules of language are explored a little further it will eventually be discovered that the rules are indeed what they are - only the rules of language, and that they do have coherence and are hence logical. But this is followed by the discovery that the language and its rules are not necessarily connected in any way to the independent

coherence of reality outside language - e.g. the landscape. The first Western philosopher to come to this realisation and pronounce it as a victory for metaphysics was Nietzsche in the 19th century (see Nietzsche 1967, 1974; Pfeffer 1972; Simmel 1991; Vattimo 1988). He was later followed in the early 20th century by Heidegger and Wittgenstein, and subsequently by a host of postmodern philosophers such as Foucault, Derrida, and Lyotard for example.

When this discovery is made - that reason operates according to its own rules, and that these rules are relative (as opposed to absolute), the very foundations of epistemological determinism dissolve completely. One is then left in what may at first appear to be a meaningless quagmire of nihilism. Now, nihilism is not the end of the story (Pfeffer 1972). Nihilism at the level of language and reason (i.e. epistemology) only means that the slate of the normative world created by language is able to be wiped clean leaving nothing - no meaning. Once this is discovered, realised, and accepted, nihilism grabs you sternly by the collar, stares you in the face and shouts, "forget determinism!, forget any absolute unchanging authority!... throw it away!!". And if you do, and keep listening it will go on to say, reassuringly, "meaning can and does come from beyond language", but to attain it one must release one's tight grip on the rope of reason and determinism. Letting go, one is able to fall back to earth, pass through the linguistic silence of nihilism, and realise that the world is still there. The prickly feeling of the grass is still at the back of your neck as you lie there, even if you have stopped thinking. Descartes was wrong. "*Cognito ergo sum*" (I think, therefore I am) is not the foundation stone of human existence. He would have been better to have said "I think therefore I am letting language create my linguistic world" thus realising that we humans also exist when we are not thinking.

In this condition people are able to come to a vivid realisation that they can be at home in the world even when there is no solid or permanent authority. They also are able to discover the locus of their own creativity, as predetermination by an extra-human agency is gone. In the process people also realise that because they do have the capacity for indeterminate creative actions they are personally *responsible* for these actions (see Kenney 1991). The same goes for a culture. This sets a thorough-going mandate for taking ethics seriously.

The next task is to establish an appropriate form of ethics that does not slip back into determinism via universalism, predetermination, or a fixed steady state condition. Because, if the ethical prescription does this it will steer a human community back into

the folds of anxiety and the apparent need for its suppression. If this happens the culture moves once again away from the landscape, away from the possibility of an adaptive relationship, and away from the possibility of ecological sustainability. The cycle of determinism (grounded in the search for a universal authority) must remain broken. In keeping the cycle of determinism broken, a culture is able to sustain an adaptive relationship with the rest of the landscape because the source of ethical instruction is not some universal (invented) authority, but Nature in all its changing ways.

I argue that any deterministic rationality (including modernity) will be incapable of achieving ecological sustainability. However, one way of changing this is to explore the possibility of flux. Process rationality acknowledges constant change. The acknowledgement of constant change, in turn, dissolves the need to search for a solid (universal) foundation for truth and reason, as nothing is fixed and no fixed authority is possible. Discarding the need for inventing a universal deterministic authority dissolves the foundations of oppressive social and political structures that appeal to a totalising (universalistic) authority as a basis for their legitimation. This demonstrates why totalitarianism of any form cannot be legitimated in ethics.

Casting off the psychological need for a universal authority (by accepting mystery and process) also dissolves a major source of anxiety. In modernity this anxiety is constantly suppressed through control and manipulation (sometimes gained through science) which is necessary in order to vindicate the illusion of order and permanence. The overcoming of the source of this anxiety makes room for creativity in the vacuum left from the departure of predetermination, a predetermination grounded in universals (Zimmerman 1983; Foltz 1984; Kenney 1991). This creativity acknowledges indeterminacy and free will in all beings, thus enabling a re-enchantment of Nature, as indeterminacy allows mystery to be accepted as legitimate, and this mystery is enchanting. Nature is no longer seen as a thoroughly predictable and mundane Cartesian machine (chaos theory has helped to point us in this direction - see Percival 1991). Free will is then able to be balanced through the constraints of responsibilities via ethics, as we do have a choice in the matter and, therefore, are responsible for our creative actions.

Ethical instruction comes through moral intuition which is symbolically and metaphorically recreated in language, ritual and ceremony. This ethical formula is not fixed but, like the rest of Nature, is in a constant state of creative flux as it responds to the flux of the landscape. Ethical instruction comes from Nature where Nature expresses itself through language. This establishes the possibility for ecological sustainability

where a culture and the rest of the landscape are able to recreate themselves in an indeterminate dialectical relationship of mutual becoming.

6.7 ALTERNATIVES OR MORE OF THE SAME?

Calls for a change in the culture and rationality of modernity are not new. Indeed the forms of rationality celebrated in modernity have been argued against for far longer than modernity itself. In this sense the debate between Parmenides (permanence) and Heraclitus (flux) are still as relevant today as they were then. However, the stakes are even higher today as the consequences of a non-process rationality and the expression of its inherent flaws have been realised more in this century than ever before, particularly in the global environmental crisis we are now experiencing.

The call for a process form of rationality advocated in this thesis is not a call for a single form of this rationality but any rationality that arises in any landscape that is capable of authentically describing that landscape. This, of course, leaves the door wide open for many different forms of process rationality where different cultures express their own creativity in their own way in their own landscape. The ability to express an intuition of Nature in cultural discourse can only be captured in a society that sees the expression of intuition as a legitimate form of discourse. In this sense we can begin to understand what Heidegger was referring to when he suggested that what is questionable is sometimes worthy of thought, and what is unthinkable can sometimes be regarded as that which thinking is about (Mehta 1987). Similarly, for Snyder (1980) poetry walks that edge between what can be said and that which cannot be said, and where the words stop they point you in the direction of meanings the lie beyond words. Neuman (1959) shows the importance of art and ritual in their ability to foster the unconscious acceptance of biopsychic transformations in social life. If such a culture were practised in a Western context, then the works of people like Goethe, William Blake and Henry Thoreau would be taken seriously, not merely as entertainment, but as part of an ethical framework for decision making concerning the society's relationship with the rest of the landscape - such as resource use.

The modern environmental movement of recent decades has pointed to ecological flaws in modern Western ways of life revealed as externalities, environmental impacts, resource depletion and pollution for example. From this movement has arisen a call for radical changes in the relationship between humanity and the rest of Nature expressed in a variety of ways. This includes *inter alia* the promotion of ecological economics

(Geogescu-Roegen 1976; Meadows et al 1992; Perrings 1987; Daly 1973, 1989, 1991), building more ecological principles into modern culture (Botkin 1991; Ehrlich 1988; Odum 1989), protecting the environment through better management of natural resources (Watling and Chape 1992), a balancing of human needs and environmental protection within the existing global economic order (World Commission on Environment and Development 1986), changing the international economic order to free smaller economies from their position of subordination and exploitation (e.g. Weaver 1992c; and Rosenberg 1993), and a greener science (Wynne and Mayer 1993). All of these perspectives involve bold attempts of achieving something in the way of improvement in the light of the deepening global environmental crisis, but fail in one crucial way - they ignore the unsustainable character of modernity itself and *a fortiori* the rationality that supports it.

Wynne and Mayer (1993) for example provide a critique of modern reductionist science, its role in policy making and its hegemony in the legitimation of knowledge in modern societies. They argue for a greener culture of "good science" where science moves towards a more ecological outlook explicitly accommodating the interconnectedness of ecosystem functioning. They, like Habermas (1975) also ask that science steps down from its privileged position and engages in discourse with other non-scientific groups where the inherent uncertainties in science are acknowledged and other forms of rational discourse are legitimised.

I support this view but believe that it falls short of providing an adequate pre-requisite for ecological sustainability. Science *qua* knowledge must step down from its self constructed pedestal, but furthermore, knowledge *qua* discourse must make room for other narratives that are not necessarily mediated by knowledge. The expression of intuition through language and ritual are necessary parts of the process of a re-enchantment of Nature. This enables the landscape to be 'heard' by people and be capable of informing them of how to relate with the landscape in a harmonious fashion. This is particularly important if cross-cultural dialogue is able to be conducted meaningfully, as mentioned above. This does not suggest that we throw out the baby with the bath water, as science and knowledge are valuable in their own right as forms of discourse. They should merely engage in conversation *along side other narratives* so that a culture can be informed from as many perspectives as are relevant and possible. Truth can then be established in an on-going process of conversation and negotiation.

White (1967), for example, was an early proponent of the cultural causes of the current

environmental crisis who suggested that rationality, world view and religion are pivotal in the relationship between a human population and the rest of Nature. Schumacher (1973) commented on the environmental consequences of an economy based on Buddhism and suggested that such a cultural basis for economic life would foster ecological harmony more than modern Western economic structures are capable of achieving. Sponsel and Natadecha (1988) reflected on the consequences of capitalist modernity on the landscapes of Thailand suggesting that the cultural transformation from Buddhist to capitalist had dire repercussions for the landscapes of Thailand in general and the forests in particular. Whereas Schumacher, and Sponsel and Natanda explore the cultural ecology of a non-Christian religion, White searched within Christianity for an ecological ethical alternative capable of achieving the equivalent of ecological grace, and found examples in the theology of St Francis (Western) and Byzantine (Eastern European) Orthodoxy. The same can be said of the mysticism of Meister Eckhart and Thomas Aquinas.

It is worth exploring these perspectives further to see how this thesis might agree or disagree. Hallman (1991) discusses the deep ecological (i.e. process) undercurrents in Nietzsche's work of the 19th century (e.g. 'The Will To Power', 'Thus Spoke Zarathustra', 'Untimely Meditations', 'Daybreak', 'Beyond Good And Evil', 'The Anti-Christ') and how this compares with the views of White (1967) and others. Whereas, White sees the predominant threads of Western Christian thinking as an inherent problem with respect to environmental ethics, I focus on *any deterministic doctrine* grounded in the search for universals. For Nietzsche, such a deterministic doctrine was the dominant form of Christianity he experienced in Germany in the 19th century where, as Nietzsche's madman declared - "God is dead" and "all of us are his murderers" (Nietzsche 1974). As mentioned above, determinism can be expressed in many different forms, where a Christian form of predetermination such as Calvinism, is merely one manifestation out of many non-process, deterministic and unsustainable possibilities.

Similarly, process rationality can also be found in a variety of cultural forms. To brand Western Christianity as totally devoid of creative possibilities is to misinterpret much of Christian theology including the gospels themselves. A notable example is the Western Christian mysticism of Thomas Aquinas, Francis of Assisi, and Meister Eckhart (see Arraj 1988, Caputo 1978; Mockler 1976; and Cox 1986 for example).

Many regard Thomistic theology as an Aristotelianization of Christian thought (see Wiser 1983). More recent interpretations of Thomistic philosophy (e.g. Arraj 1988) as

a form of mysticism (as opposed to rationalism) have revealed that much of what Aquinas argues for is in complete agreement with Zen Buddhism which is process orientated. In particular, the role of intuition of Nature by means of an equivalent of *zazen* (a form of meditation) is seen as central to the creative realisation of an ethical basis for being in the world. For that matter, Pirsig (1974) could have written the same book but gave it the title of 'Thomistic Mysticism and the Art of Motorcycle Maintenance'. This interpretation is gravely at odds with many other views of Thomistic theology and demonstrates the necessity for the employment of a hermeneutic of caution when exploring any text. This is not in defence of Christianity, it can defend itself, as can any other religion or culture, provided they are understood according to the terms in which their authentic meaning was originally captured in language. And here I echo Heidegger (1975) with his call for caution when attempting to uncover the uncoveredness (i.e. truth) of meaning in symbols such as language.

In this chapter we have deconstructed determinism and left the door wide open for a creative response to the question of ethics in general and environmental ethics in particular. This remains a central issue in the quest for understanding ecological sustainability, as we have shown how and why a culture, any culture has a contingent morality. It can have a morality by default arising from determinism, where the moral consequences of determinism are unquestioned and accepted but acted out by the culture none the less. Because the basis of determinism is grounded in an appeal to a steady state condition, it immediately contradicts the actual indeterminate flux of Nature. This indeterminate character of Nature has been well documented in chaos theory (Davies 1991), quantum physics (Bohm 1980; Capra 1975; Davies and Brown 1986; Davies and Gribbon 1991), biology (Waddington 1977; Sheldrake 1981), and chemistry (Prigogine 1979) for example. But the question remains as to what ethical formula should inherit the vacuum left over following the departure of determinism. We need an ethics and we need to base this ethics on a set of foundations (if there are any) that will not obstruct the possibility of co-adaptation. The task of chapter 7 is to establish such a basis, and begin a process of ethical reconstruction.

CHAPTER 7 - AN ETHIC OF ECOLOGICAL SUSTAINABILITY

One cannot step twice into the same river, nor can one grasp any mortal substance in a stable condition, but it scatters and again gathers; it forms and dissolves, and approaches and departs

(Heraclitus Fragment LI)¹.

In the establishment of an ethic of ecological sustainability we are defining the means by which a culture (any culture) may recognise and employ a set of ecological instructions to live by. It is a process of uncovering an ecological wisdom. This wisdom is not only conceptual, it is also psychological, and existential. It is not sufficient to think in an ecologically benign fashion whilst acting contrary to such thought. Ecological wisdom must be able to come about even when we are not thinking. It is a way of life. People who achieve such a condition may never know it. But the landscape cares little for what we know or do not know. It merely responds to what we do. Our best intentions might be ecologically dysfunctional. I believe that this is precisely the condition of modernity. This being the case we need to deconstruct our best intentions.

7.1 ON THE BASIS OF ECOLOGICAL MORALITY

[W]e need a critique of all moral values; the intrinsic worth of these values must, first of all, be called in question. To this end we need to know the conditions from which those values have sprung and how they have developed and changed... The intrinsic worth of these values was taken for granted as a fact of experience and put beyond question... What if the 'good' [person] represents not nearly a retrogression but even a danger, a temptation, a narcotic drug enabling the present to live at the expense of the future?... What if morality should turn out to be the danger of dangers?... (Nietzsche 1956:155)

As mentioned previously, once ethics is taken seriously we must establish an appropriate ethical formula capable of delivering ecological sustainability. Such a formula must steer clear from even the seeds of determinism and the oppression it leads to. In this section I explore the basis for ethics which will lead to the possibility of a bioregional narrative as a means of reciting the autobiography of the landscape and hence deliver ecological sustainability.

¹Cited in Kahn (1979).

The landscape engages in a relationship with all of the human and non-human individuals that make up the biological dimension of place. The actions of one individual may be cancelled out by another or be reinforced by another. But the end result is the product of the collective deeds of the human and non-human community. Goethe asserted, and I agree, that humanity is its deeds (Reed 1984; Kaufmann 1980a). This is not an appeal to some form of materialism, but instead acknowledges that, in spite of our best intentions we are what we are through our actions. This is not all that we are, as the non-material is also real.

In other words, the landscape cannot read your mind. If you have kind thoughts towards the landscape but still abuse it you cannot claim to be living in an ecologically sustainable relationship. And just like the man who says "I love you" as he beats his wife, the actions belie the words which do not reflect anything real. They become empty husks with no kernel, and I believe that a great deal of environmentalism is of this form.

The difference lies in the meaning behind words in language and the actions that result. But it is also true that our deeds can result from outside language. For example, a culture may be engaging in an ecologically sustainable lifestyle but have never heard of the term "ecological sustainability" or anything with a similar meaning in their language. Also, language does not send our digestive system into action and yet one of the by-products of this process is flushed down the toilet every day - and hence, engages in a physical relationship with the landscape. Conversely, our economy (in modern society) is a normative system of exchange that does result from thinking and language. It is planned. It does not always go according to plan, testimony to the abysmal failure of the free market to deliver the goods of plenty it has been promising for the last three centuries. But it is planned all the same. The question remains as to whether a planned ethical system, grounded in cognitive understanding and logic is the road to take for ethics, or whether the unplanned one is better. I suggest, and hope to make clear in the following pages, that the answer should be a combination of both, but more of that later.

Another question needs to be asked: can environmental ethics be separated from other forms of morality, or is environmental ethics simply a flavour in an holistic moral soup. In previous chapters I have asserted that environmental concerns cannot be separated from those supposedly outside the environmental domain. This is because ecological sustainability is about the relationship between humanity and the rest of Nature in a particular landscape. This refers to the *entire* relationship, encompassing all forms of resource use, the production of wastes, the physical impacts of people and so on and so

fourth. For this reason developing an appropriate basis for environmental ethics cannot be separated from ethics in general, even down to the ethics of interpersonal relations within a human community.

In the process of uncovering such an ethical prescription in the following chapters, I will chart a course through the domain of culture, metaphysics, and a post-metaphysical sphere. The notion of sustainability as the 'autobiography of the landscape', by means of a 'bioregional narrative', precipitates out of this theoretical exercise. The latter term was put forward by Cheney (1989), whereas the former is my own. Both of these notions conceptually embody a great many, seemingly incompatible, conceptual fields. These include, for example, linguistics, intuition, perception, logic, psychology, art, science, ontology, epistemology, and mythology.

7.1.1 THE PRIMORDIAL DIMENSION OF LANGUAGE

A way of life in a landscape is influenced by opportunities and constraints to human activities. As mentioned above, these human activities are motivated in a variety of ways including active conceptual planning (executed through language), and passive doing in the absence of any cognitive plan as such (outside language). So, language is all important for culture, although culture is also more than this. The language ingredient influences the way of life of a particular human community in a number of ways. One significant way is that it furnishes such a community with a set of opportunities and constraints quite different from non-cultural animals. These opportunities and constraints are those given by symbolic language.

Science uses a symbolic language and is, thereby, a cultural activity. The practice of science is underwritten by metaphysics. But metaphysics? What might this be and why might it be important for purposes of coming to understand ecological sustainability? Metaphysics is thinking. It is a type of thinking about reality. It questions the structure of reality within and beyond our sensibilities. What must reality be like? In asking questions such as this we are thinking. We are using a human faculty to do something - to think. Now the relationship between thinking and that which thinking is about is an important one. It is somewhat like the relationship between a camera (subject) and the thing to be photographed (object). Photographers know very well that different lenses and filters make different photographs even if the object being photographed does not change. The same is true for thinking about the world around us. Employ a particular standard of rationality and we are putting on a filter. Discard it for another and we have

another rational filter. What we 'see' is different even if the object which is 'looked at' remains unchanged. The way we think helps to shape our world, as all of the objects we 'see' are coloured by the way we do the 'seeing'.

But thinking - what is this made of? Kant discovered two types of knowledge *a priori* and *a posteriori*. Heidegger discovered two types of thinking primordial and fallen. They are not the same as Kant's discovery but when used together help to explain what thinking is about. Another personality is also helpful here - Wittgenstein. Wittgenstein showed Western philosophy the way to understanding the relationship between linguistics and logic, between language and the world we create for ourselves through language. He introduced the concept of the language game which is language working to a set of rules (Wittgenstein 1953).

As mentioned in chapter 6 thinking and language are very closely related, sometimes completely interdependent. Sometimes but not always. When thinking is happening according to the rules of linguistic coherence it is the language game operating in an internally coherent fashion. It is grounded in the internal rules of language - derivative of those rules. This form of thinking leads the way to *a priori* knowledge which happens by deduction from linguistic predicates and their meanings. For example, all people are mortal; Bob Dylan is a person: Bob Dylan is mortal. This is deductive reasoning using linguistic predicates in the absence of ever having met Bob Dylan. It is *a priori*. When thinking is happening independently of the rules of language it can be grounded in experiences outside those rules - primordial. This is what Heidegger in his latter works means by the word 'thinking' (see Halliburton 1981; Kockelmans 1972; Dreyfus 1987; Dostal 1993). It is necessarily *a posteriori* in character. These two types of thinking are really two types of language, particularly in terms of the source of their inspiration and coherence.

Now, metaphysics employs language in order to make sense of reality for humans. It is not merely entertaining to establish what reality might be like, it is essential for a culture that wishes to live in a landscape, and *a fortiori* a culture that wishes to do this in an ecologically sustainable fashion. For cultural life to be ecologically sustainable it must live with the ever changing process of the landscape. Because culture is recreated through language it is all important that the language used and its rules do not contradict the ecological processes going on in and around that human community. If it does then the culture will exist in a contradictory relationship with the landscape, and hence be unable to establish a compatibility, an aptness. The relationship will not be adaptive and

cannot be ecologically sustainable.

For ecological sustainability to be possible a culture must have a linguistic capacity for *moving with* the landscape. This linguistic capacity for on-going cultural adaptation must be ingrained in the language game, in the rationality, in the thought patterns of that human community. But how might this be achieved? This is where Heidegger's differentiation between primordial and fallen language becomes crucial. I mentioned this in chapter 6 but elaborate on it here to show the links this theory of thought and language has with fundamental ontological assertions to be presented below. Primordial language comes through real experiences outside the rules of language. It is empirical but not necessarily logical (as logic is merely the internal rules of language). It is these experiences, able to be captured in language that give a culture the possibility of becoming ecologically sustainable.

But the question might then be asked - "surely if logic is only the rules of language then no absolute truth is possible and hence no *absolute* true condition of ecological sustainability?" This is correct. Truth is perspectivistic - not absolute. But this is not to say that truth cannot evolve with the landscape as well and hence remain true yet constantly changing. How can this be? What is truth? Truth is a fiction that lies on the other side of the coin that reads 'false'. I say 'fiction' but do not mean this to be interpreted as 'wrong'. Fiction simply acknowledges that it can only be, at best, an interpretation. This is because truth defined in language is only that - language. 'Truth' that arises from beyond language is something quite different, and I believe is more real than the linguistic form.

The linguistic form can be the same as the 'truth' arising from outside language, but this is dependant on that way language is used in a culture. If a culture uses primordial language it is capable of moving with the landscape even if and when the landscape changes. The 'truth' so defined primordially moves also. This is a 'truth' beyond true and false, beyond fact and fiction, beyond the rules of language. I will call it 'aptness'. It is apt and hence adaptive. It is neither true nor false - it just is or it isn't, it occurs or it doesn't. When it occurs ecological sustainability becomes possible. When it is not able to occur ecological sustainability is positively obstructed. How is it obstructed? - when a culture does not employ primordial language as the basis for its rationality and thinking. Modernity definitely does not do this because modernity has relegated irrational thinking to the dunces corner. But primordial language is often irrational as it does not necessarily operate according to the rules of language.

Such language, and such forms of narrative can be called post-metaphysical, as they leave metaphysics behind. Wittgenstein helps to open the door to a post-metaphysical epistemology. For Wittgenstein, this non-rational 'knowledge' is attainable through art where we are able to apprehend the world *sub specie aeterni* (see Murdoch 1993). In this sense aesthetics and ethics are seen to co-inhabit the same realm beyond the reach of language, and are thereby transcendental (Wittgenstein 1922).

The rules of language and the structure of the language game can arise out of primordial language but if and only if the primordial aspect is fostered in that culture. How is this achieved - by experiencing the landscape vividly with perception cleansed of the grit and grime of accumulated norms. Such norms include the rules of language - logic. Experience the landscape - don't think about it! This is how it can be achieved by any culture, as any culture is capable of turning language off for a while, and this is how it is and has been achieved in cultures around the world. But we moderns will find this very difficult to come to terms with as we have inherited a form of thinking and a language game that positively obstructs it. This is because our language game is dominated by universalist discourses grounded in the absolute primacy of reason, and has been in this unfortunate condition ever since Socrates and Euripides. But how can illogical, primordial language be shown to have legitimacy? - through nihilism.

Anaxagoras urged Western culture to believe that in the beginning all things were mixed together in chaos and then reason came and introduced order (Nietzsche 1956). What Anaxagoras failed to comprehend was the possibility and desirability of a cultural formula arising out of the coalescence of both reason *and* irrational creativity. This realisation had been made before him by Heraclitus who expressed poetically a dialectical world view encompassing a synergy of reason and intuition² (Needleman and Appelbaum 1990; Kahn 1977). The point behind this diversion into thought and intuition

²It is not surprising that much of the criticism that Heraclitus received came about as a result of misunderstandings rather than from genuine and constructive disagreements. For example, Heraclitus chose fire as a metaphorical symbol that expresses his dialectical views concerning the constant flux of reality. Theophrastus (one of the first natural philosophers) was one among many who mistook this for a theory of material monism - where all of material reality is derived from fire (Kahn 1979), thus placing Heraclitus in the scientific hall of fame as a prize idiot. But it is these very misunderstandings that set Western thought (as opposed to Western feelings, experiences, and intuition) down a wrong path, a path the West is still confidently walking. I will expand upon this line of thought in a chapter 7 when we come to the process of deconstruction proper. I merely introduce such thoughts here by way of introduction, so don't be too concerned if they are difficult to penetrate.

and their differences relate to the opportunities and constraints a culture may have in acting out an existence in a landscape. Constraints to human cultural activity can come from the *outside* where the landscape places restrictions on cultural possibilities. For example, a fishing culture is unlikely to flourish in the dry desert salt pans of Australia's lake Eyre. But constraints to cultural activity can and do come about through *internal* checks and balances such as rationality, world view, language, and ethics. No culture is free from such internal influences because all cultures *qua* culture employ symbolic language, which gives its members a cognitive map of the world to navigate with. The map is that of language and through language the culturally contingent world comes into being for people in that culture (Whorf 1956).

This must not be confused with any notion of an objective world or reality outside the relativism of language. I refer to the 'world' as a subjective, contingent, perspectivistic, relative condition. In contradistinction to this I use the word 'reality' or 'Nature' when referring to that which lies within and beyond the world of language. If seen in this light we can begin to make more sense of mythologies such as: "In the beginning was the Word [logos; language] and the Word was with God [the underlying essence of Nature]...all things [a 'thing' is a linguistic construct] were made through him³ [language gives 'things' names and thus creates them for the conscious linguistic 'world'] (John 1:1). The same metaphorical story relating the role of language in the 'creation' of the conscious linguistic world is seen in Buddhism, where according to Nan-ch'uan "During the period...before the *world* was manifested there were no names. The moment the Buddha arrives in the *world* there are names and so we clutch hold of forms" (my emphasis, cited in Watts 1957). Similarly in Taoism we have at the opening of the *Tao Te Ching* "The nameless is the origin of heaven and earth; Naming is the mother of ten thousand things" (cited in Watts 1957).

Ecological sustainability is a cultural phenomenon. It is not the fault of the landscape that the people of the Vunivia catchment (and Fiji generally) are not leading an ecological sustainable existence. Blaming hurricanes for smashing up an otherwise sustainable selective logging operation is no excuse. What happened to the natural forest that made it so vulnerable to hurricane damage in the first place? Surely hurricanes are part of Nature and should be lived *with* if ecological sustainability is able to unfold. The onus is on humanity to live *with* the rest of Nature - not the other way around as it is in modernity. Because it is humanity's responsibility to recreate a sustainable life in a

³'Him' is an unfortunate masculine metaphor that denotes a gender free entity.

landscape, we must investigate the various obstructions to responsibility that have been thrown into the path of sustainability.

The basic underpinnings of the dominant Western genealogy of morals (which greatly influence culture in Fiji) lie in the common sense and philosophical ontology (theories about the structure and nature of reality) of what has become modern culture. The basic ingredients include atomism (reality is made up of autonomous 'bits'), a non-human transcendent creative agency (or no creativity in the mechanistic model), and the assumption of underlying permanence. Nietzsche thrusts a cautionary note before us on the question of the Western world view. He tells us that the Western culture "has become mendacious and false down to its most fundamental instincts - to the point of worshipping the *opposite* values of those which alone would guarantee its health, its future, the lofty *right* to its future" (Nietzsche 1969:218, his emphasis).

I agree with Nietzsche here (up to a point) and reject all of the metaphysical assumptions described in the above paragraph. However, to set the context for a process of ethical deconstruction I will introduce the structures inherited in the modern world and indicate their shortcomings, and thus the need to deconstruct them and rebuild a different set.

7.2 MODERN MORAL PHILOSOPHY

Western moral philosophy has developed over many centuries with a heritage that reaches back to the Greeks, the Judeo-Christian tradition, and localised cultural influences. The variety of different traditions portray a great diversity of thought and tend to be divided into four principle groups - the deontologists, the utilitarians, the existentialists, and the mystics. The deontologists are well represented by Kant, the utilitarians by John Stuart Mill, the existentialists by Sartre. The mystics are in themselves a diverse group, but can be portrayed, for example, by Christians such as Thomas Aquinas, and Meister Eckhart.

The deontologists argue that morality must be based on a concept of absolute Duty, following a code of absolute moral law. A good example of this form of ethics can be seen in the works of Immanuel Kant (1724-1804). The Kantian system rests upon a number of underlying assumptions. Firstly, what is crucial and relevant to question of morality are the motives behind actions, not the actions themselves, or the consequences of motives (Sprigge 1988). Morality has a basis beyond the world of phenomena, in an

a priori domain which legislates good will by means of what Kant called the categorical imperative. As such, the basis of moral worth lies in an inner reasoning, on the notion of the innate good of Reason as a an absolute basis for moral law (Taylor 1976). Humans are regarded as autonomous beings, and by virtue of possessing the faculty of reason, humans (and not plants or other animals) are absolute autonomous ends (rather than means) (Billington 1988). Because the moral imperative is deduced from pure reason a morally 'good' end cannot justify the means, as the focus is on the motives rather than the consequences of human actions.

The utilitarians argue that the consequences of moral actions are more important than the motives. As such they can be called 'consequentialist' in orientation. The end can justify the means. Utilitarianism developed primarily as a philosophical basis for substantiating social reforms in England at the height of the industrial revolution. This ethical system served to legitimate the social and economic basis of 19th century English capitalism. As such, its focus was on defining a morality that was instrumental to securing the 'good life' as defined by the growing capitalist parliamentary movement that had succeeded in toppling the English monarchy in English revolution of the late 17th century (see Wiser 1983). The 'good life' was defined by the 'greatest happiness principle', originally coined by Presbyterian minister and philosopher Francis Hutcheson (1694-1747): "action is best, which procures greatest happiness" (Graham 1990). This idea was developed further by Jeremy Bentham (who was instrumental in organising institutional reforms in Victorian England), and later John Stuart Mill (Curtis 1981).

This moral system is founded on a number of assumptions which I will spend the balance of the thesis refuting. Such assumptions include the notion of natural law in relation to human nature, that all humans merely seek pleasure and avoid pain; the assumption that happiness can be quantitatively measured and ranked; that happiness is grounded in egocentric wants; and that all humans are autonomous individuals existing in an alienated field of competitive selection. The hedonistic conception of happiness is one of the major flaws, but worse still is its inherent instrumental character. Morality is to serve a socio-economic system under this framework. One of the biggest critics of this moral system in relation to human alienation was Marx (see Bottomore and Rubel 1967). I will not pursue a thorough critique of utilitarianism, but mention to highlight its dominance in capitalist countries, and its differences with the deontological framework of Kant. Noteworthy is its empirical standpoint as opposed to the *a priori* basis of Kant.

Rather than critique the existentialist and mystical camps here I will move on to defining an ethics of ecological sustainability in the light of the two traditions mentioned above. The reason for this stems from the fact that the ethical system to be developed in this thesis arises from a combination of (a form of) existentialism, neo-Marxism, feminism, and mysticism. The existentialism is influenced by Heidegger (as opposed to Sartre), the neo-Marxist aspect is inspired by Habermas, and Freire, the feminist aspect is prompted by de Beauvois, Merchant, Radford-Reuther, and Salleh, and the mystical component is influenced by Goethe, Schopenhauer, Heidegger, Eckhart, and Dogen. The various influences contribute to different aspects of the project of achieving ecological sustainability which will be explained in the chapter to follow.

Before I continue I wish to point out (as indicated earlier) that I believe that no moral system can *add anything* to a culture to make ecological sustainability come about. Instead, I believe that an ecologically benign moral system is one that *removes obstructions to sustainability*. This is, therefore, a negative approach to morality. I see it as being similar to sculpture, where an ecologically sustainable form comes about through what is removed rather than what is added. This is because I believe, and intend to demonstrate in the following chapters, that the capacity for living an ecologically sustainable life is within all of us, only we tend to bury it beneath many layers of cultural norms, that build up in ever thickening encrusted residues through the course of many centuries.

7.2.1 ETHICS AND REASON

I will now undertake a brief critique of the deontological perspective which, unlike utilitarianism, is capable of being critical of the existing social and economic system. One of the first modern Western philosophers to question the *basis* of modern moral philosophy was Schopenhauer (1788-1860) who scrutinised the metaphysical foundations of Kantian ethics. Goethe (who influenced Schopenhauer) also questioned the Western moral framework as portrayed by Kant and provides a coherent alternative in his plays, particularly Faust. Kant provides an ideal example for a critique of the foundations of deontological moral philosophy due to the fastidious and exhaustive employment of logic in the Kantian system. Kant was a logician *par excellence* and thereby bestowed moral philosophy with a logical *tour de force* in his ethical project.

One of the first things that Schopenhauer acknowledges about the foundations of Kantian ethics is that they are supremely logical. Although, as Whitehead (1929) has

since pointed out, it is the duty of a philosophical critic to witness the coherent nature of the argument to be critiqued, as it is not on the grounds of inconsistency that the argument is to be fought. The flaws of Kantian ethics lie not in Kant's lack of logical proficiency (of which he was well endowed), but in the ontological foundations upon which his very logical ethical system was built.

Kant's discovery of the *a priori* and *a posteriori* categories of knowledge were a great achievement. However, in his attempts at exegetical illustration of the efficacy of his philosophical system he stretches the story line too far. What Kant believed to be the ultimate foundation for all knowledge was 'pure reason' (Kant 1907), even though we need empirical *a posteriori* contributions (Oldroyd 1986). He also applied this system to the domain of ethics in his book - *Foundations of the Metaphysics of Morals* (see Kant 1991). It is the assumptions that underlie this work that Schopenhauer ruthlessly destroys in his alternative - *On the Basis of Morality*.

Schopenhauer's bone of contention was Kant's assumption that ethics can have a basis *a priori*, grounded in the categorical imperative⁴, and thus be employed according to the bed-rock of reason (see Hamlyn 1980). This stems from Kant's belief that morality is brought about by an inner reasoning. As Kant reflects - "Two things fill the mind with ever-increasing awe,...the starry heavens above me and the moral law within me" (cited in Billington 1988). If reason is solely responsible for the basis of good will, then the Kantian system is certainly robust. But should real experience, or illogical creative influences play even a small part in the *basis* of actions of moral value then the pillars of the Kantian system begin to crack. The starting point of Schopenhauer's argument lies in the relationship between virtue and the highest happiness. According to Schopenhauer the 'ancients' (read Greeks) saw virtue and the highest happiness as synonymous - eudaemonism. Much of Christian theology then changed the rules and gave the highest happiness the meaning of salvation, where virtue became a means to this end (see Schopenhauer 1965; Cheney 1989b). The problem arises (also in the case of Kant) in

⁴Kant's 'categorical imperative' is an unconditional law of universal instruction and can be contrasted with a 'hypothetical imperative'. The latter gives rise to 'prudential' reasoning which may not be universal in its application, but changes with regard to the context of the situation at hand. This was insufficient for defining the basis of morality according to Kant, who reduced hypothetical imperatives to a subordinate position in a moral hierarchy. The 'Ought' is an unconditional instruction grounded in an assumed metaphysical law.

establishing the criteria for what constitutes virtue as this salvational means⁵.

It remains questionable as to where the locus of legitimation for standards of virtue are to be found. Kant develops a philosophy of virtue in his *Critique of Practical Reason* (Kant 1956), establishing a bivalent taxonomy of genuine and adoptive virtue. The former is grounded in pure reason (hence *a priori*), forms the basis for the whole of morality, is the ground of the categorical imperative, and is regarded as masculine. The latter is comprised of feelings and intuitions (*a posteriori*), is the domain of hypothetical imperatives, and is regarded as feminine. Because of this, Kant rejects the empirical (*a posteriori*) aspect of knowledge as unworthy of forming the *basis* of ethics⁶. This stems also from Kant's proclamation that humans are rational beings. Schopenhauer, on the other hand argues strongly that humans are also irrational, and that this irrationality is part of what constitutes our humanness. Nietzsche, Heidegger, Whitehead, and Bergson would agree. As such, Schopenhauer asserts that the *a posteriori* empirical dimension (which is often irrational) is all important even for the basis of ethics. Schopenhauer argues that Kant takes the ontological strength of pure reason too far into what amounts to an act of spurious philosophical faith:

pure reason is, therefore, taken here not as an intellectual faculty of [humanity], though it is indeed nothing but this; on the contrary, it is hypostatized [by Kant] as something existing by itself, without any authority; and the deplorable philosophy of our times can serve as an illustration of the results of that most pernicious example and precedent (Schopenhauer 1965:63).

Arguments that dismantle the primacy of reason as a basis for good will can also be found in socio-biology. For example, Lorenz (1966) asserts that compassionate behaviour is an integral aspect of the human character, where "all specifically human faculties [including moral responsibility] could have evolved only in a being which, before the very dawn of conceptual thinking, lived in well organised communities" (ibid.:246). As such, compassionate behaviour would have been practised "aeons before

⁵It is interesting to note that some types of radical environmentalism including some forms of deep ecology work as salvational systems where the highest happiness (in this case biospherical egalitarianism) is mediated with a form of virtue (the deep ecology platform). What this does is establish a form of neo-stoicism where laws of virtue are installed as predicates to the salvational project (Cheney 1989b).

⁶In Kant's system the decision procedure for establishing the criteria of virtue is conducted through an appeal to *a priori* moral imperatives. The actual content of the moral decision has an empirical (*a posteriori*) component which is then judged by the *a priori* system (Kant 1956).

[humans] developed conceptual thought and became aware of the consequences of [their] actions" (ibid.:246). Similarly, Midgely (1978) has suggested that compassionate behaviour is also apparent in non-human animals such as whales and wolves where social bonds structure their lives. In support of this view Levy (1984) contends that emotions, including compassion, have a long evolutionary history and are not merely culturally contingent (i.e. some are innate). Wrangham (1987) also tells us that "shared behaviour can be viewed as part of an 'ancestral suit' which, though admittedly hypothetical, offers a logical starting point for behavioral reconstruction at any time during human evolution" (ibid.:5). Such views are also supported by Wilber (1983) who explores the evolution of the human consciousness.

In the domain of moral philosophy Taylor (1976) suggests that, according to a Kantian system of ethics (which is promulgated by reason), "To act immorally is to act contrary to Reason; it is to commit a sort of metaphysical blunder.." (ibid.:230). A more recent example of the unquestioned faith in logic in relation to ethics can be found in Raphael (1994). Intuitionism, as a participant in the game of ethics, has been side-lined by Raphael because apparently "it does not meet the needs of a philosophical theory, which should try to show connections and tie things up in a coherent system" (ibid.:55). It seems that in Raphael's view, the job of ethics is to serve philosophy as opposed to the other way around. Furthermore, intuitionism may indeed "tie things up in a coherent system" but that system may not be logic but Nature itself.

7.2.1 THE EMPIRICAL IMPERATIVE

In contrast to the views of Kant, an empirical imperative lies at the heart of Schopenhauer's ethical system. He uses this ground of experience for deconstructing the existing foundations of modern ethics and as the basis for a process of ethical reconstruction. He agrees that the Kantian system is logically robust, but shows how these logical foundations are disconnected with the real world. In a similar vein, Taylor (1976) suggests that -

Kant's system thus represents the rational, logical conclusion of the natural or true morality that was begotten by the Greeks, of the absolute distinction that they drew, and that [people] still want to draw. This is the distinction between what *is*... and what *ought* to be... No one has ever suggested that Kant was irrational... His greatest merit is that he was consistent. He showed [people] what sort of metaphysic of morals they must have - if they suppose that morality has any metaphysic, or logic and method of its own. He showed what morality must be if we suppose it to be something rational and at the same time non-empirical

or divorced from psychology, anthropology, or any science of [humanity]" (ibid.:231).

As such the Kantian style of ethics "may carry on its disputations and make a show in the lecture halls, but real life will make it an object of ridicule" (Schopenhauer 1965:121). Billington (1988) makes a similar comment: "The argument that moral issues can be resolved in the court of reason and rationality seems to be falsified by the realities of the human situation...Some of the noblest acts in the history of human behaviour have been quite illogical" (ibid.:76).

Moral philosophy of this form (i.e. established on a purely *a priori* basis) becomes a pantomime for pedants, but contributes little or nothing to the project of ecological sustainability. This is because an environmental ethics capable of fostering ecological sustainability must be tied to the landscape, and not merely to a sophisticated system of rules of language that sits blind-folded in a corner, divorced from reality, playing with itself.

In this regard, personal experience of Nature is pronounced by Goethe's Faust as sure way to virtue in a personalised path to self discovery, of liberation, a way of wisdom:-

If only I might walk upon the mountaintops
In your beloved light [referring to the moon],
Soar with spirits through the mountain caverns,
Wander across the meadows in your twilight
And, cleansed of all these fumes of learning,
Wash myself sound again in your dews!
(Faust Part I:22)

What is needed is an ethics that falls into line with the constant flux of Nature in an ever-changing landscape. An ethics established only on reason implies a steady state somewhere (i.e. is normative to the core). But you will not find this anywhere in Nature. The employment of reason (corresponding to the rules of the language game) as the foundation for ethics, and hence 'correct behaviour', leads directly to a normative system and back to the plethora of anxieties that result. A normative basis for ethics is not adaptive as the landscape is constantly changing. The basis must be descriptive and evolutionary - hence the need for primordial language. This is because Nature, being so fond of insolently breaking our invented rules, defies our attempts to place it under the commanding voice of reason. Nature consistently ignores the categorical imperative, which is probably why Kant put humanity above the rest of Nature, where humans (and

not other beings) are the only absolute ends, by virtue of being endowed with the glory of reason. But I firmly believe that Kant was very wrong in this respect. We must learn or re-learn to *move with* the flow of Nature. This demands that we unmercifully smash the moral barriers between ourselves and other members of the landscape. We must find ourselves once again, in Nature.

Again from Faust:-

Alas, am I still stuck in this jail! [referring to the dominance of reason]
Dank godforsaken hole in the wall
Where even the dear light of Heaven
Breaks mournfully through painted glass;
(Faust, Part I:23)

Normative ethical systems lead to the need for manipulating Nature (including human society) into line with the normative ideal where non-human beings become mere means to our own ends. This asks that reality conform to our model. It sets up a projection of how the world ought to be (according to a model in our head) and then engineers an outcome deemed 'ethical' by the stoics that legitimate the language and rationality of modernity. This is what management does, and an ethical system set upon *a priori* foundations (such as that of Kant) serves to legitimate such management. This is what is so wrong with much of modern Western environmentalism. It is the height of self-righteous idolatry. And here I revisit Nietzsche's scathing attack introduced in chapter 2:

Your pride wants to impose your morality, your idea, on nature...you demand that she be nature "according to the Stoa," and you would like all existence to exist only after your own image....And some abysmal arrogance finally still inspires you with the insane hope that *because* you know how to tyrannize yourselves - Stoicism is self tyranny - nature, too, lets herself be tyrannized: is not the Stoa - a piece of nature? (Nietzsche 1973:15-16).

7.3 INTRODUCING THE BIOREGIONAL NARRATIVE

One way of establishing a conceptual framework for combining language, landscape and culture is through the concept of the bioregional narrative. This idea has been developed by Cheney (1989a; 1989b) as a means of providing a spatialized and contextual component into environmental ethics that recognises the centrality of language to the re-creation of culture in a particular place. I believe that the bioregional narrative idea presents a coherent framework for:-

- a. dismantling the humanity/Nature dualism,
- b. avoiding totalizing and universalistic vehicles of domination, and

- c. providing a theoretical template that enables a politics of difference⁷ to coalesce with a vivid landscape dimension in social discourse and cultural evolution through adaptation.

As shown above, a basis for social and cultural instruction must be capable of fostering cultural adaptation to landscape in such a way that it does not, inadvertently, carry seeds of domination and/or anxiety, and hence the downfall of its aims. Such domination, at the level of language, can be sustained through the reification of privileged⁸ discourses that colonise the minds of those it politically captures (Best and Kneller 1991). The political and linguistic alternative that has been richly developed in some forms of feminist and post-structuralist theory is that of a non-colonising, non-alienating discourse of difference (see Cheney 1989b; Young 1990; Phillips 1993). It is from this perspective that a cohesive critical viewing of environmental ethics is made possible in the search for sustainable ethical formulae.

A good example of the value of this non-normative, evolutionary approach can be seen in the debate between ecofeminism and deep ecology. Ecofeminist and postmodern theory has helped to pinpoint some problems in the otherwise robust ethical standpoint of deep ecology. The complaints of ecofeminism lie in the discovery of androcentric and totalizing tendencies in the ontological and epistemological canons of deep ecology (Salleh 1984; 1992; 1993). A postmodern view reinforces this by demonstrating the existence of a form of neo-stoicism as a subtext beneath the deep ecology platform (Cheney 1989b), which can lead to more radical criticism of deep ecology as a form of ecofascism (see Salleh 1992; Bessarab 1992).

In order to introduce the bioregional narrative concept I will first revisit the criteria for

⁷The politics of difference refers to the avoidance of universalist political discourse that is endemic in modernist theoretical frameworks. The recognition of particularism vis-a-vis the local situation is fostered in much postmodern philosophy. This issue becomes increasingly important when considering the way a social discourse such as ethics, must be capable of being adaptive to a particular real and unique landscape. This issue will be discussed further in chapter 7, and 9.

⁸A 'privileged' discourse is one that claims to possess universal coherence and thereby be capable of judging other discourses from its 'privileged' position. It will be discussed further in chapter 7.

an ecologically adaptive (and hence sustainable) culture. As mentioned above, language is an all important feature of culture. In introducing Heidegger's distinctions between fallen and primordial language I indicated the importance of the primordial component. This aspect is grounded in experience of the realm outside language - hence the landscape. For this reason it tends to be both poetic and esoteric. It is esoteric as those who have not had similar experiences will find it difficult or impossible to understand the meaning of statements generated from such experiences. A Zen koan works in a similar fashion, where a question (the koan) is put to the zen student by the master. The question cannot be answered logically as it asks something from outside language. The correct answer will not be logical (see Watts 1957; Abe 1981).

For this ethical situation to succeed in a culture there are a number of conditions that must be met. These conditions tend to be obstructed or even overtly prevented in modern societies. They include having real experiences beyond the reach of language. These experiences happen to us all the time but tend to be ignored or suppressed.

Secondly, the decision making structures (personal, interpersonal, and large scale) need to be thoroughly democratic where no individual is prevented from gaining access to speech. Uncoerced, consensus orientated, democratic discourse is vital. This allows the experiences of all of the community to be shared and serve to guide the actions of a group. Not only must this discourse be democratic in its *style*, it must also be democratic in its *content*. Legitimate forms of discourse must include non-scientific knowledge, and also non-cognitive understanding (that come via primordial language and the experiences that precede it). Such political discourse becomes an on-going process of negotiation and conversation. 'Truths' are negotiated by the group. There must also be an effective framework for extending this democracy to the non-human world, where negotiation and conversation is conducted not with people but with the landscape.

Obstructions to these conditions are rife in modern culture. The reasons for this include the primacy given to reason (the rules of language) in social discourse, totalitarian political structures arising from universalism (such as the primacy of reason, or the primacy of one standard of rationality). Another problem is the lack of appropriate mythologies and rituals which foster authentic relationships conducted outside language. Modernity does have its own myths (see Campbell 1988), but what it lacks are myths that can foster ecological sustainability.

As mentioned above, I believe one of the most significant by-products of modern life

is anxiety. This is because the cultural equation of modernity is unauthentic. I use the term 'unauthentic' to refer to non-adaptive - hence incompatible with Nature. This incompatibility with Nature includes an incompatibility with our humanness because we are part of Nature. As such, unauthenticity is inhuman, alien, and alienating. Unauthenticity nurtures anxieties due to the *unconscious* realisation that what is happening is non-adaptive and incompatible with our humanness (see Heidegger 1962). This sense of 'wrong' is expressed as a psychological tension - anxiety. As such, one of the principle pass-times, and often the primary purpose, in people's lives in modern culture is the suppression of these anxieties. For example, there are the egotistic power games of domination, the mindless gathering of material wealth as a surrogate for happiness, escapism with the aid of things such as television, the leisure industry, holidays, sport⁹. Chemical addiction to alcohol, nicotine and other drugs is another example. These simply help to sweep the symptoms of a non-adaptive (and hence unsustainable) culture beneath the carpet as they do not confront the causes of the tensions (anxieties) that are motivating such a plethora of psychological diversions (Wilber 1983) Many different religions in many different cultures are attempting to help people realise the dynamics of this psychological process.

The suppression of these symptoms of psychological problems is not different in type from some forms of environmental management that sweep the symptoms of an unsustainable way of life beneath the carpet. Both forms of 'symptom control' serve to perpetuate the problem itself by allowing the culture to avoid confronting the causes of the problems at the source. And furthermore it is a common source - unauthenticity, where people are living behind the veil of Maya, in a deluded condition.

Before launching into the details of my creative alternative to modernity in relation to human ecology, I first wish to situate my work in a tradition that gives it a history. This also serves to demonstrate that what I am doing in this thesis is not anything new - it is not a new 'ism'. It has all been said before in many different places. My task is to help reveal the meanings behind such a tradition in the midst of so much misunderstanding. I present a genealogy of a difference.

7.4 A GENEALOGY OF A DIFFERENCE

⁹I do not suggest that these things are bad in themselves, only the way they are used in modern life as a means of suppressing anxieties through escaping from the world and distracting the consciousness from the unconscious tensions that are being perpetuated by such escapism.

The philosophical views that I develop in this thesis, which I regard as integral to the project of understanding ecological sustainability, are not put forward merely to antagonize those who might disagree with them. They come through personal reflection and experience where the mainstream views of many people around me ran a contradictory course. In spite of this difference, I refused to relent and thereby move back into the fold of the dominant social and cultural machinery of legitimation. This refusal has meant losing support from some (generally professional) circles, but gaining individuality and the fulfilment that comes with being true to oneself. As such, what you encounter in these pages is not a voice from a professional mask, but my very own deeply personal views which, like a trout, rises in my professional outlook breaking the surface right here where you read.

In my theoretical explorations I have come across many other thinkers who share similar views. In my wanderings in the theoretical wilderness I have managed to uncover a healthy, yet ostracised, tradition that has for centuries been banished to the periphery of Western thinking. What I present here is a brief assortment of forms of thought from this tradition of difference. It comprises a selected genealogy to my work (as not all are mentioned), and the various thinkers I refer to embody the ancestral figures of what is essentially a counter-cultural movement not afraid to stand and be counted. The cultural framework that this genealogy stands in opposition to is that which has culminated in modernity, but traces its roots back to ancient Greece.

7.4.1 APOLLO AND DIONYSUS

To begin, I wish to return to an allegory introduced in chapter 2 - a dialectical relationship that was acted out on the stage in Attic drama in the 5th and 6th century b.c. The two principal characters of concern are the two artistic embodiments of the spirit of Greek tragedy: Apollo and Dionysus. Dionysus, originating in Thrace and Phrygia, is the god of chaos, intuition and instinct, destruction and creativity, fertility and productivity, celebrated through intoxication and abandonment (Kenney 1991: Pfeffer 1972). Apollo, from Olympus, represents sublimity and form, reason, order, and serenity (Pfeffer 1972). Hinduism also has a similar couplet with Vishnu (corresponding to Apollo) and Shiva (Dionysus) (Campbell 1988).

The interplay of these two gods on the tragic stage encapsulated a metaphorical union between two opposites similar to the Taoist notion of yin and yang. Sustaining this dialectical relationship became expressed in the plays of Aeschylus and Sophocles,

which, according to Nietzsche reflected the height of ancient Greek culture (see Raphael 1959; Nietzsche 1956; Pfeffer 1972; Kenney 1991). This relationship does not give primacy of one god over the other but maintains their differing features in a dialectical interplay symbolic of the Greek world view at the time. This symbolic theatrical dynamic was not to last, as with the arrival of Socratic rationality in the wake of Anaxagoras, Parmenides and Democritus, the Greek world view was changing to one that rejected this dialectic and gave primacy to reason and order. This new cosmology was depicted in the plays of Euripides who was a contemporary of Socrates, and sought to capture this new rationality in drama.

Whereas Sophocles and Aeschylus express the dynamic and dialectical interplay between reason and instinct, Euripides on the other hand saw it as his duty to allow reason to triumph. For example, Anaxagoras told us that in the beginning all things were mixed together; then reason came and introduced order. As such Nietzsche tells us that:

even as Anaxagoras, with his concept of reason, seems like the first sober philosopher in a company of drunkards, so Euripides may have appeared to himself as the first rational maker of tragedy. Being of this opinion, Euripides had necessarily to reject his less rational peers [and as such] would never have endorsed Sophocles' statement about Aeschylus - that this poet was doing the right thing, but unconsciously; instead [Euripides] would have claimed that since Aeschylus created unconsciously he couldn't help doing the wrong thing (Nietzsche 1956: 81).

And so with Euripides, Apollo begins to take dominance on the stage of drama and in the process, sends the spirit of tragedy headlong to its death. And again from Nietzsche¹⁰ - "If the old tragedy was wrecked, aesthetic Socratism is to blame, and to the extent that the target of the innovators was the Dionysiac principal of the older art we may call Socrates the god's chief opponent..." (ibid.:82). The philosophical works of Socrates, Plato, Aristotle formed the foundations of modern Western rationality. Should this rationality be depicted in drama, Apollo would still be standing firmly in a dominant position on the stage.

It is interesting to note that the first lunar module to touch down on the moon was not called 'Dionysus'. And here there is something of a cosmic irony. Had Apollo not been so dominant since the 5th century b.c. Western culture might have spent its energies and resources on authentically enriching its quality of life, rather than blindly increasing the

¹⁰See Pfeffer (1972) and Tejera (1987) for an account of Nietzsche's views on Greek thought.

quantity of its dross. You see, it is the Apollian influence that has led Western culture to what it claims to be its greatest 'successes', but Apollo has also been there to deliver its greatest failures. Why Western culture thinks that it needs to venture into outer space is beyond me. I think it is because it has forgotten that there will always be a mysterious frontier right here on earth, right here in our own minds.

In my view Dionysus needs to be brought back to centre stage in order to set the dialectic back in motion - a balance between Apollo and Dionysus. This is not an iconoclastic Dionysian alternative. Instead what is sought is a new form of conceptual equality which emerges spontaneously from the dialectical conflicts and reconciliations of reason and intuition, chaos and order, knowledge and feeling, art and science, female and male.

7.4.2 GOETHE

The challenge to Apollian dominance in Western culture was taken up by many different thinkers who, by the nature of their understanding and passions, tend to be found within the realm of 'art'. The German Enlightenment of the late 18th century inspired *inter alia* by the philosophy of Rousseau and Spinoza, and the romantic art of many others, sought to recapture in mainstream Western culture the spirit of aesthetics and 'art'. The rise of Cartesian and Newtonian science and its flourishing in the French Enlightenment had stripped conceptions of reality of its mystery and beauty. Art was becoming exiled as an 'other' to the real world of objective science, economics and industrial technology, only to be objectified and placed upon the walls of aristocratic and bourgeois society as an aesthetic instrument. The active role of art in the life praxis of Western culture was thrown out, and it has become a mere appendage. Preminent among the Enlightenment thinkers that recognised the dire cultural consequences of the loss of an artistic spirit was Goethe (1749-1832).

Most well known as a poet, novelist and play-write, Goethe embodied an inspired challenge to the emerging paradigmatic undercurrents of modernity. His poetry, novels and plays acted as a platform from which to convey a serious message to European culture. This message included the dangers concerned with: a. bestowing primacy to reason over and above intuition, b. over-estimating the human ability to possess knowledge about reality, c. losing sight of the fluidity of reality, and d. the separation of humanity from the rest of Nature. The work which most cohesively captures this message is his life long project - *Faust*.

In his earlier works, traces of this artistic view of culture emerge in different contexts. For example, in his play *Iphigenie auf Tauris* Goethe reworks the Euripidean (5th century b.c.) plot so that Iphigenie (the Greek Princess of Artemis) is guided by feelings (rather than merely reason as is the case with Euripides) in her various decisions that determine her own fate. The message from the play stands closer to the thematic undercurrents of Aescylean drama which (according to Nietzsche) enhances the true spirit of tragedy and re-creates the dialectical essence of pre-Socratic Greek culture. According to Reed (1984:57) "Iphigenie traces the victory of humane actions over tragic possibilities".

Of central importance to the creative success of Goethe was his insistence of 'being himself', which included the landscape as an aspect of this self. In Nature he discovers his real roots in which he realises the continuity of himself *with* Nature. As such Goethe is not someone writing about Nature from the outside, but someone providing a vivid and creative description from within. In this regard he is echoed in the 19th century by Thoreau, Emerson, and Whitman across the Atlantic. Goethe emphasises in a number of different works the up-welling of creativity from within, which applies not only to artistic motivation but also moral inspiration as exemplified in *Iphigenie* and later *Faust*.

Blow at the sparks and try to breed
A fire out of piles of ashes!
Children and apes may think it great,
If that should titillate your gum,
But from heart to heart you will never create
If from your heart it does not come.

(*Faust*, lines 534-45)

On epistemology Goethe dismantles the dualism between fact and fiction arguing that the novel is both. Anything that assumes itself to be only fact is itself a double fiction. This theme was later taken up by Nietzsche who declared that facts are precisely what we do not have, as instead all knowledge is interpretation, perspectivistic - a fable (e.g. *The Will To Power*, *The Gay Science*). Such a view leads reason round in a grand tautological circle so that it proves itself to be logically consistent but not necessarily connected to Nature. This leads to the discovery of nihilism at the level of epistemology and forms the basis for theoretical deconstruction.

The theme of the coalescence of art and Nature is also developed by Goethe, particularly

in his theoretical excursions into the natural sciences. According to Reed (1984) Goethe's linking of art and Nature are more than mere coincidence as both comprise aspects of the overall unity of his thinking which focuses on Nature's 'truth' as aptness in necessity, and that of a work of art which connects with and represents such 'truth'. In a similar vein Cezanne has said that art "is a harmony parallel to Nature" where his task was to adapt impressionism to the task of expressing this point (Honour and Flemming 1982:545). For Goethe, existence within Nature and human artistic expression are influenced by the same creative forces (Kaufmann 1980a,b; Lange 1968). This idea is rekindled in the work of Nietzsche, and later Bergson, and Heidegger, and more recently in forms of postmodern thinking, aesthetic theory, deep ecology, and feminist theory. This notion of an underlying unity in Nature, surfacing in art and human creativity leaves the door open to an artistic theory of human evolution guided by moral intuition as a basis for ethical instruction. This idea is not inconsistent with the evolutionary processes of adaptive 'instruction' in the non-human living realm. Goethe also uncovers the connections between love, art and Nature as being more than metaphorical. This theme will be further developed in chapter 8.

On science Goethe presents one of the earliest metaphysical challenges to the emerging modern scientific paradigm which was being refined at the time by Kant, who was a contemporary of Goethe. Few people have recognised the coherence of Goethe's arguments against Cartesian, Newtonian, and Kantian views of reality and knowledge (Kaufman 1980a). Goethe begins with a rejection of atomism that can lead to the kind of ontological taxonomies developed by Aristotle, and later Kant. This view argues against the tendency of dividing up the world into fragments for purposes of categorisation which had been developed to great lengths by Linnaeus at the time with plant taxonomy. Goethe took seriously the terrain that lay on the taxonomic boundaries arguing for an acceptance of continuous variation. This view lends itself to challenges of the notion of the 'species' as a fixed ontological unit which instead shows it to be an epistemological convenience.

Such ideas ran against the surging tide of the scientific community which was at pains to firm up the foundations of its foundationalist epistemology, rooted in the assumptions of the primacy of reason going back to Socrates and the reification of Aristotelian and later Kantian categorisation. Because of this Goethe's scientific views were doomed to 'failure' in sociological terms notwithstanding their efficacy in relation to the fuzzy and fluid character of the real world and humanity's place in it. They can be seen as a modern example of Heraclitian rationality inspired by a very personalised experience of

Nature as was the case with Heraclitus. Noteworthy in Goethe's agreement with Heraclitus is his realisation of the importance of process rather than form, which led to a conception of science as the study of morphogenesis - the pattern of morphological development as a continuous process (Reed 1984).

Goethe insisted on an essential unity of humanity and the rest of Nature as mentioned above. As part of this project he set out to prove this by demonstrating (along with other scientists at the time) the existence of the inter-maxillary bone in the human skull, which, in its apparent absence, provided 'proof' of the higher position of humanity in God's creation. For Goethe this bone vestige provided the 'keystone' of humanity as it brings us back down to earth and places us among the other animals. For Goethe, soul and mind are also part of Nature (Kaufmann 1992). These views of an ontological unity in relation to humanity's place within Nature were partly influenced by the earlier philosophy of Spinoza (Vincent 1987) who even today provides inspiration for radical environmentalism such as deep ecology (e.g. Naess, Sessions, Devall). Spinoza, as interpreted by Goethe, argued for a transcendental conception of the divine as opposed to a transcendent one that required only unquestioning faith (Reed 1984). This recognised the possibility of intuitive (mystical) experiences of this divine presence to be accessible to people in life, in earthly existence. This brings the notion of the 'fall' in Christianity into question (Campbell 1986; 1988) where it is not a permanent loss, but a forgetfulness of what lies all around (Heidegger 1959). And as Thomas Aquinas suggests his version of the Gospels "The Kingdom of the Father [sic] is spread upon the earth and men [sic] do not see it" (Guillaumont et al 1959). It then falls into line with many Asian religious traditions that see the presencing of the divine as not only accessible to humanity but personally attainable in life (e.g. Buddhism, Hinduism, Taoism).

Like Bacon before him and Thoreau after him, Goethe emphasises the importance of experience of the world in the path to understanding it. But although sustaining an empiricist epistemology as I do, Goethe, Thoreau, and I, unlike Bacon, forego an empiricist, atomist ontology. As such, Nature must be apprehended as an experience of its *unity*, otherwise 'every separate thing is [in the book of Nature] only a dead letter' (Goethe 1784, cited in Reed 1984). Unlike Descartes who *invents* an *a priori* 'truth' and then exercises a plethora of rationalistic legitimations to defend it, Goethe *discovers* an *a posteriori* 'truth' and declares that it has efficacy above and beyond some abysmal arrogance that claims to be capable of knowing all of reality. This form of empiricism was - you guessed it - developed further by Nietzsche who scornfully lifted the age old

carpet of Western metaphysics only to discover a festering mass of sophisticated lies.

Some have prudently argued that Goethe's view of empiricism plunges into anthropocentrism (that nasty pestilence of the Western mind), but do so under the assumption that Goethe claims to be capable of capturing all of an objective reality by such a method (e.g. Reed 1984). Such a view arises out of a misunderstanding of what Goethe implied, as the world Goethe speaks of is a relative, subjective one, not a universal objective reality.

Goethe also planted seeds of feminist thought in some of his work, notably *Iphigenie auf Tauris*. Iphigenie rejects the world of male domination that maintained an on-going cycle of violence. Rather than break this cycle through a patriarchal model, she challenges the very structures of male domination itself, symbolising an ethical stance that takes leave of oppression, irrespective of its legitimation in philosophy.

As mentioned above the prize of Goethe's work must really be given to *Faust*, which has been called a "phantasmagoria for the theatre of the mind" by Reed (1984:67). Embodied in the character of Faust is Goethe's own quest for understanding which, in spite of academic prowess, left him still bereft of wisdom. In taking a less travelled path to wisdom Faust charts a course via beauty and experience coming in the process to the door of self realisation. Faust discloses his conviction that no experience could ever be so great that he would want to hold onto it for ever, and declares that if he ever wishes to so grasp at the present moment it be the moment that ends his life (see *Faust Part I*, act IV). And so instead of subscribing to a faith in the transcendence of an after-life, he brings transcendence to earth thus announcing the existence of an earthly paradise that need only be discovered by people (see Vincent 1987 for example). Its discovery comes about, not through reason and philosophy, but through the wisdom gained by attuning to one's place in Nature, by listening to intuition and letting such irrational 'knowledge' coalesce with reason in a *never ending dance*. And here, in the underlying message of *Faust*, you get to the core of what I am trying to convey in this thesis.

Because Goethe's philosophy, instilled in his poetry, novels and plays, represents such a complete narrative of the outer and inner world, I use it as a view-finder which is able to spot similar philosophical perspectives from within the Western philosophical tradition. Looking further back into the folds of this philosophical genealogy I find a number of gems shining brightly, otherwise buried beneath centuries of prejudice and misunderstanding. Such gems include Heraclitus, Jesus (as portrayed in some of the

Christian Gospels - particularly that of John), Thomas Aquinas, Francis of Assisi, Meister Eckhart, Cervantes, Shakespeare, Spinoza, Rousseau, Cezanne, Runge, Carus, Baudelaire, George. Many others have joined the ranks including Kierkegaard, Schopenhauer, Nietzsche, Thoreau, Whitman, Bergson, Whitehead, Jung, Wittgenstein, de Beauvoir, Heidegger, Blake, Joyce, Neumann, Fromm, Wordsworth, Waddington, Bohr, and Bohm. In more recent years (since the 1970s) there is Campbell, Sheldrake, Foucault, Derrida, Zohar, Capra, Prigogine, Griffin, Harding, King, Daly, Bhaskar, Woodiwiss, Freire, Habermas, Naess, Fox, Zimmerman, Cheney, Sellah, Radford-Reuther, Spretnak, Ross, Wilber, and Merchant. We have quite a genealogy here and quite a heritage to draw upon.

7.5 ON SOTERIOLOGY

One important aspect of this inquiry that has remained either absent, hidden, or insufficiently developed in most philosophical discourses in the West is that of the role of self-realisation in ontological understanding. Philosophy, theorising, and engaging in cultural life are all undertaken (whether tacitly or explicitly) within a framework of personal development. Heraclitus went in search of the world and found himself. Goethe did the same, as did Schopenhauer after him, Walt Whitman, William Blake, Wordsworth, Nietzsche, and Heidegger later still. The point behind this, is that I believe conceptual understanding to be inseparable from personal development in terms of self-realisation for the scientist, philosopher, manager, or the average person in the street. In analytical psychology it is called individuation (see Stevens 1990) - where the individual is able to develop and fulfil its potential as a human being. This process has been of particular interest to a number of philosophers over the last two centuries and was developed in a variety of ways by Kierkegaard, Schopenhauer, Nietzsche, Freud, Jung, Alder, Whitehead, Heidegger and Maslow, to name a few. It was also of central importance to some notable medieval philosophers and theologians such as Thomas Aquinas, Meister Eckhart, and Francis of Assisi. It underlies the teachings of Jesus, as well as Lao Tzu in China (Taoism), and Siddhartha Gautama (Buddha) in India, and forms a basic ingredient of Hinduism as well (see Wilber 1983; Ross 1993).

The importance of self-realisation as a practice, however, has not received the attention in the West I think it deserves. Asia, on the other hand, has made substantial advances in this direction where the emphasis is not so much on philosophy as knowledge, but on enlightenment as wisdom. Here it is recognised that conceptual and existential dimensions of understanding go hand in hand (see Heine 1985 for example). I introduce

this notion here in order to indicate that this genealogy of a difference extends into the mystical domain, due to the connections between self realisation and conceptual understanding. Conceptual understanding is, of course, essential for purposes of developing a theory of ecological sustainability. It is also a crucial aspect of a cultural praxiology, particularly in relation to the *practice* component of acting out an authentic adaptive social life in the landscape. Remember nihilism, you have to switch language off. You cannot think the unthinkable - you can only practice it. This is where philosophy ends and mythology and ritual begins.

It is at this point in the thesis that I finally take leave of the West, and head for 13th century Japan. The reason for this is only because I have not found in the West a suitable equivalent to what I see as a most satisfactory formula for completing the picture I am painting. Dogen (a Zen master of 13th century Japan) gets the final word. The entire line of inquiry leads us to a point at which Dogen can begin to make sense to us. We nearly got there with Heidegger, but I believe Dogen achieved what Heidegger pointed to but never fulfilled. This is similar to the way Heidegger achieved what Nietzsche pointed to but also failed to achieve. I do not suggest that Dogen is the only one, or even that an equivalent achievement has not been made in the West. Jesus achieved it too but did not write a thesis, and as such, I do not have access to his teachings apart from that written by others (e.g. the gospels).

7.5.1 A QUESTION OF BALANCE

I introduced the dialectic between Apollo and Dionysus above, in an attempt to portray a conceptual picture of what I am trying to achieve in this thesis viz. a reinstatement of the dialectical balance between these two aspects of culture. Many people may think that they have achieved a balanced condition when they explore the boundaries of their world and determine a middle path. This can take on the appearance of balance and harmony if they have indeed fully explored their world. The problem is, that many people have not fully explored their own world in terms of an exploration of the self and its relationship with the rest of reality so perceived by that self. For example, people who sustain an over-confidence in the capacity of reason to disclose their world, may explore the domain of reason and then define a middle path within that realm. This then appears to be a balanced path. It is a middle path. But is only in the middle of reason. It is a middle path through Apollo's house. But what about Dionysus? Is this aspect of reality to be left out of the picture?

If the Dionysian aspect were also explored then a middle path would be very different from one developed solely within Apollo's territory. The middle path would encompass a balance between a much broader world with much broader horizons. This is essentially what I am attempting to do in this piece of work - to show that the Dionysian aspect (feelings, intuition, instincts, chaos, creativity, destruction) is a legitimate and real aspect of the reality of cultural life; and, that a situation of balance must take into account this Dionysian component. I believe that modernity has left Dionysus out, and because of this the 'balance' so achieved by well meaning modernists is really quite substantially unbalanced. Such an unbalanced basis for cultural life prevents a condition of ecological sustainability from becoming possible.

7.6 DECONSTRUCTING THE CONCEPT OF NATURE

Science, speared on by it's energetic notions, approaches irresistibly those outer limits where the optimism implicit in logic must collapse... Every noble and gifted [person] has, before reaching the mid point of [their] career, come up against some point of the periphery that has decided [their] understanding... When the inquirer, having pushed to the circumference, realises how logic in that place curls about it self and bites its own tail, [they are] struck with a new kind of perception; a tragic perception, which requires, to make it tolerable, the remedy of art (Nietzsche 1956:95).

The modern project has tended to either do away with metaphysics and replace it with positivist science (which itself rests upon hidden metaphysical assumptions), or build epistemological frameworks upon explicit metaphysical assertions which provide the source of legitimation for the various forms of science that result. This discourse of legitimation - called philosophy, amounts to the establishment of a sophisticated set of logical predicates that supposedly furnish science with an ultimate and sturdy foundation. This exercise in metaphysical legitimation has been going on in the West at least since Socrates and particularly since Aristotle. However, maverick thinkers throughout the history of Western philosophy have pointed out that such a discourse of legitimation is not the end of the story.

Lyotard (1984:xxiii) states his conceptualisation of modern science in the following way:-

Science has always been in conflict with narratives. Judged by the yardstick of science, the majority of them prove to be fables. But to the extent that science does not restrict itself to stating useful regularities and seeks the truth, it is obliged to legitimate the rules of its own game. It then produces a discourse of legitimation.

Of fundamental interest in this debate is the question of what Nature really might be like. After all, if we do not have an adequate understanding of our concept of Nature how are we to talk coherently and confidently about ecological sustainability? Earlier this century Whitehead confronted this issue of the concept of Nature and its intellectual heritage in Western thought. Whitehead (1930:3) asks the question "What is Nature?" He goes on to say that:-

Nature is that which we observe in perception through the senses. In this sense-perception we are aware of something which is not thought and which is self-contained for thought. This property of being self-contained for thought lies at the base of natural science.

Whitehead makes it very clear that for him Nature is not merely that greenery outside the window. In relation to the issue of philosophical legitimation Whitehead clearly confronts the dominant Western scientific assumptions by questioning the project of science and natural philosophy since Aristotle. This he calls the "doctrine of matter" grounded upon a "metaphysics of substance" (Whitehead 1929). He suggests that this tradition can be best understood by tracing the genealogy of the Greek influences on what became modern science.

According to Whitehead, this influence of Greek philosophy on modern science had established a long misconception of the metaphysical status of Nature and natural entities. At the level of fundamental ontology Whitehead reflects on the questions that the ancient Greeks asked concerning the structure of Nature.

The answers which their genius gave to this question, and more particularly the concepts which underlay the terms in which they frame their answers, have determined the unquestioned presuppositions as to time, space and matter which have reigned in science (Whitehead 1930:17).

In this respect Whitehead is in much agreement with Nietzsche, Bergson and Heidegger. Concerning the ontology of substance Whitehead suggests that Aristotle's logic qua epistemology had profound consequences for his metaphysics qua ontology. In Aristotle's logic "the fundamental type of affirmative proposition is the attribution of a predicate to a subject". From this epistemological condition Aristotle carries over to the ontological realm his search for an ultimate substance which is not predicated by anything else. This fits squarely into the tradition of Democritus who invented the concept of the 'atom'. As such, Aristotle frames Nature in the image of his own logic. Whereas according to Whitehead (1930):-

The unquestioned acceptance of Aristotelian logic has led to an ingrained tendency to postulate a substratum for what ever is disclosed in sense awareness, namely, to look below what we are aware of for the substance in the sense of the 'concrete thing.' This is the origin of the modern scientific concept of matter and of ether, namely they are the outcome of this insistent habit of postulation (ibid.:18).

In response to Aristotelian predication Whitehead makes the comment "Personally, I think that predication is a muddled notion confusing many different relations under a convenient common form of speech." In this regard Whitehead seems to be in agreement with Wittgenstein who argued that philosophy is really a game of linguistic coherence (see Wittgenstein 1953). Such a concept of Nature as it developed in the Aristotelian tradition sets in motion a form of science (as a way of coming to have knowledge about Nature) that traces the "fortunes of matter in its adventure through space" (Whitehead 1930:20). Because of this Whitehead suggests that the origin of the doctrine of matter is the outcome of an uncritical acceptance of space and time as external conditions for natural existence.

Whitehead goes on to critique the scientific doctrine of substance and matter and its relationship with the Aristotelian concept of absolute time. Much of science and natural philosophy rests on the metaphysical assumption of elementary particles (see Hawking 1988). Similarly there is an unquestioned assumption that time is unitary and linear. Whitehead questions both of these assumptions, criticises them and establishes a creative alternative which I have found to be very useful in coming to understand ecological sustainability.

Accordingly "The philosophy of nature took a wrong turn treading its development by Greek thought. This erroneous presupposition is vague and fluid in Plato's *Timaeus* [but were then] hardened and made definite [by Aristotle]" thus producing a sophisticated yet faulty analysis of the relation between matter and the form of Nature as disclosed in sense awareness (Whitehead 1930:24-5). And consequently "when we remove the [flawed] metaphysics and start afresh on an unprejudiced survey of nature, a new light is thrown on many fundamental concepts which dominate science and guide the process of research" (ibid.:25).

So, we have come to the need to begin afresh in terms of the metaphysical basis for undertaking an inquiry into Nature and the place of humanity in Nature. But how might this new start be conducted? By passing through nihilism.

7.7 THE ACCOMPLISHMENT OF NIHILISM

In our adventures through a metaphysical landscape we come to the threshold of nihilism. Nietzsche brought us here (see Pfeffer 1972; Schutte 1984; and Vattimo 1988). Many people of many different cultures are too afraid to go any further as the linguistic silence of nihilism requires a casting off of any inclination to grasp hold of knowledge, reason and thinking. Anyone who meditates will know what it feels like to 'fall' into the realm of linguistic silence. No language, no thought, nothing - nothing? In a state of meditation¹¹ or linguistic silence one is still alive, only no thoughts distract the mind and hence no normative conscious condition is able to obstruct the flow of intuition and perception. So, it is not 'nothing' in the absolute sense, only 'nothing' in terms of knowledge and thinking. No-thing is able to exist for the consciousness as a 'thing' is a construction of language. In this nothingness the arbitrarily invented divisions between what human reason denotes as autonomous 'things' or 'objects' is dismantled, and so there is no 'thing' - nothing. Abyss, wilderness, silence.

Now, in the absence of thinking and the condition of 'no-thing', one is unable to sustain the linguistic concept of the individual self as an autonomous 'thing' either, as the individual self is another invention created by thinking and language. Only with the help of language and thinking can you ask the question "who is thinking?". But, Descartes was wrong - thinking is not the essence of humanness, as you are still there and thoroughly human even when you have managed to switch language and thinking off. What happens here is that one becomes unified with the rest of Nature as no arbitrary boundaries lie between the 'me' and the 'not me'. The individual self begins to realise its unity with the collective Self. This enables compassion to unfold spontaneously - compassion as empathy, feeling with the other, suffering with the other, joy with the other. The 'other' is no longer an absolute 'other', merely different aspects of the whole - Nature.

The whole is not merely the sum of the parts (mechanism), nor is the whole greater than the sum of the parts (stoicism) - the whole is in every part. This is a form of holism, but not that of modern systems theory. It is a holism that does not lead to fascism as stoic

¹¹I do not imply any religious overtones in the use of the term 'meditation'. Meditation is simply used here to refer to a therapeutic state of consciousness in the absence of thoughts. One does not need to be baptised or ordained as a monk to do this - anyone can, even atheists, scientists, and philosophers.

holism can do. It is a non-totalising form of holism that does not set up shop as a privileged discourse, as it does not claim to be able to dictate what the parts do from the point of view of the whole. Indeterminate creativity is in every part. The whole and part dialectically interpenetrate each other. The part is the whole, the whole is the part. Quantum physicist David Bohm has suggested the hologram as a metaphor that describes this condition (Bohm 1980).

Schopenhauer was one of the first modern Western philosophers to deconstruct the self, although Spinoza also did this earlier (see Simmel 1991; Delahunty 1985). As such Schopenhauer, and Spinoza before him, began the process of de-centring the ego-self in modern Western philosophy and ethics¹². These efforts also helped to bridge the gap between the philosophies of Asia and Europe, because in Asia the deconstruction of the self had been a prominent feature for many centuries. It is in this context that Schopenhauer developed his empirical (*a posteriori*) basis for morality as a creative alternative to the *a priori* system of Kant (see Schopenhauer 1965). Here Schopenhauer employs the notion of the 'will to life' as the basis for actions of moral worth, where that will is a collective will (Schopenhauer 1966). This is different from Nietzsche's individualistic notion of the will-to-power, which was inspired by Schopenhauer's work. According to Schopenhauer (and I agree), actions of moral worth are those that are not egotistic and selfish. This can only happen when the individualistic self is able to identify with the broader Self following the dissolution of the arbitrary boundaries between the 'me' and the 'not me'.

¹²Schopenhauer's philosophy was similar to forms of Hinduism that equated the individual in terms of the whole without acknowledging the uniqueness of the individual in itself. This was also a criticism levelled against Hinduism by Buddhism (which branched off from Hinduism). In Buddhism (particularly Zen) there needs to be an acknowledgement of both unity (interconnectedness) and identity. This is also true for much postmodern political theory. Hinduism stops short at the level of interconnectedness (as do some forms of Christianity). This amounts to a totalizing holism that Zen (and postmodernism) rejects. The apprehension of interconnectedness is merely the first stage in a Zen enlightenment, achieved through the negation of the autonomous self (employing nihilism in the form of meditation). The second stage comes as a result of a negation of the first negation (also by means of meditation), where the interconnected whole is also negated along with the autonomous self, leading to absolute Nothingness. This absolute Nothingness is an absolute affirmation of the existence of unity and identity (see Abe 1985). This process is very similar to the process of Christian enlightenment in Hegelian philosophy, although Hegel's double negation leads to absolute Spirit, as opposed to absolute Nothingness. Schopenhauer was a contemporary of Hegel and directed a lot of criticism towards Hegel's work.

Schopenhauer demonstrates the difference when referring to so called moral actions that are really the result of the egocentric seeking of spiritual rewards (perhaps in an after life) through compliance with codified canons of virtue (as is the case with much Christian morality), or the avoidance of penalty where a code of civil or religious law dictates what behaviour should or should not happen. For Schopenhauer it is the deeds of people in the absence of any law that really tests the moral worth of human actions. Following a law is merely the disempowered submission to an authority outside oneself. This is what happens in salvational ethical projects where the goal of the highest happiness (spiritual salvation in Christianity, biospherical egalitarianism in deep ecology) is mediated by virtue, and where that virtue is constructed on the basis of a set of invented predicates (such as Kant's categorical imperative) - stoicism (see Schopenhauer 1965; Campbell 1986, 1988; Cheney 1989b; Taylor 1976).

Using the symbolism of Apollo and Dionysus introduced earlier, a rational moral system (e.g. Kant), asks Apollo to determine the basis of moral actions. Apollo is the god of reason, order, serenity, and knowledge - (i.e. the cultural domain within language and thinking). Apollo will give an answer but that answer can only be the best Apollo is capable of. In other words, Apollo can only give a reasonable or logical answer to the question of ethics in general and environmental ethics in particular. One of the most sophisticated logical answer to this question was given by Kant who holds Apollo in the highest regard.

An alternative might be to ask Dionysus - the god of instincts, chaos, intuition, feeling, emotion (i.e. the cultural domain which lies beyond language and thinking). Dionysus will surely give a different answer, as it will not be logical. It will come from intuition, instinct, feelings and illogical or irrational emotions. Which of these two gods should we trust? Apollo or Dionysus? The chicken or the egg? Why should we have to choose between two things which in reality are inseparable? They are two sides of the same dialectical coin. So, like the coin, try spinning it and see what happens. Invite Dionysus and Apollo to dance a dialectical dance as Aeschylus and Sophocles did. Set the dialectic in motion. Do what Hegel would have done with two opposites - employ the thesis (Apollo) and the antithesis (Dionysus) and get a dialectical synthesis (the possibility of ecological sustainability). Take the colour blue (Apollo), and the colour yellow (Dionysus), spin them very fast, and... get green. The result is different from both parts in isolation. The green ethical alternative (a convenient environmental pun) is different from both the blue and the yellow. It is the dialectical product of the *never*

ending dance of Apollo and Dionysus on the metaphorical stage of life's drama.

Schopenhauer's creative alternative goes some of the way towards this. This is because he rightly argues for an empirical basis for ethics. Here feelings and emotions of compassion emerge in the wake of the dissolution of the individual self as an autonomous absolute. Compassion unfolds spontaneously through the identity of the self (being) with the 'other' (other people or the landscape) as kindred and interconnected aspects of the Self¹³. The emotional aspect (compassion) arises from the Dionysian component. The Apollean aspect (reason) precipitates out of real experiences of landscape¹⁴, where reality beyond the reach of language is able to enter the linguistic domain via primordial language. It is not recreated simply according to the previously constructed rules of language, but is recreated afresh each time. If it coincides with the rules of language then the rules of the language game are able to coincide with the landscape. Primordial language is inspired by real experiences of the landscape such as sitting quietly by the river and, as Heidegger suggests, it is really the landscape doing the talking *through people*, as opposed to people talking solely according to their own internally coherent rules of a normative language.

This is what makes ecological sustainability possible as the poetical autobiography of the landscape. The landscape speaks through people in this way and thus recites its autobiography through a human culture. Music can do the same - it is inspired by real, intangible experiences of or in a real place. This is where poetry comes from (Heidegger, Whitehead, Goethe, Campbell) and why Blyth (1942) argues that poetry and religion are identical, as poetry brings into language that which lies in the realm beyond

¹³The term *Self* with a capital 'S' refers to the interconnectedness of the individual with the rest of Nature once the false boundary between the 'me' and the 'not me' has been dissolved. This is a central theme in deep ecology (see Fox 1990). However, in this thesis I take the process of deconstructing the self a step further than deep ecology, and this forms the basis of my departure from that branch of eco-philosophy as I understand it. Rather than stopping with the identification of the self as *Self*, I also identify with the individual as a unique being in its own right as a unique part of the collective *Self*, that is seen to maintain its own locus of creativity. This is denoted by the term *Sself*. In the conception of self as *Self* the individual is subordinated to the greater whole, which amounts to a totalising cosmology and a stoic form of holism. Such a form of holism is totalitarian and is open to criticism as 'ecofascist'. This will be more fully explained in chapter 8 where this identity of the *Sself* becomes crucial. In this way my work is able to be differentiated from forms of Christianity, and Asian religions for example, and aligned with other specific movements within these traditions.

¹⁴'Landscape' as I use it includes the people of a place.

it. It is thereby transcendental, as it unites the conscious and the unconscious world, the world created by language and reality which is beyond our sensibilities. This is why art is so important for ecological sustainability. Art enables culture to be embellished by far more information concerning the ecosystem than is possible in language. Hence the postmodern call to recreate ourselves as a work of art.

The term 'poetical' can refer to at least three things: the poet, the poem, and the subject of the poem (Blyth 1942). Each come together in primordial language united by the experiences of the poet, and the symbolising of such experiences in language. A culture can be sustainable if it is poetical in all three aspects. The 'poem' is primordial language itself. The language of such a culture will be poetical. The subject of the poem (language) is the landscape. It will not necessarily be recognised as poetic to an outsider unless the outsider learns the language game, and more importantly, its meaning. Furthermore, such poetry is not merely a form of entertainment, an erotic exercise in aesthetics. It is simply the result of a bioregional narrative in action.

All this has been made possible by nihilism, and we can begin to see that nihilism is supremely useful. What else can nihilism do for us? Having accomplished nihilism, we are able to begin afresh, as Whitehead suggested, in developing a science in the absence of that family of prejudices that tied the shoelaces of modernity together and made it stumble about, smashing into Nature everywhere it went. Nihilism makes fundamental ontology come alive. And here we can continue with establishing the basis for a new science of ecological sustainability. However, one substantial stone remains unturned in our process of deconstruction. This is the question of time.

7.8 ON THE QUESTION OF TIME

Then the past is constant
The future alive in advance
The moment is eternity
(Goethe, cited in Vincent 1987)

What has 'time' got to do with the question of ecological sustainability in Fiji? I believe that it is of central importance. In chapter 2 I passed briefly over the general definition of ecological sustainability and suggested that in most cases there is an implicit or explicit reference to time together with the ontological assumptions relating to the nature of time.

Ecological sustainability means *sustaining* something. What does 'sustain' imply and what is this 'something'? Sustain means to "endure without yielding; withstand; to keep up or maintain; keep in effect or being" (Funk and Wagnalls 1975). To endure means to *continue to be*; to last. And to last is to remain in existence; to *continue to be*. Each of these definitions point to what appears to be a temporal condition, something like eternity - to *continue to be*. There is no horizon on the 'to be' aspect, only to continue to do so. But what is 'to be'? Shakespeare confronted us with this question many centuries ago, and it is not a trivial question. It points to being something, to having a character, an existence, to be. But, to be what? - Ecological. Ecological is that 'something'. But what is ecological? Ecology means that aspect of biology that addresses the *relationships* between organisms and their environment. 'Ecological' is the corresponding adjective. To be of this condition - existing in a *relationship*. But what kind of relationship? - A dialectical one. A dialectical relationship between a community and its environment - the landscape. The relationship is dialectical because it is holistic. The community and the landscape are different aspects of one and the same thing.

I earlier argued that reality (including Nature) is in a constant state of flux - process. So, this means that the dialectical relationship is one of mutual *becoming*, as the landscape and the community are constantly *becoming* something, constantly changing. But if this is to *continue to be*, there must be some condition that allows or fosters this continuation to be. There must be a compatibility, a harmony. Moreover, this compatibility must be constantly changing because all is in motion. This compatibility is an aptness, and so the relationship must be adaptive. Ecological sustainability is a continuous condition of adaptation. This adaptation is co-adaptation as the relationship is dialectical. Thus, ecological sustainability is a continuous condition of co-adaptation between a community and its environment, between people and the rest of the landscape. Continuous. Continuous adaptive change. On-going, sustainable. Never stopping. For ever. But how long is this? A week? A year? A hundred years? A million years? See, time comes straight back into the spotlight. How long is for ever? Can we get there by waiting? Can we get there through management - through stoicism? Is it the same as a very, very, very, very long time? Or perhaps it is not even temporal in the ordinary sense? Perhaps eternity is not merely different in degree from a very long time, but different in type? If it is different in type what might it be, and how might we understand it and employ it in a form of ethical praxis that might guide a culture to a condition of ecological sustainability?

The notion of a very, very, very long time is underwritten by a major assumption

concerning the nature of time itself. It implies that time is linear and unitary. This is not surprising considering that the notion of time has been this way, and remained largely unchallenged in Western culture since Aristotle. But is it valid and are there other possibilities, and are those possibilities relevant to the question of ecological sustainability? What I do in this section is question the common Western conception of time (which is part of the cultural baggage that modernity has carried to Fiji since the 19th century) in relation to the idea of ecological sustainability. In so doing I hope to demonstrate that ecological sustainability is not different in degree from our current actions but different in type. It points to substantial changes in our cultural being, in our ecological niche, our eco-culture.

We are already well on the way to a different standard of rationality with holism, process, perspectivism (in relation to truth), and the limitations of knowledge which leads to the acceptance of mystery (hence enchantment). The 'time' issue is merely one further step in essentially the same direction. In fact, according to Bergson, Whitehead, Heidegger, and Dogen, we need to fully address the question of time if we are to successfully achieve both an authentic ontological understanding of existence, and an authentic existential condition in itself. Both are central to my task as I seek to develop a theory, and point to a cultural practice. In addressing this question of time and its relation to Being I reach the conceptual apogee of this thesis. In so doing, I push to the most outer limits of this research and there, precisely there, find a domain where the last loose ends of all of the conceptual threads, that have been introduced in earlier chapters, are able to be tied together. I also show that historicism is not sensible and notions of linear progress are misguided. The question of time is also important in relation to the soteriological dimension of this theory of ecological sustainability. A personalised path to ontological understanding and existential belonging is crucially linked to people's conception of the time dimension.

7.8.1 TIME AND CULTURE

Time is known to me as *an abstraction* from the passage of events. The fundamental fact which renders this abstraction possible as the passing of nature, its development, its creative advance, and combined with this fact is another characteristic of nature, namely the extensive relation between events. These two facts, namely the passage of events and the extension of events over each other, are in my opinion the qualities from which time and space originate *as abstractions* (my emphasis, Whitehead 1930:34).

Time is an enigma. It appears to be so simple at first glance. Past, present, future, time

flies, what is the time? time to go, times up, begin, end, origin, now, never. How long is 'now'? When is never? Does the past and the future *exist*, or are they only words in language? We use notions of time in every day life largely on the assumption that we know what we are referring to, or that if we don't really know it doesn't matter anyway. But time? What can this be? And if it does exist, what is its character? Is it linear, unitary, able to be counted? Or is it non-linear, non-unitary and impossible to count. When we count time are discovering or inventing something? If time were ontologically linear and unitary then such counting would be a discovery. But should it not be linear or unitary then it can only be an invention. Nature, however, demands that we do not simply invent a way of life, but discover a way to be that does not contradict the flux of ecosystems, thus allowing such a way to endure.

A clue to the Fijian conception of time can perhaps be found in the way that time is used in common speech. *E na gaona e liu* (the time in front) refers to the past. *E na gaona mai muri* (the time coming from behind) refers to the future. Time is infused with human actions, and it is through such actions that time has meaning in Fijian life. If I were to travel to another village and you were to go before me, I would say to you something like *oiko sa lako e liu; au na qai muri yani* (you go first; I will follow behind you). The same statement helps to show why the past is in front of the future (which is coming up from behind). If you go in front you will get there before me and hence be in the 'past'. If I follow behind you I come after you in the relative 'future'. The meaning of time is infused with social life and actions. This is quite different from modern Western notions of time where it supposedly exists as a pre-existing linear treadmill that is constantly 'ticking over'. We walk out of the past and step into the future. Time flies. It flowing like a river for us in our modern rationality. It flows in spite of us and carried us to our ultimate death. But this notion of a flow of linear time, of its passing away, is not a universal notion. It is culturally contingent. It exists in modernity for example, but did not exist in pre-modern Fijian culture (and many other pre-modern cultures around the world).

Some would here argue that it is because of our very sophisticated conception of time that allows us to progress, because without linear time there is no possibility of a trajectory of improvement. Progress? Progress towards what? From where? Linear time underlies the modern assumption of historicism that sees evolution as a trajectory of progress and improvement. The past leads to the glorious present and the future will always be better, faster, bigger, and brighter, well... so the story goes. But in relation to the question of ecological sustainability, is the future always better? It certainly looks

as if the opposite were true. This century has seen more environmental destruction than perhaps all of previous human history put together. But time underlies it all, as time carries us to 'progress'. But what if progress were shown to be an invention, which it was - invented during the Enlightenment in the wake of the sophisticated historicism that gave capitalism a power injection and Marxism its inception. Both capitalism and Marxist socialism ride on this imaginary train of progress made possible with a linear and unitary conception of time. But I believe that such a conception of time is flawed, and also obstructs the possibility of ecological sustainability.

Time has fascinated philosophers in the West for centuries (see Zwart 1976; Wood 1982). The same is true in Asia. An interesting convergence of Western and Asian ideas can be seen in the work of Heidegger, and that of Dogen. Both maintain that the problematics of existence and ontological understanding are directly related to misconceptions concerning time (Heine 1985). They both disagree with the common sense views of most people in their respective cultures, and the philosophical views of the dominant metaphysical traditions they participated in. As such, they both establish a creative alternative that builds upon their own deconstruction of the views they reject. In spite of the very many similarities between their philosophies they do have some subtle yet significant differences which I will allude to later on.

Heidegger's first major work *Sein und Zeit* (Being and Time) set the foundations for much of his philosophical efforts throughout his life. The 20th century has also witnessed the philosophies of Bergson and Whitehead who both call into question the ontology of time as it is commonly depicted in Western metaphysics and in the common sense world view of Western culture. Significant in the works of both Whitehead and Bergson is their concentration, at least in part of their work, on biology. Bergson's philosophical project as applied to biology emerges with his conception of creative evolution and the *elan vital* (Bergson 1911). Whitehead, on the other hand, focused on the biological exegesis of process rationality and showed how this may work in the form of a science of process (Whitehead 1929, 1930). According to Heine (1985:164) "Whiteheadian process philosophy of the harmonious and dynamic universe of prehensive events and developing organisms perhaps poses a significant challenge to Heidegger's Dasein-oriented¹⁵ approach to the question of time."

¹⁵Dasein' is Heidegger's term for human being.

Rather than focus on their differences, however, I will instead concentrate on where they agree in regard to the dominant conception of time in the modern West¹⁶. Bergson, Whitehead and Heidegger each agree that the question of time is of crucial significance for ontological understanding in general. They also agree that the dominant Western notion of time (both philosophical and common sense) is flawed and leads to numerous metaphysical misconceptions which, in turn, furnishes science with a defective metaphysical basis. It also leads to historiography and historicism. On this note:

All historiography predicts what is to come from images of the past determined by the present. It systematically destroys the future and our historic relation to the advent of destiny. Historicism has today not only not been overcome, but is only now entering the stage of its expansion and entrenchment (Heidegger 1975:17).

Bergson, along with Heidegger and Whitehead each independently argue that time is not ontologically unitary. Bergson, for example, will not allow us to count units of time, as no two units of time can exist together for us to operate on them. In order to measure time (or think we are measuring it) we must first separate time into countable units. Bergson's contention is that in order to count time as the passing of ontological units we must first conceptually spatialize the temporal domain. Counting anything first implies that what is to be counted exists in space. This also implies a visual image in space of what it is we are counting. But for Bergson we dispose of the image after the first group of numbers have been counted (Lacey 1989).

Therefore, the act of counting presupposes the possibility of images even though it may not use the images each and every time. When we count things that are not the same (and theoretically cannot be regarded as units) we substitute the reality for symbols and then we count the symbols. For example, imagine a field where there is a horse, a cow, a goat, a dog, and a pig. To count them we must replace the reality of these animals (which are ontologically different), with categories which are epistemologically the same. We give them numbers and count them as: one, two, three, four, and five. The

¹⁶Because I am focusing my efforts of critique on modernity I will not bring Dogen in just here, as Dogen was not concerned with modernity as it did not exist in 13th century Japan. Dogen becomes important when we get to the reconstruction of a creative alternative.

unity we give them is the category 'animals', and as such we have counted five animals. What Bergson argues is that this concept of having counted five animals has only epistemological significance and no ontological credence. It can only be seen as a human convenience rather than theory about how the world really is.

Bergson also argues that the things that we count must exist together before we can count them and for this reason he denies that time is able to be counted without first imagining that time is spacial. Hence we do not count ontological units of time, instead we count only symbols which are made into units for counting. This can only have ontological significance if time is indeed ontologically unitary. This ontological assumption is rejected by Bergson, Whitehead and Heidegger.

The existing theory of time and space, as it was held in Newtonian physics prior to relativity theory, states that causal events occupy certain periods of absolute time and occupies certain positions of absolute space. For Newton all processes in the physical world are grounded in absolute linear time which has no connection with the material world. "Absolute, true, and mathematical time...of itself and by its own nature flows uniformly, without regard to anything external" (cited in Capra 1975:63).

Whitehead admits that this view is perfectly logical but logic is not where the problem lies. The problem is ontological. Whitehead approaches the question of time from a slightly different position concentrating on the ontological significance of space and its relation to time. For example:-

The germ of space is to be found in the mutual relations of events within the immediate general fact which is all nature now discernable, namely within the one event which is the totality of present nature. The relations of other events to this totality of nature form the texture of time (Whitehead 1930:53).

But, as Sachs declared:-

The real revolution that came with [the theory of relativity] was the abandonment of the idea that the space-time coordinate system has objective significance [ontologically]. Instead, relativity theory implies that the space and time coordinate are only the elements of a language that is used by an observer to describe [their] environment (Sachs 1969:53).

For Whitehead, Nature is a process where all we can do to have knowledge about it is to use language speculatively to express interrelationships within Nature. Accordingly:-

It is an exhibition of the process of nature that each duration happens and passes. The process of nature can also be termed the passage of nature. I definitely refrain... from using the word 'time', since the measurable time of science and of civilised life generally merely exhibits some aspects of the more fundamental fact of the passage of nature. I believe that in this doctrine I am in full accord with Bergson, though he uses 'time' for the fundamental fact which I call the 'passage of nature' (Whitehead 1930:54).

As such, Whitehead does not suggest that the 'river' of time is not flowing, only that it is not flowing prior to, or underneath the passage of Nature in terms of real events. We are told by Hegel, for example, that time and history is what humanity has invented in order to deal with the finality of death (see Wilber 1983). This can be understood once the illusory nature of the autonomous ego-self is apprehended. Only the autonomous individual ego-self dies. But if people learn to identify with a greater Self as *Sself*, then the knowledge of on-coming death will no longer be terrifying. This being the case, the conception of linear time becomes redundant and people can begin to experience eternity in the present moment, thus realising that linear time as an absolute is an illusion and is a derivative function of the ego-self. This has been a recurring theme in the philosophy of Hegel, Heidegger, the plays of Goethe, and the poetry of William Blake for example.

Before continuing on the theme of time and overcoming its derivative form it will be necessary to make a brief diversion into the domain of soteriology. This is because the apprehension of primordial time is made possible only thorough a soteriological praxis, where the ego-self is able to be transcended and the collective Self as *Sself* is able to be apprehended both conceptually and existentially.

7.8.2 TIME AND ITS RELATION TO SOTERIOLOGY

Rather than employ relativity theory and quantum mechanics to frame a discourse on the ontology of time I instead show how the same can be achieved through a process of contemplation. The reason for this is that I can show that modern science cannot claim to be the only pathway to such forms of understanding, and that any culture that does not possess science can achieve the same understanding through by-passing the mechanistic world view.

At this point it will be useful to return to Heidegger and explore the relationship between his discourse on time and its relation to Being (the basis of existence), and that of Dogen who addresses the same project although from a different perspective. Both

Heidegger and Dogen do not rule out the common sense view of derivative time, they simply move beyond it. The flawed common sense view of time is not peculiar to Western culture, but rather a tendency of many cultures. Both thinkers do not regard this common sense view of time as absolutely false, but instead see it as derivative of primordial time in its coalescence with the psyche. Such a view is phenomenological and soteriological as it argues that the personal development of the observer of time is a crucial ingredient in the apprehension of the apparent character of time. Although Heidegger and Dogen differ in their views of the structure of primordial time they do agree that it must be seen as a fluid, and flexible process inseparable from human activities (Heine 1985). The apprehension of the nature of primordial time for both thinkers is dependant on discarding notions of permanence, and the autonomous ego-self.

The conventional views of time are problematic precisely because they have remained unquestioned due to their familiarity and their relationship with language. For Heine, human activity will be misdirected so long as the question of time remains unexplored and flaws in the apprehension of time remain intact. Methodologically, Heidegger and Dogen share two significant things in common. They engage in a discourse concerning time both ontologically (in terms of metaphysical inquiry), and existentially (in terms of a genuine personal encounter with the experience of temporality). Heidegger argues that the question of Being (the basis of existence) has been misunderstood in the West since the Greeks due (partly) to a misapprehension of primordial time - hence the title of his book *Being and Time*. The time dimension sustained in Western metaphysics, as a predicate to all other forms of metaphysical questioning, has been built upon a foundation that itself obscures understanding namely - a naive definition of now-time (Heidegger 1962). The primordial ground of existence (Being) is posited in the West as sharing the same temporal domain as beings (such as human beings - Dasein), - the present.

The temporality of the ground of existence (Being) is obscured in Western metaphysics because Being, as introduced by Aristotle (see Sokolowski 1990), is seen as embedded in derivative time, or, lies outside time itself. As Olafson (1993) points out -

The equating of being with presence on the part of the Greeks was faulty because they did not have any understanding of the temporal character of being. They simply equated presence with the present tense and the Now; and the conception of time that was worked out by Aristotle, and that determined the course of all subsequent Western thinking about time, construed time as a manifold of Nows. As Heidegger tries to show...this altogether obscures the distinctive character of the Now, which is at once a "having been" and an "about

to be", and is thus closely bound up with both the past and the future (ibid.:102-103).

Nietzsche attempted to overcome the problem of the temporality of Being by extending the present into eternity with his notion of the 'eternal recurrence of the same'. Being is transformed into 'becoming', and as such, Nietzsche reverses rather than overcomes the Western metaphysical condition in relation to time (Heine 1985).

As mentioned above, both Heidegger and Dogen attempt to demonstrate that metaphysical inquiry based on the assumptions of derivative time arise from deficient existential encounters with time in one's own life experience. This suggests that an authentic view of temporality (where primordial time is apprehended) can only be gained via a process of personalised experience beyond philosophy. A similar thread can be traced in Goethe and the way he addresses the question of time in his works, particularly Faust (see Vincent 1987). Like Heidegger after him, Goethe's conception of time is radically different to that of the common sense and philosophical view in the West. For Goethe, time and existence are thoroughly interdependent, and not totally separate as Newton suggested.

We are all eternal! - My beginning I don't remember,
I have no calling to come to an end,
And do not see the end.
Thus I am eternal, since I am!

(Goethe - the *Prometheus* fragment: cited in Vincent 1987:14)

The relation of Being to eternity is, for Goethe, the same as the relation of the present moment to time (Vincent 1987). This is extremely important for the common sense and existential apprehension of temporality itself. Heidegger agrees, and so does Dogen (see Heine 1985). This points to the central role of soteriology and personalised involvement in the process of coming to apprehend one's existence, one's place in the landscape, one's sense of belonging. In attempting to hide from the existential impermanence of time (with the knowledge of on-coming death), people become ever-more imprisoned by their own conception of derivative temporality. Because people fear the apparent finality of death they are perpetually anxious which serves to bring about an apparent need for suppressing this anxiety. One way of doing this is to convince oneself (with the help of some forms of religion) that there is immortality in an after-life. Another way is to spend one's entire life filling up the mind with distractions so that the quiet desperation of their condition is not able to be contemplated. Watch television, make endless plans, buy new toys, go on holidays, play more sport, be busy, be successful,

be famous, be a star, be the prime minister, work harder, get rich, be modern.

Although not a problem in themselves, these psychological diversions do not solve the problem, they only serve to obscure its source - to cover it over. If the anxiety is not addressed at the source it will never be overcome, and a person and their entire culture will lead an alienated life - as aliens from their true immediate existence. People spend their entire lives making plans for the great 'one day' and fail to actually live now. This failure to be able to live out the beauty of the present moment, by failing to see its eternity is what makes a culture fail to achieve the highest happiness - belonging. This belonging is a belonging to the rest of the landscape, a place in the way of the landscape, a place in the way of Nature. This is what Goethe was trying to help us understand when Faust declared that there is no moment which is so great that he would wish to grasp onto it for ever.

If I ever say to any minute:
"But wait, wait! You are so fair!"
Throw me in chains, then; then I'll gladly perish!
(Goethe: *Faust* I Act IV).

For Heidegger, the dominant Western concept of time obstructs an understanding of our own existence and our place in time and space (Nature). He calls this the forgetfulness of Being. This misapprehension of the time dimension prevents people from existing in an authentic existential relationship with their social and ecological surroundings. This is central for our problem of cultural authenticity in relation to ecological sustainability as the latter requires the former. In my view, ecological sustainability is dependant on existential and psychological authenticity. It is precisely for this reason that I take the question of time so seriously in my explorations concerning ecological sustainability.

7.8.3 PRIMORDIAL TIME

The importance of disclosing the nature of primordial time, for both Heidegger and Dogen, is to show that temporality is fundamentally interrelated with, and inseparable from, existence. Time does not precede existence as it is implied in the common sense and scientific view of much of modern life. Beings do not exist 'in time' and, as such, time is not able to be hypostatized as a framework separate from the passage of Nature, as Whitehead suggested. This is implied in Western metaphysics and modern science

by carrying over to ontology an unfounded yet sophisticated epistemology of time, grounded in an assumption of the existence of a linguistic predicate similar to the atom (i.e. the indivisible unit of time). McEvoy (1984) noted the way St Augustine was aware of the linguistic analogy between the measurement of time and space, which Bergson also focused on earlier in the 20th century. But the practice of predication must not become a philosophical fetish. If it does we will continue to search for real objects in Nature (such as the elementary particle) that we have invented as a product of the patterns of our own thoughts.

Instead, we must begin to see time as the inherent dynamism and fluidity of the movement of Nature itself. To achieve this realisation time must be de-objectified (i.e. no longer conceived of as an 'other'). Achieving this cannot be conducted solely through philosophical argument (i.e. within language) but must be accompanied by an experience of time uncluttered by misconceptions. Being and time, for Heidegger, are not reducible to each other but exist in a dialectical relationship of interpenetration. The disclosure of one requires the other as well. This existential disclosure of both Being and primordial time together constitute the fundamental ingredients of what Heidegger calls 'authenticity', where (dialectically), authenticity is essential for the disclosure of temporality (Heine 1985).

An awareness of primordial time allows human beings (Dasein) to realise and experience the interconnectedness of reality beyond the individual self. Heidegger, in contrast to most of Western theology and metaphysics, does not view time as a gap to be bridged in order to understand Being, or as a pre-existing 'surface' onto which 'things' and beings are added (see Heidegger 1985). Time and existence are one and the same, as Goethe suggests.

The question remains as to how primordial time might be apprehended by people. Again from Goethe:

Two souls, alas, are dwelling in my breast,
And either would be severed from its brother;
The one holds fast with joyous earthly lust
Onto the world of [humanity] with organs clinging;
The other soars impassioned from the dust,
To realms of lofty forebears winging.
(Goethe cited in Vincent 1987).

The initial realisation to be made is that there is more to ones existence than the

material world of the ego-self. This part of one's existence is real, but it must begin to discover its non-ego self as a *Sself* that has a geography and a temporality beyond the autonomous individual. An individual is an aspect of the landscape, not separate from it. Even the mind is part of Nature. The unity with one's surroundings as a broader geographical *Sself* is able to be conceptually and existentially apprehended once a person is rid of a major linguistic illusion - the ego-self. I will go into this further in chapter 8 to follow. Identity with the landscape is all important. Because, if this is achieved then the beginning and the ending of the ego-self becomes a non-issue. There is no need to hold onto the illusion of an isolated, autonomous ego-self which has derivative temporality only (i.e. it perceives derivative time only). The passing of the present moment is no longer a loss of existence and 'one step closer to death', but instead an aspect of eternity itself - right here and now.

To achieve this conceptual and existential condition one must learn how to drive nihilism *existentially* and experience the Nothing. One must be capable of leaving language behind and immerse oneself in the silence of nihilism. Nihilism has been employed earlier but only conceptually. Authenticity requires more than this. Authenticity, which makes ecological sustainability possible, must also be existential and thereby extend beyond our thoughts and into the basis of our actions. We will look into the existential aspects of nihilism in chapter 8 to follow.

Thus shall ye think of all this fleeting world:
A star at dawn, a bubble in a stream;
A flash of lightening in a summer cloud,
A flickering lamp, a phantom, and a dream.

(The Diamond Sutra)

CHAPTER 8 - THE AUTOBIOGRAPHY OF THE LANDSCAPE

A story draws on relationships in the exterior landscape and projects them onto the interior landscape. The purpose of story telling is to achieve harmony between the two landscapes, to use all the elements of story - syntax, mood, figures of speech - in a harmonious way to reproduce the harmony of the land in the individual's interior. Inherent in story is the power to reorder a state of psychological confusion through contact with the pervasive truth of those relationships we call "the land" (Lopez 1989:67-8).

I have been gradually developing a postmodern approach to cultural ecology which amounts to a re-enchantment of Nature. The different postmodern discourses are by no means in agreement concerning the creative response to the problems modernity and the establishment of a 'counter-hegemonic bloc' called for by some postmodernists (Best and Kellner 1991). In particular, there is much disagreement in relation to the constitution of the 'self' and its role in such a political process.

As I see it, as it was for Goethe, Walt Whitman, and Thoreau, the self gains identity from its place in the landscape. The self is not an autonomous being, but an epiphenomenon of Nature. Its essence is contextual, specifically tied to the real landscape that surrounds it, where that 'landscape' includes the social dimensions of a place. This is a self of 'difference' and a self of 'identity'. Best and Kellner (1991) contend that Foucault did not sufficiently clarify the connections between ethics, aesthetics, and politics. I believe this can be done by awakening people to the landscape dimension of the self. In this way, I am not an essentialist although I do employ the term essence. My conception of essence is inseparable from an existential relationship with the rest of Nature, a relationship that exists both within and beyond language.

As mentioned earlier, the style of this research is reconstructive as opposed to simply deconstructive. Nihilism is employed as a tool but not the goal. I use 'silence'¹ as a way to deeper meanings, where those meanings are able to come into culture, via language, from Nature itself. A form of mysticism is uncovered showing how a 'silent' apprehension of Nature can instruct a culture in an ethics of ecological sustainability. This is the bioregional narrative, and the bioregional narrative lets the landscape recite

¹I use the term 'silence' to metaphorically denote that which lies outside the reach of language. Listening to bird song without thinking is listening to the 'silence'. 'Silence' as it is used in this chapter is a linguistic 'silence'.

its autobiography.

In this chapter the notion of the geography of the self is explored and developed. I do this by means of a 'cultural ecology of silence'. In the previous chapter we were confronted with the outer limits of language, and there we began to realise that the universe was still there, and furthermore, that much of our human experience of reality around us lay beyond this point. In this chapter we enter into mysticism and the realm of mythology.

8.1 INTRODUCING THE SILENCE

The silence I speak of is the 'no-language zone' of linguistic silence - the wilderness, the abyss. The silence serves two important purposes. The first is epistemological, the second is existential, but both arise out of the same silence, the same nihilism. In terms of epistemology we can discover that a form of truth can and does lie beyond language, beyond logic, beyond good and evil. This truth is the truth of Nature and Nature's coherence. It is the ever-changing way of Nature, the way of evolution and adaptation. We will gain an opportunity to listen to the silence, and then we will see where primordial language comes from. This primordial language consists of a conversation with the landscape² where adaptation and evolution of culture with the rest of Nature becomes possible. Such a conversation is the bioregional narrative where the landscape is able to speak and be heard.

The second purpose of employing silence is existential and relates to personal experiences of the landscape, in relation to the soteriological process of self realisation. It relates to the apprehension (i.e. discovery) of the geography of the self. This aspect of my story is crucial to its overall coherence, and I believe it is also decisive in coming to an understanding of the meaning of ecological sustainability. As such, it is also a significant part of the process of learning about Nature (i.e. it is also epistemological). I call this 'natural learning' or 'wisdom'. Knowledge, made possible by language, adds information to our mind. Wisdom, on the other hand, comes through the removal of obstructions to the flow of Nature's coherence. Knowledge is often an obstruction to wisdom. Silence plays a central role in the process of allowing wisdom to rise to the surface of our consciousness, as it is through this silence that obstructions to wisdom

²I use the word 'landscape' to include the people of a place in their geographical environment. It also includes their own bodies, intuitions, and feelings.

are removed. The flow of wisdom will be obstructed if it is made illegitimate in a cultural discourse which demands that legitimate knowledge be logical. It will be misinterpreted if Nature's messages are blocked by a mistaken conception of the self, arising out of a case of mistaken identity. This points to the existential and soteriological dimensions of my story.

If the self is seen as autonomous and/or non-geographical then individuals will fail to identify with the landscape as an aspect of the self. This amounts to a massive obstruction to an ethics beyond good and evil, an ethics capable of fostering cultural evolution with the rest of Nature, an ethics of ecological sustainability. I will attempt to demonstrate this in the following pages.

To help clarify this conceptual exercise, imagine the silence (linguistic nihilism) to be a metaphorical river. It is a river of linguistic, and existential nothingness. Rarely do we acknowledge the river, and in our refusal to accept its existence we are unable to see what lies on the other side. On the other side of this river is where primordial language lies, where compassion is at home, where ecological sustainability becomes possible. Anyone can point to the other side but to get there one must get wet. There are no short cuts. In this chapter I will attempt to show why we must learn to swim, and how we might go about this if we are still interested in ecological sustainability.

8.2 ON THE WAY TO SILENCE

A culture that recreates itself through language (as all cultures must) may do so according to a normative system viz. according to the rules of language (i.e. rationally). Modernity tries to do this. Here the deeds of the culture are informed by and grounded in the rules of the language game, where truth is defined according to those rules (truth is defined rationally). Furthermore, this truth is exported from language to the domain beyond the reach of language. If reality beyond the rules of language (e.g. the rest of Nature) does not comply with the rules of linguistic consistency, such a culture may attempt to manipulate its environment in order to make it appear to conform with its internal system of linguistic rules. This is what Western culture has been doing for many centuries, and particularly since Francis Bacon encouraged us to employ science to control Nature (see appendix 1).

Such a world view will have internal coherence, but internal coherence only. This is because a normative culture declares that the predicates for conceptual (linguistic) coherence lie *in the rules of language* and that linguistic coherence so defined comprises the criteria

for truth. It is a self-referencing system that uses the internal rules of a linguistic convention to find those rules and declare that they have found the truth of reality. Remember, such a view of truth is the same as a cat that eats its own tail and declares that the universe is nothing but cat. I will hope to demonstrate below that a culture can establish a system of linguistic coherence, where that coherence is based, not on the internal rules of language (e.g. logic or reason), but according to Nature itself. There is method in Nature's madness, but this method is not logic. Nature's coherence can be brought into language and hence culture, but can only be brought into language through wisdom. Wisdom is poetic, not logical.

O truth of the earth! O truth of things!
I am determined to press the whole way towards you,
Sound your voice!
I scale mountains or dive in the sea after you

(Walt Whitman - *Great are the Myths*, lines 39-40).

Truth defined according to logic will determine what is acceptable as cultural behaviour in what becomes a normative system of cultural (ethical) instruction (e.g. Kantian ethics). Because the culture recreates itself through acting out the language game, the normative linguistic system becomes a self-fulfilling prophecy, producing a normative culture. Now, this would be fine and dandy, if and only if, reality outside the rules of language was fixed and/or logically organised. Such organisation of Nature is supposedly orchestrated by God - the Mathematician (as quantum physicist James Jeans did - see Weber 1986), or the logical laws of Nature (why people think they must be logical is beyond me).

Mathematics has epistemological and not ontological credence. Quantum physicist David Bohm appeals to our good sense, asking "why should mathematics - an invisible, non-physical sort of thing - be the powerful governor of matter, which is physical and visible?" Instead he tells us "you [will not] find [mathematics] anywhere in matter" because, "we don't experience mathematics as a feature of matter. It is just how we think about it... we may say that it describes matter and that is how things work up to a point, but that does not entail that matter is mathematics" (Weber 1986:139,143, 146). Kurt Godel and Alan Turing

both showed (using the incompleteness theorem devised by Godel³) that it is impossible to obtain a consistent and complete axiomatic theory of mathematics and a mechanical truth verifying procedure (Chaitin 1991). This does not rubbish mathematics and logic, it merely shows that they are human inventions, not discoveries. They fit within the domain of knowledge not wisdom.

Any culture that reifies its inventions by transferring them from epistemology to ontology will set in motion a normative cultural system. This happens when people assume that the precise geometrical shapes and lines they place on their maps are actually equally precise in Nature. But they are not. We must not pretend that the map is the landscape. It is only a map. I do not suggest that we throw the map out, but we must recognise the difference between a map and the landscape. If we confuse the map with the landscape we have committed a great fallacy - the epistemic fallacy as Bhaskar (1978) would put it. Because a normative linguistic system will contradict the constant flux of Nature it cannot be adaptive. It cannot *move with* the ever-changing patterns of the landscape. Remember - even the highest mountains erode, even the brightest stars explode. I call this normative condition unauthentic, fallen, unsustainable. *Moving with* the rest of the changing landscape is what makes indigenoussness come about. Indigenoussness is an adaptive condition. It is evolutionary. A condition that is able to evolve is able to ecologically endure without yielding, to continue to be - to be ecologically sustainable.

Normative, unauthentic and unsustainable cultures will be immediately non-adaptive in terms of their underlying ecological character. But this may not become apparent, however, due to low population numbers, where environmental responses to non-adaptive cultural deeds are essentially masked by the existing background 'noise' of environmental change in any landscape. However, the growth of such a culture will eventually bring the non-adaptive consequences home to roost. These non-adaptive tendencies will be recognised by members of that culture (or other cultures) who may also discover that the source of the problem lies in language.

³Kurt Goedel was a member of the Vienna Circle of logical positivists, who like Wittgenstein (who was also a member for a short time) demonstrated major flaws in the underlying assumptions of positivism in relation to the question of truth.

Another way that the ecological contradictions of an unsustainable culture can be masked is if such a culture exports its environmental and social problems. Resource depletion for example, can be temporarily ignored through conquest as Rome did all those centuries ago, and every capitalist nation has been trying to do since Adam Smith showed them how. But these unsustainable contradictions will more effectively come home to roost the more successfully a normative linguistic cultural system penetrates to every corner of the planet, as is currently being fostered with the GATT negotiations in relation to capitalism. Every free market capitalist apologist worth their salt will be celebrating the final freeing up of the global economy, but they do so in the ignorance of what it will really do to the planet. There will be no space left to export the contradictions of capitalism once it has captured every corner of the earth. Lenin predicted this earlier this century from the perspective of industrial socialism (see Lenin 1978).

The recognition of non-adaptive cultural systems by members of a culture will tend to give rise to counter-cultural movements that seek to overcome unauthenticity and unsustainability, even well before the contradictions of a normative cultural system have reached their full destructive capacity. Such counter-cultural movements tend to embrace forms of mysticism due to their realisation of the need to bring a normative culture to an acceptance of meaning arising from outside language (e.g. from intuitions). Such movements are often called religious due to their mystical bent. They will be difficult to comprehend if the observer fails to realise the significance of the linguistic problems of their own culture, and fails to apprehend the meaning of the metaphorical narratives told as myth in such movements.

This is not to say that all counter-cultural movements or religions are indeed moving in the right direction in relation to ecological authenticity and adaptiveness. In fact, many are simply alternative normative systems, and in this sense they might be counter-cultural but just as unsustainable as their cultural enemies. A good example can be seen in the salvational projects of many forms of Christianity, which sustain a normative linguistic system in defining the criteria for virtue. Here, as said before, virtue stands in the way of the highest happiness - salvation, or biospherical egalitarianism in some forms of deep ecology. I believe that an eco-cultural movement capable of fostering ecological sustainability must be a form of mysticism due to the need to bring into culture information about the landscape that lies beyond the reach of language. It must also be a form of

eudaemonism - where the highest happiness is synonymous with virtue⁴. I will explain this further below once we have explored what is meant by the 'highest happiness' and its relation to authenticity.

I believe that the cultural and linguistic viewfinder developed in this thesis (there is more to follow) is able to expose the difference between cultures and counter-cultural movements that are capable of delivering ecological sustainability, and those that are not. Those that are capable are simply those that fail to establish obstructions to eco-cultural adaptability and evolution. However, just because such obstructions are absent does not guarantee that ecological sustainability will become manifest. You cannot force a horse to drink. But normative cultural systems actually prevent such a horse (ecological sustainability) from gaining access to water. What we witness is its death in the environmental and social degradation that results from unsustainable cultural life.

I also believe that Nietzsche was right in saying that "God is dead, and we are His murderers" (Nietzsche 1974). Nature is dead and we in the West are its executioners. We have, for the last two and a half millennia, been strangling Nature ever so subtly. We strangle it in such a way that we do not see it dying. We take joy in listening to its death throes as all good sado-masochists would, as in listening to its cries of pain we witness our own pain and suffering. It is a suffering we have been taught to endure by coercive, manipulating, dominating, alienating, self-denying, totalitarian linguistic and political systems that teach us to love our servitude. And in our gleeful evangelism we parade around the planet teaching others to do the same in the name of 'progress' - that insatiable god of modernity, that 'end of the rainbow' we chase but can never grasp.

As a culture continues to grasp for that solid fixed truth which does not exist, it continues to divorce itself from Nature. This is because the way of Nature is flux and its truth is flux also. In order to be capable of engaging in an authentic relationship with Nature we must let go. We must release our tight-fisted grip on the rope of reason, of the rules of language, of logic, and fall back to earth, enabling a realisation that there is meaning and truth beyond the rules of internal linguistic coherence. In so doing, a culture can begin to allow information to come into language from Nature itself. Such information will not be logical,

⁴Not to be confused with hedonism.

but it will have coherence. The coherence it has will be a coherence according to Nature - not to geometry. This is what Cezanne meant when he said that we "must do Poussin over again, this time according to nature" (de la Croix and Tandey 1980:783), and to do so we "must reflect...The eye is not enough" (Honour and Flemming 1982:545).

This is why meditation is so crucial to Zen - we must learn how to turn language off and simply be without the rules of language, without logic, without reason. This is what Angelus Silesius in 13th century Germany was trying to tell us by saying that "The rose is without why; it blooms because it blooms; It cares not for itself, asks not if it is seen" (cited in Caputo 1978). Meister Eckhart asks us to achieve detachment, and Heidegger asks that we let Being be, by listening to the silence. Lets take a closer look at this notion of silence.

8.2.1 THE CULTURAL ECOLOGY OF SILENCE

The experience of the abysmal nature of our being, of the nothingness of its ground, is not necessarily terrifying, as long as one has the appropriate attitude. From the perspective of Zen (and something similar is true for Heidegger) the experience of the abysmal nothingness of the self and the world is the starting point for "salvation". In Dogen's words: "One who falls to the ground gets up with the help of it" (Kotoh 1987:205).

Language, if improperly used, can help to give us a major source of anxiety as we keep using language to ask questions like "who am I?" and then inventing an autonomous self that is able to answer this question. But the answer is only as good as the question. This autonomous self is a linguistic invention, not an intuitive discovery. The self is a linguistic mirror. Because we only see the reflection, we are unable to realise that it is, in fact, only a reflection of language. To realise this we must take the mirror away. Take language (the mirror) away and no reflection can dazzle us. We can begin to see that we are not an autonomous self at all. Instead we are really much more than this. We equate the edge of 'I' with the apparent edge of the skin. The individual body conveniently coincides with a linguistic convention. But it is only a coincidence.

When the mirror is gone the 'I' begins to fill the space beyond the individual body. This does not deny the body, only it affirms that the self has a geographical aspect in addition to the body. The self has a unity with the landscape where the 'landscape' includes the

people of a place. The apprehension of such unity enables an identity with the landscape (including other people) as 'I'. The landscape is no longer an 'other', but part of the collective Self. This identity with the 'other' - the other human and non-human dimensions of place, is a source of compassion, a source of ethical instruction that is not grounded in a sophisticated system of moral philosophy. It is grounded in the real experiences of ordinary people who have had the privilege to overcome the limitations of language. In the opening words of Walt Whitman's *Song of Myself*, published in 1855, he utters:

I celebrate myself,
And what I assume you shall assume
For every atom belonging to me as good belongs to you.
(*Song of Myself*, lines 1-3)

In chapter 7 I showed how a logical ethical system could come about, as it did with Kant. Such a logical system embodies a quest that seeks a highest happiness in salvation, mediated by reason (and hence language) in what became a discourse of 'good' and 'evil'. Kant tried to move beyond 'good' and 'evil' by employing pure reason as a metaphysical Ought. We are then commanded to follow a standard that supposedly leads to salvation and the highest happiness. But the 'good', the 'evil', and pure reason are each inventions of language, and so, in spite of the virtuous intentions of so many of the world's moralists our condition plunges yet further into confusion, pain and suffering of the psyche (see Schopenhauer 1965; Nietzsche 1969; Foucault 1982; Campbell 1986, for example). In the words of William Blake:

- I [The] perceptions [of humanity] are not bound by organs of perception; [we] perceive more than sense (tho' ever so accute) can discover.
- II Reason, or the ratio of all that we have already known, is not the same that it shall be when we know more...
If it were not for the Poetic or Prophetic Character the Philosophic & Experimental would soon be at the ratio of all things⁵, & stand still, unable

⁵This is why Kant argued that *a priori* reasoning could never *increase* our knowledge. However, unlike Blake, Kant undervalued the illogical, poetic nature of experiences that could form the basis for a mystical knowing (i.e. wisdom). The latter was a central project of Heidegger, which is why Heidegger would probably have approved of the poetry of Blake.

to do other than repeat the same dull round over again⁶.

Application. [Whoever] sees the Infinite in all things sees [the divine].
[Whoever] sees the Ratio [i.e. reason] only sees himself [sic] (Blake 1993).

Such an ethical system can never be 'at home' in the landscape - it is lost and in thorough, yet quiet desperation, unable to comprehend its identity with the rest of Nature. In so doing, a culture breeds a population of egocentric, imaginary autonomous 'selves', that selfishly hide from the apparent finality of death, which mocks their egotistical grasping for permanence and immortality. They imagine that linear, derivative time (also an invention of language) is running out on them. Not enough time... Time flies... Times up! And in this game of hide-and-seek with the divine executioner (another invention) they have neither the disposition nor the ability to really live. On the contrary, Thoreau tells us: "I went to the woods because I wished to live deliberately, to front the essential facts of life, and see if I could not learn what it had to teach, and not when I came to die, discover that I had not lived" (Thoreau 1980:66).

Goethe's Faust had the courage to let go of the world (not denying it), and in doing so achieved a creative apprehension of Nature through natural learning, bringing on the wisdom he originally went in search of at the beginning of the play. In our selfish modern search for absolute answers we hold tightly to reason, as we convince ourselves that truth *must be logical*. But the answer and the question, of course, lie partially in the abyss itself, where reason cannot venture, that silence beyond the reach of language where there is no reason: all simply is. This is a realm beyond good and evil, beyond language and its rules, where the source of our authenticity resides. The source of ethical instructions that make ecological sustainability possible.

A decisive precondition to recognising the importance of silence is the realisation of the unity of the individual and the surrounding landscape. For both Heidegger and Zen there is no split between the world and the person who observes it:

The true self is not separated from the world that has become one with it; there is neither subject nor object....the world, which had hitherto been rigidified by linguistic segmentation, gradually becomes fluid, thereby dissolving the boundaries

⁶This is what Nietzsche proclaimed about the inevitable tautological nature of Western metaphysics.

created by segmentation. The shapes of things which have been sharply distinguished from each other subtly lose their sharp definition, and with the elimination of distinct boundaries things come mutually to interpenetrate each other. (Kotoh 1987:206).

The silence of the linguistic abyss or 'wilderness' is an ever-changing realm. It is an evolving reality, much of which is accessible to all of us only language alone will not get you there. If you close your eyes and switch off language, even for a moment to disentangle yourself from this text, you are walking in the silence of the wilderness. Taking your pulse and feeling its rhythm and strength (but not counting, or timing it) is another example. You are taking information from the landscape, from outside language. Learning to interpret it is the next trick, but this can only come from experience - from doing it. Chinese medicine takes the pulse in this way and is able to procure far more information from part of the landscape (i.e. the body) than Western medicine which is so blinded by the need to quantify everything (see Capra 1982; Kaptchuk 1983).

Listening to the landscape requires an acceptance of the mystery that lies beyond the reach of language. If it is able to be heard the landscape will provide a culture with a major source of information that fosters ethical instruction. It requires simplicity if it is to be revealed. On the contrary, the sophisticated and supreme pedantry of logically driven ethical discourses like that of Kant actually serve to obstruct it. An acceptance of mystery and the enchantment that enfolds is not possible if a culture cannot let go of logic from time to time. The mysticism of which I speak annoys philosophers who see logic as the only source of meaning. They contemptuously brand mystics as irrationalists. Logicians are unable to penetrate or decipher the coherence of this form of experience of Nature, precisely because such coherence comes from Nature - not logic. Nature holds the key to the coherence of ecological sustainability, not philosophy. Western philosophers must learn to let go of language and its rules. This is why I argue that an essential part of the equation of coming to understand ecological sustainability is soteriology - self realisation.

Allowing Nature to lend meaning to social life on its own terms, provides the opportunity for a creative moment to become incarnate in your consciousness, expressed poetically if captured in language. This is the poetry of primordial language which makes a bioregional narrative possible. This is the hidden order of art (Ehrenzweig 1967). This can be seen in the paintings of Cezanne, in the music of Wagner, in the poetry of Blake, Whitman, Goethe,

George, and Wordsworth, and in the prose of Thoreau. It can also be seen in crafts, where contemporary artisan John McQueen, for example, aligns his aesthetic language with the language of Nature, discernable through observation and contemplation. He informs us of the source of creativity in his baskets: "Trees as religion/ words making objects/ have a way of hardening/ into handles" (Morse 1993). A bioregional narrative is not merely people speaking to each other, it is the landscape addressing itself through human language. This is why it is autobiographical.

The silence (linguistic nihilism) is the 'no-language zone' in which any person, from any culture can gain a vivid experience of place, of the existential geography of their world. This enables an individual of any culture to be able to cast off their delusion of autonomy and apprehend their unity with the landscape. In this way the self begins to be defined according to its *geography*. As Kotoh (1987) suggests:

When the meaning-relations of every day language collapse as a whole, one is thrown into an incomprehensible chaos of phenomena without meaning [nihilism]. When the ultimate meaning of life fails, what one sees is mere nothingness which repels any attempt at rationalisation... the world becomes disconnected from language and floats by itself (Kotoh 1987:205).

In this way, our experience of the world around us in the absence of language is different from an experience which is mediated by the overlay of every day language. Such an idea was central to the latter thought of Wittgenstein (e.g. see Hanfling 1989), which comes very close to Buddhism (see Gudmunsen 1977). In his first major work - *Tractatus Logico-Philosophicus*, Wittgenstein states: "There are, indeed, things that cannot be put into words. They make themselves manifest. They are what is mystical". He then concludes the entire philosophical exercise by stating: "What we cannot speak about we must pass over in silence" (Wittgenstein 1922:6.522, 7). But silence is not the end of the story. Experiences of the silence can be brought poetically into language (any language) *ex post facto* through primordial language, thus creating language anew from those very experiences. This is the 'stillness of silence' found in Heidegger's work that underlies his conception of language (see Heidegger 1971, 1975b). And from this; "It is silence that hears the echo of stillness which constitutes the essence and origin of language" (Kotoh 1987:210).

In hearing the echo of linguistic stillness (experiences of Nature's coherence outside language) people can allow the landscape to enter into culture through the front door. This

is because:-

silence cuts into and explodes the network of ordinary language which has degenerated into mannerism [normative language]. At the same time it restructures and modifies previous meanings in such a way as to create a new form of language. Ordinary language can thus be constantly questioned and nourished by silence and be reborn as a language capable of describing the life-breath of silence. The thread which was cut between reality and language [deconstruction] is then retied through this silence [reconstruction]. Silence is the source of language (Kotoh 1987:208).

In this way people can provide their culture with a basis of ethics which, provides a set of moral instructions enabling a co-adaptive relationship with landscape to develop. In such a condition a bioregional narrative is set in motion enabling the landscape to recite its autobiography. But just how can this be brought about in a culture? Through a form of love. Yes, love - that forbidden word. But just what do I mean here by love? What is called 'love'? And what on earth has it got to do with ecological sustainability? Touchy feely stuff, read on...

8.3 LOVE?

Many people get queezy when the word 'love' is used in conversations, especially when it is used in a professional forum. People get embarrassed, thinking, "here we go...a religious sermon, good grief". But love, yes, love - say it - l..o..v..e. What a word that can evoke such discomfort in professional circles. But what can 'love' possibly have do with ecological sustainability? Up until now I have been talking about relationships. The relationship between people and place, between culture and landscape, between people and people. Relationships. Interactions, ethics, compassion, respect, virtue, grace, mana...love. It is only a small step. The reason why I bring this prohibited word into my story, is to explore its meaning, and show why aspects of its meaning are able to shed light on the far-reaching coherence of this theory, from the evolutionary process right down to interpersonal relations. I hope to show that ecological sustainability can be brought about through a form of love, which can be apprehended and experienced by ordinary people. I will show how people can participate directly in the process of moving a culture closer to ecological sustainability without being ecologists. It brings ecological sustainability down from the dizzy heights of philosophy and plants it firmly in the every day experiences of people of any culture in any landscape. But before going any further it is necessary to explain just what I mean by love.

Love is a word we use to suggest a number of different things but tend to be related to a sense of joy. However, there are very different sources of joy, and therefore, joy alone is not a sufficient criteria to define love. For example, there is a joy in sadism, but this joy is inspired by a delight in the giving pain to someone else. This could be called love, because the sadist loves the deed of inflicting pain, like a rapist. But to declare this to be synonymous with the love of one's children is a gross misunderstanding of love. This example is not as far-fetched as it may first appear. The reason for this stems from what makes a sensation of joy possible in sadism. Such joy is only possible if no compassion gets in the way, because compassion will make the sadist feel a sense of pain with the other. If no compassion is involved it means that the individual (sadist) is thoroughly selfish, as the ego-self is totally isolated from any other - hence no compassion. Sadism is joyful if, and only if, the individual lives in a totally deluded psychological condition, a condition that is incapable of identifying with any 'other'. Many people think that it is good to be yourself, and be true to your self. But first you must, must, must, be careful to know what that self is. Otherwise, being true to your self (as ego-self) may lead to sadistic behaviour even though the selfish sadist thinks that it is really love. Instead it is selfishness, and a desire to give this ego-self pleasure. Furnishing the ego-self with such joy is often desiring and grasping, as it is motivated by the ego-self which seeks affirmation. The need for such affirmation and reinforcement of the ego-self (a linguistic illusion) is often fuelled by anxieties relating to a loss of true identity and belonging - partly caused by a failure to overcome derivative time and a failure to apprehend the geography of the Self. Lets explore the question of 'love' a little further.

"I love ice-cream" is a sensible statement for many people. It implies an intense desiring, a wanting to have, a grasping. Many people use the word 'love' in this way when they say "I love you" - meaning I want you intensely. It is a grasping, a desiring, a wanting to have possession of. Furthermore, that which seeks possession is only the ego-self (a linguistic illusion) because only an isolated, autonomous entity is capable of possessing anything. If there is no ego-self, all that can happen in relationships is a *belonging to*, or a *being with* the 'other' - not owning. It is often erotic - erotic meaning an appetite, desiring - eros. "I love that painting" often means - "I want that painting" it is erotic, not necessarily sexual, although sexual desiring can also be erotic. But there are also other meanings that lie hidden in the folds of this word 'love'. A valuable starting point is to look to the ancient Greeks who formed an important link in the linguistic heritage of the West.

What we lump together under the single word 'love' was, for the Greeks, an array of words with different meanings and emphasis. There is *eros*, *agape*, *philia*, *epithumia*, *nomos*, and *storge*. *Philia* refers to friendship or kinship - a fraternity with the other. *Epithumia* is a lust or sexual desire. *Nomos* really has more to do with law but has been used to refer to the right action in relation to divine law. *Storge* is affection between immediate family members (see Bratton 1992). *Eros*, as mentioned above, is infused with value, and seeks to gain possession of its object. Attachment. This sometimes, perhaps frequently, happens in some religions where people grasp for possession of the divine. This happens a great deal in Christianity when people grasp for the saviour, they want immortality, or at least want to reserve a window seat in heaven. They grasp for the divine to save them from their neurosis, which leads to erotic fundamentalism, and idolatry (see Williams 1978). It is also common in interpersonal relationships where one person 'loves' the other, but it is a grasping, wanting to take possession of the other. When someone dies, often the grief people suffer is a product of their own erotic grasping for the person now dead. Their supply of ice-cream labelled 'Paul'⁷ has dried up, and yet they love ice-cream. Some have argued that love can become genuine and authentic when it is transformed by *agape* (e.g. Lewis 1960; Smedes 1978; De Rougemont 1974).

Agape (pronounced something like 'agapea') is quite different from *eros*. It refers to a non-grasping acceptance of what is. Whereas *eros* is a striving, desiring, wanting goodness, *agape* is unmotivated and spontaneous (Singer 1966). It is the result of detachment, of a kind of nonchalance. In theology it is used to refer to an acceptance of the divine presence - divine will. It is indifferent to value, it just is (Nygren 1957). It is similar to the Zen Buddhist notion of *mahakaruna* (great compassion) which comes about through the absolute negation of the ego-self, thus becoming one with the absolute *Mu* (Nothingness), enabling a unity with the *Dharma* (way of Nature) (see Abe 1985). In Hinduism a similar meaning lies behind the word *atman* referring to the presencing of Brahman (analogous to God) in a person as the true self (Ross 1993). In Taoism, moving with the flow and flux of the Tao (see Capra 1976; Campbell 1986, 1988; Watts 1957 for example). Many of the criticisms of Christianity from those who sympathise with Asian religions tend to overlook the *agape*

⁷Paul was a close friend of mine who died during the write up of this thesis.

aspect of forms of Christian mysticism which differ from a number of Asian forms of mysticism merely in the choice of words as labels for what are really very similar meanings. I do not defend Christianity, Christians can do that. What I do defend is the meaning behind words such as *agape*, *mahakaruna*, and *atman*, I defend this meaning because I believe it is all important to the achievement of ecological sustainability, which I will attempt to explain below. To begin I will return to the question of art.

8.4 THE WAY OF ART

A substantial issue raised in postmodernism is the role and place of art in culture, and in particular, the way art has been treated in modern bourgeois society (Sarup 1989). Burgers (1984) has distinguished between two major types of art in terms of its relationship to culture. One is art that is central to the life praxis of a culture (sacral and courtly art), the other is alienated art which lies outside the life praxis of a culture. The latter condition is common in modern societies and has been called bourgeois art by Bergers (1984). In many modern cultures art becomes detached from culture as an alienated instrument of entertainment. Many postmodern theorists argue that art must be de-objectified, and brought back into the praxis of life including its place in the political and economic sphere. This was one of the principle messages of Nietzsche and later Heidegger, both of which have greatly influenced postmodern theory (see Vattimo 1988; Sarup 1989).

Goethe expressed the notion that the relationship between art, love and Nature was more than an metaphorical one (see Reed 1984). It relates to the unity which underlies each of these domains. I believe this unity does exist and can be employed to help explain the evolutionary process, particularly as it relates to human evolution and adaptation. But to understand this we must first clarify just what we mean by 'art', 'love', and 'Nature'.

James Joyce (1916) has critiqued the different forms of art appreciation differentiating between what he calls 'proper' and 'improper' relationships with the art work. A 'proper' relation to an art work is one that takes the art for its aesthetic purpose. 'Aesthetic' rooted in the Greek *aisthetikos* refers to perceiving and feeling (Campbel 1986). Taking the art work for what it is aesthetically, is not asking the art do be in the service of any other interest. The art just is and the person interacting with the art work does not seek to have or use it in any way. It just is. What the art work does to the beholder is a function of the

aesthetic connections between the artist, the art work and the viewer. If seen in this way, art is doing its own thing. Its meaning lies in letting it be, and letting it do what it does. It may give the beholder a sense of 'being there' amidst the emotions that the art work is symbolising or expressing. Hence symbolism and expressionism (see Cassou 1979; Richard 1984). It may capture a fleeting moment in form and colour - hence impressionism (see Honour and Flemming 1982). It may arouse deep psychological connections with unconscious aspects of the psyche - hence the importance of art in mythology and ritual (see Gablik 1991; Ehrenzweig 1967; Campbell 1986, 1988 for example).

When the art work is somehow in the service of something other than aesthetic perception, either due to the intention of the artist or the disposition of the viewer, Joyce calls it 'improper'. Such 'improper' art is using art for purposes of entertainment, ethics, politics, or economics. Slogans, propaganda, advertising are included in this category. What unites these improper forms is the arousal of desires (*eros*) in relation to the art work - to possess the art work, or possess what it represents, or to loath or fear it. When art appreciation is mediated by *eros* (desiring) or loathing, Joyce calls it pornographic. All advertising is thus pornographic in this sense, and indeed the common meaning of pornography (with its erotic sexual connotations) is not different in type from advertising in terms of it being mediated by *eros* (desiring). Now, what can pornography possibly have to do with ecological sustainability?

I said earlier (with the prompting of Goethe, Nietzsche, Heidegger, and Foucault) that we must learn to recreate our selves as a work of art (due to the need to reactivate the Dionysian aspect of life). As indeterminate beings we are all *ipso facto* artists, and works of art. We are the three-fold dimensions of poetry - the poem, the poet and the object of a poem (see Blyth 1942). Problems arise when we fail to realise this, when our language game plunges into determinism (cf. chapter 6) and/or a normative framework. When this happens we fail to recognise our innate creativity, and the mystery (unknowable aspects) of what it is to be, and what it is for the rest of Nature to be. For ecological sustainability to become possible we must accept this poetry, by letting our illogical experiences of illogical reality come into language through a bioregional narrative which allows the landscape to recite its autobiography through us. This can be achieved by recognising the unity of art, love and Nature.

We are works of art, and our culture must be artistic⁸ if it is to do ecological justice to the indeterminate character of Nature and our relationships within Nature. Our relationship with other works of art (such as other beings or the rest of Nature as a whole) can be apt and hence adaptive if it is driven by a form of love. But it must not be driven by *eros*. If it is, it will be pornographic. If so, our love of landscape, our love of Nature, our love of each other will be (in spite of our best intentions, and even beyond our realisation) desirous, manipulative, coercive, dominating, and alienating. Even though the relationship may be joyful and satisfying, it may be an erotic, pornographic joy expressing itself as a form of sadism or sado-masochism, as alluded to earlier. The latter condition will not lead to ecological sustainability. Heidegger asks us to relearn to let beings be, because if we don't our relationship with other beings (including other human beings) will be a power relationship which bottoms out in either domination or submission.

Ecological sustainability demands no submission nor domination in terms of the relationship between people and place. It requires a *moving with* other beings and the rest of Nature. Erotic love will obstruct this, as in our erotic grasping, we will crush Nature as an instrument of our desires. We have been doing this in the West for many centuries. Such desires will be driven by the insatiable thirst of the ego, thus furnishing culture with a self-referencing system of self-fulfilling selfishness. Such cultural selfishness has reached its (as yet) highest point in forms of modern totalitarianism, of which the capitalist new-right is a sub-set (i.e. it is totalitarian to the core). The sadism of Nazi concentration camps is now being carried out covertly, indirectly, and unknowingly by business people the world over.

8.5 THE LANDSCAPE SELF

As said earlier, the autonomous self is an illusion created by language. No being is autonomous; we are all epiphenomena of Nature. Letting go of *eros* is made possible by letting go of the autonomous self, thus enabling us to realise our unity with the collective Self as *Sself*, within Nature. This is the source of compassion, of a felling with, suffering with, a joy with the other. At this point it will be useful to return briefly to Nietzsche and show where this work stands in relation to Nietzsche's ethics.

⁸In saying this I do not mean that we should throw science away. We can have both art and science which, if combined together, creates something greater than both in isolation.

The end was the *value* of ethics, and I had to fight this issue out almost alone with my great teacher Schopenhauer,...The point at issue [in Nietzsche's book *Human all too Human*] was the value of the non-egotistical instincts, the instincts of compassion, self denial, and self sacrifice, which Schopenhauer above all others had consistently gilded, glorified, "transcendentalised" until he came to see them as *absolute* values allowing him to deny life and even himself. Yet it was these very same instincts which aroused my suspicion, and that suspicion deepened as time went on. It was here, precisely, that I sensed the greatest danger for humanity, its sublimest delusion and temptation - leading it whither? into nothingness?...I began to understand that the constantly spreading ethics of pity, which had tainted and debilitated even the philosophers, was the most sinister symptom of our sinister European civilisation (Nietzsche 1956:153-154).

This is where Nietzsche and I part company. He heads back into the individualism and egotism of the will-to-power, whilst I head for the non-egotistical domain of the will-to-life. Nietzsche either mistook Schopenhauer's mysticism for self denial, did not understand Buddhism, or simply had too strong a dose of narcissism to wish to let go of the autonomous ego-self. I believe, and hope to show in this chapter, that (contra Nietzsche) the "most sinister symptom of our most sinister European civilisation" is the ego.

In the existential process of self realisation the will to life can be cultivated which is beyond an individual will. Once we have passed through the silence of linguistic nihilism (which Nietzsche, Wittgenstein, and Heidegger gave to the modern West) and let go of the individual autonomous self (constructed through language) we can begin to realise that we share our existence with the rest of Nature. As such, we are able to identify with that which lies outside our individual self. According to Schopenhauer (1965) this represents a metaphysical realisation of the shared unity of the 'I' and the 'not I'. Heidegger calls it an existential confrontation with the nothingness of Being (Caputo 1978). Being (with a capital 'B') is that which is no other being, no other thing, no-thing, nothing. This is very similar to what Meister Eckhart calls the Godhead. On identifying with the rest of Nature through an apprehension of the 'nothing' Schopenhauer comments;

this presupposes that to a certain extent I have identified myself with the other [person or landscape], and in consequence the barrier between the ego and the non-ego is for the moment abolished; only then do the other [person's, being's] affairs,... need, distress, and suffering, directly become my own...I share the suffering in [the other], in spite of the fact that [their/its] skin does not enclose my nerves.

(Schopenhauer 1965: 166)

He goes on to say;

My true inner being exists in every living thing as directly as it makes itself known in my self-consciousness only to me. In Sanskrit *tat tvam asi* (this art thou) is the formula, the standing expression, for this knowledge. It is this that bursts forth as compassion on which all genuine, i.e. disinterested, virtue therefore depends... (ibid.: 210).

Such a 'this' in the statement (this art thou), is the landscape - the *Vanua*. This is how the *Vanua* can be reborn in culture in Fiji, and it is ironic that Sanskrit (the ancestor of Hindi) is also able to help point the way to a means of attaining ecological sustainability and indigenoussness in Fiji. It furnishes such an amusing contradiction where so many egotistical, selfish, myopic Fijian racist nationalists think that Fiji's problems are caused by the Indians (Indo-Fijians). The Indo-Fijians are framed as false demons that are beaten by angry yet ignorant Fijians, frustrated in their loss of belonging which has come with the death of the *Vanua*, the blood of which still stains their very own hands. But who can claim to have clean hands? Few if any can. And those who can are those who have let the *Vanua* speak. But to do this one must love the *Vanua* and that love must be *agape* - not *eros*.

In relation to the postmodern call for a rebirth of art in the mainstream of cultural praxis, the avant-garde's de-centring of the category of individualistic creativity is a useful concept (cf. Marcel Duchamp's ridicule of the artist's signature by signing mass-produced consumer items and displaying them as works of art). Here it is not an artistic genius that produces works of art, but a complex set of cultural interrelations that become expressed through the work of an individual (Sarup 1989). A culture is being creative through particular people that have captured meaning in certain artistic ways. A culture produces art in a similar way that an apple tree produces apples. The artist, like the individual branchlet, cannot claim to be solely responsible for the creative act. Such a view moves beyond an individualistic conception of artistic talent, where the self of the artist acknowledges its unity with the collective Self of the culture.

This is why self realisation, and self reflection is not selfish. Through the soteriological process of self realisation, facilitated by self reflection, contemplation, and meditation⁹, a

⁹I believe that travelling also does this, as it achieves a non-attached state of mind. In this detached disposition, the doors of perception are cleansed and the landscape can begin to be heard.

person is able to gradually dissolve the individual self (an illusion of language) and thereby come to the realisation of the unity of the individual self with the collective Self as *Sself*. This process is brought about through a process of negation. The first step is to negate the autonomous ego-self (self) which leads first to nothingness, followed by an identity of the self as Self (i.e. as unified with the rest of Nature). The next step is to negate the Self (amounting to a double negation) leading to an identity of the Self as *Sself* (absolute Nothingness in Zen; absolute Spirit for Hegel) (see Abe 1985). Christian mystic such as Meister Eckhart might have said that a person becomes united with the Godhead through this process, as happened to Jesus. Heidegger might have said that Dasein becomes one with Being. For a Buddhist the person achieves buddha-hood (enlightenment) by attaining a realisation of the *dharmakaya* (see Wilber 1983).

I am of the opinion that an ecologically sustainable culture will develop only when the equivalent of enlightenment is achieved somewhere in a culture. Essentially, those of a culture that are able to achieve a *moving with* the way of Nature in their own existential being, can provide a culture with a valuable source of information. This information comes from outside language - from the landscape. When it is brought into a culture, through ritual or primordial language, it can inform a human society in terms of ethical instruction that can make authenticity, a bioregional narrative, and ecological sustainability possible.

A culture that remains attached to the linguistic illusions of autonomous appearances is one that remains ignorant of the unity between humanity and Nature. Such a culture will sustain this illusion by inventing a model of how the world ought to be and attempting to force Nature to conform to the model. Where this appears to happen, success is declared. This is what Francis Bacon thought his version of science could achieve. This psychological condition underlies rationalism, transcendental idealism, and positivism in the modern scientific epistemologies. This also applies to radical modernist discourses that support reason in its position of epistemic privilege, such as the hermeneutics of Gadamer, critical theory, and critical social science. It also applies to deconstructivist postmodern discourses that fail to acknowledge a transcendental ontology (as was the case with Nietzsche and his sycophants e.g. Kaufmann), or those who sustain the notion of the autonomous self. In each case the condition remains unauthentic. Authenticity can only be achieved through letting go of the autonomous self. This can be achieved by awakening to an equivalent of *agape*. Through being true to your nature as a being within Being, beyond good and evil.

8.6 ON THE ECOLOGY OF AGAPE

I said earlier that one of the reasons for bringing love into the story was to show how ecological sustainability can be experienced by ordinary people. Ecological sustainability is a condition of dialectical adaptiveness between culture and landscape. A *moving with* the constant flux of Nature. This constant process of ever-renewing adaptation is what evolution is about. Evolving together is what happens in non-human ecological systems. An organism evolves in relation to its ecological surroundings. This is what ecology studies. It is a dialectical relationship in the sense that both the organism (or population) and its ecological surroundings are beings within Being (see Levins and Lewontin 1985). It is holistic, and because Being is that whole which is no other being, the whole is not greater than the sum of the parts - stoic holism, but instead the whole is in each part. A being (e.g. a fish) and the collection of other beings around it (the community or ecosystem) are epiphenomena of Nature. They are part of one and the same thing. Hence the need to employ dialectical reasoning in order to comprehend such a holism. The tree and the rest of the forest are two sides of the same conceptual coin.

The relationship between beings is an evolving relationship, because Nature is in a constant state of flux. Achieving a dialectical synchronicity is what happens in the evolutionary process. This synchronicity can come about only when a being, according to its nature as a being (e.g. a fish), *moves with* the nature of other beings, which are also existing according to their nature. Plants and animals achieve this all the time, as they do not *know* any other way to be. They do not *know* because that cannot *know* anything. This is because they do not recreate their existence according to the rules of a symbolic language. They do not have culture in this way. A tree does not know which way is 'up' as it does not have language in order to have knowledge, as knowledge (as opposed to wisdom) is a peculiarity of language. The notion 'up' is linguistic. It only has meaning as knowledge within language. It is meaningful only in relation to the opposite - 'not up' or 'down'. Meaning for each of these words is parasitic on the ability of language to sustain a convention according to a set of rules. There is no absolute condition as 'upness' apart from its existence within language.

This is perhaps why language is so amazing. As it can and does enable us to communicate and relate with each other in spite of it having no concrete or necessary connection with the

world around us. For example, ask a Zen master who she or he is and they might reply "I don't know". And the answer would be a coherent and correct answer. But the answer is not coherent or correct according to logic. It is coherent according to their being. Even though a Zen master may declare that they do not have any ultimate meaning in linguistic terms, they still do have meaning as a being, except this meaning is not grounded in the rules of language. It is grounded in Nature. In their ecological character. In their being as a being. There is such a reality as the 'I am', as beings are not absolutely nothing. They are only nothing in terms of no autonomous isolated 'thing'. They are a being within Being. Beings do have a character, an essence. This character is the collection of intersubjective relationships between the being and every other being it interacts with. This is the *Sself*. Its character is a dialectical product of its place in Nature, where this constantly changing intersubjectivity constantly creates a being. This is what Nietzsche means by his "*Dionysian* world of the eternally self-creating, the eternally self-destroying, this mystery world of the twofold voluptuous delight" (Nietzsche 1967:550).

In being true (i.e. consistent) to their subjective character, beings (e.g. fish) are achieving a truth to their condition. This is truth. This is where truth lies. All the rest are fables. All linguistic 'truths' are necessarily subjective perspectives. Compliance to one's subjective character is not a fixed truth but an evolving truth. It is a truth outside the internal rules of language, but to distinguish it from linguistic truth I will call it 'Aptness'.

Aptness is the only aspect of an ecological system that endures. And I believe that this is the only aspect of reality that is not able to be called 'flux'. All else, even the land is changing. Aptness endures even though everything else in relation to it changes. Aptness is not a being, any being, but a dialectical harmony arising out of, and mediating the trueness of beings. Aptness is simply the trueness of beings in relation to their character as beings. A rose is a rose. It is without why. It just is. It has no reason, nor value. Invaluable. It lies beyond good and evil, beyond the rules of language. Aptness, which is the trueness of the rose, is not a thing. It is no-thing - nothing. This is the coming into presence of the ontological 'Nothing' of what Heidegger calls Being. And here, right here, we have achieved a disclosure of the ontological coherence of the dialectical relationship between Apollo and Dionysus as a cosmology and a rationality that I believe is able to both comprehend and achieve ecological sustainability. This cosmology is one of a unity between flux and permanence. We did it earlier in chapters 6 and 7 with language and ethics, but here point

to it in its ontological home - Aptness.

Nietzsche reversed the Western metaphysical tradition (Heine 1985) by ending the dominance of Apollo through a celebration of Dionysus, by replacing permanence with flux. But here I achieve a result which is neither absolute flux, nor absolute permanence, but instead a product which is bigger than both. Take blue (permanence) and yellow (flux) and set them in motion, yielding a dialectical product which is different from both - green. Aptness. This is what Taoism is asking people to do with yin and yang. Set them in motion. Get Aptness. This is what Heraclitus meant when he said that reality is all about the reconciliation of opposites; "Opposition brings concord. Out of discord comes the fairest harmony" (Heraclitus, Fragment 98, in Needleman and Applebaum 1990). The dialectical reconciliation of opposites in a cultural rationality allows people to apprehend this Aptness. This is because people can begin to see that there is constant flux in the subjective character of all beings, of all that is. And yet there is still that which endures and holds the whole process together - Aptness.

Aptness is no-thing, and yet it is the only enduring truth of reality. Aptness is what holds ecosystems in an ever-changing, ever-flowing coherence. Some people may call it the coming to presence of the divine. It is not the divine itself as the divine (I refer to the underlying coherence of Nature) is not a thing. As such, it is no-thing - Nothing. But in Aptness is the rising to manifestness of the divine influence. It is a little like the way a foot print is an indication of the presence of a person but it is not the person as such. Aptness is the nothingness of the *Tao*. Aptness is the Nothing of the *Dharma*. *Brahman* underlies Aptness. Aptness is the coming to presence of God. Aptness is a non-linguistic truth. God is made manifest through this truth. Truth is *agape* - a detached realness, being true to your nature. *Agape* is a form of love. God is made manifest through love. Full circle, and there you have it in a nut-shell. Mysticism as ecology, religion as evolution.

Be true to your nature. Many different forms of mysticism are grounded in the experience of this trueness (see Abe 1985; Watts 1957; Wilber 1983; Cox 1986; Smith 1973; Ross 1993). When you are hungry - eat. When tired - sleep. Taoists say this too - flow with the *Tao*. Buddhists say this, Hindus say it, pre-modern Fijians would have said it be one with the way of the *Vanua* (see Matanitobua 1988). Any culture that lets go of language from time to time and listens to the silence, will come to the same realisation in their own way,

in their own language, in their own landscape. Be the *Vanua* and let the *Vanua* be you. This art thou - *tat tvam asi*. This is Aptness. This is the ontological source of an ethics of ecological sustainability.

Such an Aptness is also what underlies the evolutionary process. If it is not Apt, it is not adaptive as adaptation is a process of becoming (modification) in a being and its ecological surroundings in accord with Aptness. Adaptation is the constant becoming of beings in relation to the way of Nature. If it is not Apt it will not endure, and will not be sustained. If it is not adaptive it will not remain compatible with the ecosystem. As such, it will either change (adapt; become) and thus regain an Aptness (thus enabling a *moving with* to continue), or, if this is somehow impossible, death (in the case of an individual) or extinction will result. Evolution. Natural selection yes, but not by means of a purely mechanistic process as is the case with neo-Darwinism (see Sheldrake 1981). For neo-Darwinism (as an epistemology) to move into a form that is able to apprehend the evolutionary process authentically, it must let go of totalising discourses and the unfounded faith in the ability of the rules of language to disclose ontological truth. It must let go of materialism, mechanism, empirical realism, reductionism, stoic holism, and linear teleology. I suggest that it can move into an authentic framework (i.e. an epistemology that is compatible with the limitations of language, and able to transcend these limits) if it transforms into a form of dialectical, transcendental realism - eco-mysticism. It then must throw out a correspondence theory of truth (as is the case with most forms of realism - which trivialises ontology) and accept that much of reality lies beyond the reach of language and is hence mysterious.

Truth as Aptness is able to be uncovered by people. But to be capable of apprehending this truth as Aptness, the person must gain an experience of it. This is because it cannot be gained solely through language, as the source of its coherence lies beyond the reach of language - in Nature itself. The relationship between art love, and Nature crops up again. Heidegger believes that we can apprehend this through primordial thinking, which he simply calls 'thinking'. This 'thinking' is essentially a mystical experience. For this reason it is necessarily poetic - hence Heidegger's emphasis on the importance of poetry in its ability to bring on the unconcealment of Being (see Heidegger 1959). Kocklemans (1972) tells us

that the truth of the way of Nature as 'unconcealment'¹⁰

comes to pass through poetry in the broad sense. We must appeal to thought in order to comprehend what occurs in poetry. Through naming, beings first become accessible [to us] as beings; it is the condition necessary for them to be recognised and used as determinate beings..this.. is unconcealment (Kocklemans 1972:76).

The unconcealment of such a truth is a means of ethical instruction, but not based on philosophy. It is based on intuition, emotion, and intangible moods and feelings. Heidegger explains that a "mood makes manifest 'how one is and how one is faring'. In this 'how one is', having a mood brings Being to its "There"¹¹ (Heidegger, cited in Halliburton 1981:15). Mood discloses our authentic existential condition as opposed to normative mannerisms, which Heidegger calls 'idle talk'. The normative condition is what Heidegger calls 'falling'. Falling is unauthentic normative communication no longer inspired by Nature, and a culture that bases itself on such a normative framework will be an unauthentic non-Apt) culture. These normative forms of communication actually obstruct (cover over) the meaning of mood in social life. As such, we lose the ability to interpret our feelings. Our authenticity as Aptness can be rescued by poetical thinking that bring the 'mood' into cultural life through language - primordial language, which is poetry.

¹⁰In realism truth tends to function as a correspondence with reality, which is termed a 'correspondence theory of truth'. But Heidegger understands just how mysterious reality really is and shows that a correspondence theory is unable to disclose truth as the essent of a being (what it is). A correspondence theory of truth trivialises ontology, as it implies that ontological correctness (the essent of the being) is relatively easy to determine. But for Heidegger, this is what differentiates science from metaphysics. Metaphysics is ontology - a type of thinking that attempts to apprehend the essent of the being, whereas science is a means of organising our knowledge (i.e. it is epistemological). Whitehead also holds this view. Heidegger as a metaphysician, focuses on ontology as the basis of metaphysical inquiry in such a way that ontology is not passed over as something simple. Instead, like the Greek poetical thinkers (e.g. Parmenides and Heraclitus) Heidegger regards truth as able to come about through the 'unconcealment' of what has been covered over. But to achieve this 'unconcealment' one must take leave of metaphysics and enter into mysticism by means of primordial language, which is poetic. This is because the essent of the being does not lie within language and cannot be defined by language itself. This is why Heidegger argues that Western culture sustains a 'forgetfulness' of Being, as Being (the ground of existence) has been covered over by normative thought and normative language (see Heidegger 1959, 1962, 1973).

¹¹'Being there' is the translation of Heidegger's term for human being - *Dasein*.

A strikingly similar view was held by Wittgenstein, who argued that what can be said can also serve to communicate an ethically powerful insight, even when this is itself unsayable. This confirms a poetic basis for ethics but "if only you do not try to utter what is unutterable, then *nothing* gets lost. But the unutterable will be - unutterably - *contained* in what has been uttered" (Wittgenstein 1967, cited in Edwards 1982:51). Using words to point to meanings that are unsayable is what poetry does. Poetry points us to meanings that cannot be said. For Wittgenstein poetry is a doctrine that mediates the relationship between the will and thought, between mystical experiences and language.

Heidegger was influenced by 13th century German mystic Meister Eckhart (Caputo 1978). In Eckhart we also come face to face with nihilism - the Nothing that Heidegger speaks of. Heidegger takes us from modern science and philosophy to a point at which we can begin to understand Eckhart. Eckhart and Heidegger take Westerners to the point at which they can begin to understand non-Western mythical cultures, and be able to understand Zen (see Arraj 1988; Heine 1985; Abe 1985; Caputo 1978; Parkes 1987).

In relation to the river metaphor mentioned at the beginning of this chapter, Heidegger and Eckhart take us expertly to the waters edge. The water is nihilism. Eckhart takes us into the water. Dogen (a 13th century Zen master) begins at the waters edge and immediately teaches us how to swim. "Do not look back, and do not try to touch the bottom", he says and appeals to us to have the courage to swim and reach the distant bank. And there we can create language anew and our own stories (myths) relating to our own experiences of the silence, a silence specific to the landscape we are in. In knowing how to swim we are no longer afraid of the water and are happy to return to it constantly, thus enabling language to keep on being renewed. Also renewed are our perceptions of the landscape. In the poem 'The Marriage of Heaven and Hell' William Blake tells us that "If the doors of perception were cleansed, everything would appear to [humanity] as it is - infinite". We can clean these 'doors' by passing through nihilism.

8.6.1 ACHIEVING AUTHENTICITY

Many different cultures might agree on the need to achieve Aptness, but the next aspect of the debate arises on the method of achieving it. This is where Heidegger differs from Eckhart, and where Eckhart differs from Dogen. Nietzsche, Wittgenstein and Heidegger

rescue us from the tautological vortex of Western metaphysics and take us to a point at which we can begin to understand Eckhart, Goethe, Thoreau, Blake, Whitman, and Wordsworth. Eckhart takes us a step further, to a point at which we can begin to understand Dogen. Goethe is still there, a non-partisan poet. In my view, Dogen and Goethe have a lot in common. Goethe points straight to Dogen in the play - Faust (see Blyth 1942). The creative inspiration for Goethe's achievements lay in Nature, not in scripture or in language. Eckhart agrees that the creative inspiration for cultural life must lie in Nature.

Goethe, Eckhart, Heidegger, and Dogen let the local landscape tell its own story. Goethe does this through poetry and thus linguistically points to a contextual bioregional narrative. Dogen (like Jesus) achieved enlightenment and moved into the field himself - a field of enlightenment (a realisation of the *dharmakaya* -existential synchronicity with the way of Nature). And here, precisely here, is where I (with great respect) take leave of the West. This is only because the West has not adequately developed an existential methodology that fosters the achievement of this condition, which has been so richly developed in other parts of the world, such as many different tribal cultures, and Asia. In the West, if you achieve this condition or claim that it is possible you are likely to get burnt at the stake, or at best branded as a heretic (as happened to Eckhart); in the tribal world and the East everybody celebrates (Watts 1974).

I believe that this analysis points to the need for Christianity to have a major over-haul if it is to remain faithful to the original message of its founder. Jesus never once claimed that he was the only Christ (enlightened one) possible, he simply declared that he had 'made it' into the field of the way of Nature. In Christianity a mystic can never claim to be the Christ. If they do they are heretics of the highest order. But in Buddhism for example, you are told even before you begin a mystical path, that you are already the Christ (Buddha), only you have not realised it yet (see Suzuki 1969). Mystical training is simply a process of helping you realise your innate divinity. Your innate capacity for being thoroughly *with* Nature. In the words of Walt Whitman;

Divine I am inside and out, and I make holy what ever I touch or am touched from;
The scent of these armpits is aroma finer than prayer,
This head is more than churches or bibles or creeds.

(*Song of Myself*, lines 526-230).

A frog cannot ask itself the question "who am I". It exists without reason, without who and why, as 'who' and 'why' are inventions of language. That is all they are, and all they can be. The only difference between humans and non-human animals is that we, with the help of symbolic language, are the only ones (as yet and/or as far as we know) capable of knowing it once we have achieved it. We are also the only ones capable of inventing normative linguistic systems that divorce us from the way of Nature. When this divorce happens we 'fall' away from Nature. This is the fall from grace, the expulsion from paradise (see Wilber 1983). Taking the Christian story of Genesis literally will lead to gross misunderstandings¹².

If all humans in a culture achieved such a condition of synchronicity with the way of Nature they could not help but live in an ecologically sustainable relationship with the rest of Nature in their landscape. Ecological sustainability would simply exist by default, not by management. Now I do not think that every person in a culture must achieve such a condition of enlightenment for the culture to be an ecologically sustainable one. But I do believe that a culture must be informed by the experiences of those in a culture that have achieved such a condition through mystical training. These people can provide a valuable source of ethical information with regard to the relationship between a human community and its ecological surroundings. This ethical information is passed on to other people through language and ritual. An enlightened member of a community must be able to influence the living language game of the culture, and the living rituals that bring meaning into cultural life from beyond the reach of language.

Furthermore, it is also important that a human community does not simply listen to historical messages from someone who was enlightened at a previous time via scripture. This is because the landscape they interacted with in the past is not going to remain unchanged - remember all things flow, the landscape is constantly changing. Someone who moved with the flux of Nature 2,000 years ago in Israel will not have any privileged view of how to achieve the same condition in Fiji in 1994. There are no tropical forests in Israel,

¹²It should be noted that the Hebrew version of this myth did not specify that the archetypal human being was a male. The name 'Adam' formally applied to both the male and the female aspects of human being. The original term was 'ha' adam' which translates as 'humanity' - not merely the male version. The name 'Adam' has since been appropriated by men in the reinterpretation of this myth, that reshaped it to legislate for the dominance of male over female (Ryan 1984).

but there is one in Vunivia. As such, taking advice from the historical past, in the form of an unquestioned adherence to an historical narrative (such as scripture), may not be appropriate. The context of any mythical narrative needs to be able to evolve with the evolving circumstances of cultural life. There needs to be a constant 'supply' of ecological wisdom capable of informing a living culture of its place in the landscape it actually lives in.

This points to two mystical imperatives. The first is the need to recognise that mythical narratives, to be authentic, must come into culture through language or art *ex post facto*, after the event of mystical experiences, and not be used merely as a way towards such experiences. In this fashion metaphysics, as narratives, are a by-product of mystical training and not paths towards them. The path towards wisdom is a clearing away of obstructions. It is a method of achieving nihilism, capable of cleansing the doors of perception, as William Blake alluded to. Metaphysics itself is an obstruction, because it adds material to the 'doors' - we draw straight lines on the glass and in the process cover over our view of Nature and each other. This is what Heidegger meant when he said that metaphysics must come to an end in order to overcome the forgetfulness of Being (Heidegger 1959; 1973). The second mystical imperative is the need to recognise that a condition of enlightenment must be passed on from one generation to the next so that it is kept alive, and able to remain authentic in its ever-changing. In Buddhism the symbolism of the eternal flame points to this. In Christianity there is a tradition that is very similar to Zen. It is known as the *via negativa* - the negative way, which was central to the theology of Meister Eckhart (Cox 1986). There is also a similar emphasis in the theology of St John of the Cross (see Arraj 1986; Ross 1993). The *via negativa* uses nihilism in a similar way to Zen. It seeks an apprehension of the Nothing by means of negation of the ego-self, followed by a negation of the negation. This second negation is crucial, as it transcends totalitarian forms of identity where the self is lost in unity with the Self, thus losing its identity and denying its own locus of creativity as a unique individual being¹³. This is what Nietzsche complained about in Schopenhauer's philosophy as mentioned earlier. But instead of pushing further into nihilism and heading for the second negation (as Meister Eckhart and Hegel did), Nietzsche did a 'U' turn and headed back to the ego and the will to power (see Abe 1985)

¹³This corresponds with the call for a recognition of unity with identity in some forms of postmodern literature (see Cheney 1989a).

But why does Dogen get the last word? Well, it is because I believe that in Zen you will find the most effective *method* of achieving these two mystical imperatives¹⁴. The *via negativa* in Christianity comes very close, but as yet has not refined its method to such lengths as has been achieved in Zen. The same can be said of other religions, such as other forms of Mahayana Buddhism, and Vedanta Hinduism (Wilber 1983). The word 'Zen' comes from the word '*zazen*' which is a method of meditation. It is a well tried method of driving nihilism as a basis for clearing away obstructions to wisdom. Many other religions (including forms of Buddhism, Hinduism, Judaism, Islam, and Christianity) however, place an emphasis on narratives, and scripture to varying degrees. Zen on the other hand is not a tradition of stories (see Ross 1993; Abe 1985; Suzuki 1969; Watts 1957 for example). It has no scripture. In this way Zen and the *via negativa* are thoroughly compatible, because Zen as a non-linguistic, and non-cultural *method* can easily be employed in Christianity as a means of driving nihilism. This possibility has already been explored by Arraj (1988). In fact, such a method I believe would have been encouraged by the person who was the founding inspiration for this religion - Yeshua¹⁵ (Jesus) Buddha¹⁶ (Christ). The message was grace - not law. Grace is a moving with the flux of Nature. Grace is *a posteriori*, grounded in a transcendental empirical domain and is alive. Law is *a priori*, normative historical and dead.

You do not have to be a Zen Buddhist or a Christian mystic to turn language and conceptual thought off. You do not have to go to China or Japan to listen to the silence of your own landscape. Fijians can do this and stay Fijian. They do not need to be converted to Buddhism or Christianity to do this, they do not have to read the Diamond Sutra or the Bible to do this. Furthermore, I believe that many Fijians were already listening to the silence of the *Vanua* before Europeans came along like some kind of cultural exterminators and forced Fijians to burn their culture down.

¹⁴According to Wilber (1981) Zen has produced more enlightenments (Buddhas, Christs) than any other form of religion in history.

¹⁵'Yeshua' is the way the name 'Jesus' (as an historical person) is likely to have been originally pronounced (see Williams 1978).

¹⁶'Buddha' and 'Christ' both mean - 'the enlightened one', and are symbolic titles, not historical names.

A religion must grow from the local soil. If a form of mysticism is allowed to grow from the local soil, from its actual landscape, it will have far more chance of achieving ecological sustainability in that part of the world, than one which uses stories from other lands (any other lands). I see no value in Fijians mimicking the practices of Navajo rituals. Fiji is not a desert (at least not yet), and does not have coyotes. For Westerners who already have their Western cultural baggage firmly in place, then mysticism that is window-dressed in Christian apparel may be appropriate, as long as they do not keep branding enlightened ones as heretics. They will need them to inform them about how to live with Nature in that place and to teach the next generation of mystics. I am not suggesting that every freak that walks around in a loin cloth claiming to embody a manifestation of the Godhead should be canonised. But they need to be listened to - because they might be right.

A cultural methodology that wishes to achieve a condition of ecological sustainability must become a form of mysticism. If not, I believe that the evolutionary process will remain misunderstood by scientists and the television viewers who watch Nature programmes. Not only will evolution remain misunderstood, but the notion of ecological sustainability will also remain covered over. This is obviously not an argument against evolution, and in favour of creationism, as if Darwinism and Christian literalism together held the sole franchise to the evolution debate. Instead, it is an argument in support of creative evolution in the tradition of Bergson, and later Waddington, and Sheldrake (see Bergson 1911; Waddington 1977; Sheldrake 1981, 1991). The mystical element is not alone in science as can be seen with the work of numerous scientists such as Bohr, Bohm, Davies, Capra, Zohar, Zukav (quantum physics), Prigogine (chemistry), and Jung, Maslow, Sutich, Neumann, and Campbell in psychology for example.

We can never prove such a theory of ecological sustainability when measured by the yardstick of empiricist science. Instead we can only pick up elements of the mystery as empirical evidence disclosed within sense perception and tie them together in such a way that a coherence is able to be revealed. Should the source of this coherence actually lie beyond the reach of our grasping hands (i.e. outside our sensibilities) we can never prove our story right or wrong. I believe that the source of coherence for ecological sustainability does lie beyond our sensibilities and sensory capacity, as we humans are limited subjective beings. As such, I am not a rationalist (like Descartes and Newton), transcendental idealist (like Kant), or an empirical realist (Hume, Comte, Marx, Popper, Carnap). Each of these

philosophical camps are anthropocentric. They create the world in their own image - in the image of their own ability to have knowledge, and declare that this is all there is to reality at large, or declare that this is all that really matters. As a transcendental realist I (like Thoreau and Goethe) accept my limitations and do not ask Nature to conform with my egotistical whims. In the absence of the possibility of lining this story with unconquerable proof I refrain from attempting to do so. All I can do is present a story that has an element of coherence, and furnish it with evidence to that effect.

8.6.2 APTNESS, STOICISM AND MODERNITY

What is not Apt? What does unsustainability, non-adaptiveness, non-indigenoussness look like? A vegetarian tiger, a fish out of water, is not Aptness. Not sleeping when you are tired, eating when you are not hungry - this is not Aptness. And yet a human culture, such as the modern West, enshrines unauthenticity as the most virtuous form of cultural existence. This is because, at best, it employs the ground of logic as the basis for 'truth' and 'right' behaviour. Many of the radical modernist projects are arguing that the problem lies in our inability to act out this logical and reasonable way of life, which was made into a coherent cultural ideal in the Enlightenment. Modernity set up shop selling logic as the only way to liberty. But forms of postmodern theory have exposed the flaws in this argument and seeks to show Western culture that it must throw away the totalitarian means to the Enlightenment ideals, and redirect the ideals themselves.

The Enlightenment was (sadly) a re-birth of stoicism. This is not to say that the motivations behind the Enlightenment project were all necessarily deceitful, as I believe that many of them were indeed germane (e.g. Kant, Rousseau, Hegel). Romanticism is a good example. I only contend, along with many other postmodern theorists, that the radical modernist passage, with its radical (yet reasonable) democracy, will not deliver the rewards they claim to be capable of. There *is* a light at the end of the modernist tunnel, but in emerging from the darkness one will soon discover that it is not an ecologically sustainable landscape. We will have simply arrived back at where we started - within language, within a totalising discourse that asks reality to conform with the rules of our own language game. The reverse is what is needed. We need to adapt language to Nature's coherence in spite of our stoic ancestry. I wish to shout - "*we need to surpass the limitations of language*" if we want ecological sustainability. As Thoreau said, modern people have;

deliberately chosen the common mode of living because they preferred it to any other. Yet they honestly think that there is no choice left. But alert and healthy natures remember that the sun rose clear. It is never too late to give up our prejudices. (Thoreau 1980:10).

8.6.3 THE TRINITY OF ART, LOVE, AND NATURE

The source of coherence for an authentic story concerning ecological sustainability lies in Nature, in Aptness. Living or dying according to Aptness, according to your nature is the way to authenticity. It is a true way, it is an ever-changing trueness. This is what I mean by 'authentic'. This is why it is unlikely that a successful bioregional narrative will be logical. People who are searching for coherence according to logic will fail to understand such a linguistic system should they ever stumble across it. This is precisely how and why the Australian Aborigines have been so misunderstood by Westerners (see Chatwin 1987). There is an example of a bioregional narrative linguistic culture in action. The songlines. The dreamlines. The epistemology (i.e. a set of cognitive maps) that derives its meaning from the landscape itself. Such a language is poetical. Living poetry.

Another example can be found in Walt Whitman. His lengthy poem *Song of Myself* is his bioregional narrative. In this poem (as Heidegger and Wittgenstein would approve) he points to the unutterable meaning of the mystical origin of poetic inspiration:

Stop this day and night with me and you shall possess the
origin of all poems,
You shall possess the good of the earth and sun... and there
are millions of suns left,
You shall no longer take things at second or third hand... nor look
through the eyes of the dead... nor feed on the spectres in books,
You shall not look through my eyes either, nor take things from me,
You shall listen to all sides and filter them for your self.

(*Song of Myself*, lines 25-29).

Other places where bioregional narratives have risen to the surface of culture through art are the landscape paintings of Cezanne, the poetry of Goethe, George, Blake, Wordsworth, the books *Walden*, and *The Main Woods* by Thoreau, and *Arctic Dreams* by Lopez. The list goes on, and they have always been there, only they get put aside by modernity to gather dust, rather than being used as moments in an evolving code of ethical instruction. Another problem is that we do not know how to interpret them. We must learn to see art as the

bursting forth into culture of creativity that flows through the artist. We must seek out the artist as well as art. They are the ones that have been touched by the way of Nature, not the painting or poem. The poem is the footprint, not the foot. The art work carries an unutterable message, and this is the source of its aesthetic worth. So we need to maintain the spirit of the unity of art, artist, and artistic inspiration. This is the three fold aspects of poetry - the poem, the poet, and that which the poem points to.

This is the trinity of Art, Love and Nature. The Nature dimension is Nature in its ever-changing creative flux, as the source of creative inspiration for the artist. The artist can capture this creativity by letting it flow through them, by clearing away obstructions to wisdom, and moving with the flux of Nature in what are quintessentially mystical experiences. This is achieved by means of detachment made possible by the dissolving of the ego-self (negation), thus allowing *agape* to flow (this is the Love dimension). This serves to unlock the door to ones true nature by existentially realising the geography of selfhood. This is also compassion - an identity with the other, the landscape. As Heidegger puts it: "*All art, as the letting happen of the advent of the truth of what is, is, as such, essentially poetry*" (cited in Halliburton 1981:50). The Art dimension is the coming to presence in culture of this spontaneous creativity, where it lands on the surface of a cultural construct such as language (poetry, or prose), painting, sculpture, or music, and is thereby able to become a narrative. Such a narrative is the bioregional narrative. Such a narrative is an evolving code of ethical instruction. This is an existential and mystical basis for ethics as a form of eudaemonism.

Eudaemonism is where the highest happiness becomes synonymous with virtue. Ecological virtue must be synonymous with authenticity (the way of Nature). If we are able to pass through the silence of linguistic nihilism we can begin to dissolve the illusionary boundary between the 'me' and the 'not me', thus discarding the linguistic illusion of the autonomous self or ego. In the absence of an autonomous ego, *eros* (selfish desiring, wanting to control, grasping) is no longer capable of dictating our actions and motivations. This removes a substantial obstruction to compassion (a feeling with the 'other'), beyond any invented ethical instruction grounded in law. The source of 'instruction' now lies in a discovery of our feelings, a *feeling with* the other - compassion. This is a compassion in relation to any 'other' being - human or non-human. As Schopenhauer suggested: an action only has moral value if it happens in the absence of a predetermined code of instruction (Schopenhauer

1965). Acting upon our feelings of compassion does just this. We are not following any law, we are simply being true to our nature, as it is in our nature to have this compassion because our nature (self) is defined geographically in the landscape as part of the broader Self as *Sself*.

I do not suggest that this compassion is grounded in any kind of self-denial on behalf of the rest of Nature. It simply arises out of a realisation of the existential *inclusion* of the individual *with its surroundings*. In fact it only works if it is grounded in total and unmitigated nonchalance. How can this be so? It is about simply being true to your nature once you have discovered what that nature is. Humans have great deal of trouble doing this because language and its rules keep getting in the way. If you are a tiger then your compassion (as your nature) is best expressed by sleeping a lot in between killing and eating other animals; by defecating and providing a micro-environment to microorganisms that live in tiger dung. As William Blake provokes us:-

Tyger, tyger burning bright
In the forests of the night
What immortal hand or eye
Could frame thy fearful symmetry

Further in the poem we are invited to wonder; "What the anvil, what dread grasp/ Dare its deadly terrors clasp", where these deadly terrors are part of the fearful symmetry of the tyger. It slays other animals, and even humans, not out of anger, but as an aspect of its symmetry, its nature. Such slaying is compassion in the sense that it is grounded in a trueness to its character and a *being with* the 'other' and allowing the 'other' to be true to its character. The will is an aspect of a collective *Will to Be*. The Will to Be is similar to Schopenhauer's notion of the will to life (see Schopenhauer 1966). However, I differentiate from it by using the term 'Will to Be' in case I have misunderstood the similarities between Schopenhauer's thoughts and my own, and to explicitly recognise the Will to Be as applying to a being as *Sself*.

The Will to Be, as I see it, is a coalescence of the intersubjectivity of all beings. It is not a thing, it is not a being. That which is no other being Heidegger calls 'Being'. Being underlies Nature as the way of Nature - the Will to Be is where the way of Nature is made manifest in a being. Nature and the intersubjectivity of all beings in Nature are held

together spontaneously by Aptness which is also the Will to Be. It is the coming to presence of Being in the *relationships* between beings. It is the same as *agape*, because *agape* is what underlies Aptness.

If I am able to apprehend this presence of Aptness in consciousness, it is a mystical experience. It is an existential confirmation of the coherence of my intuitions - mysticism. And no culture, community or religion has the sole franchise on mystical experiences. Any person from any culture speaking any language can gain a similar experience of the Will to Be as disclosed to them in their landscape.

The source of Aptness as the Will to Be is Being (the ground of existence). Such Aptness arises spontaneously out of that which is no other being, and is the source of existential ecological coherence in Nature. Be true to your nature. If that demands dying - so be it; it is only the ego that is trying to grasp onto the present moment and hide from death. An old tree is young soil. The ecological dynamics of grazing animal populations is such that the non-Apt are selected out of the population, and or the population is thinned out. A child born with no head dies. Keeping it alive for the sake of some invented form of compassion is an affront to Nature. It is a denial of the Will to Be. It is not letting beings be. If it is the true nature of a non-adaptive being to cease to be, then let it cease to be. Anything else is not Aptness and will contradict the evolutionary process, and contradict ecological sustainability. Walt Whitman declares:

Great is life.. and real and mystical...wherever and whoever,
Great is death.. sure as life holds all parts together, death
holds all parts together,
Sure as the stars return again after they merge in the light,
death is great as life.

(*Great are the Myths*, lines 65-67)

For example, predator and prey exist in a dialectical relationship that is true to their respective natures. They need each other to be what they are, they are two aspects of the same whole, they are beings within Nature. Dialectical rationality in ecology can help to reveal this. Nowhere have I ever suggested that death or dying is bad. If death were to stop, the planet would rapidly over-flow. Heraclitus tells us "Immortals become mortals, mortals become immortals; they live in each other's death and die in each other's life (Fragment 66, in Needleman and Applebaum 1990). The tiger is exercising its Aptness, its *agape* by

killing every now and Zen.

8.7 EUDAEMONISM AS AN ECOLOGICAL ETHIC

Getting back to eudaemonism, I believe that virtue (as authenticity) and the highest happiness need to be recognised as synonymous. I described above what I mean by virtue - it is grounded in moral intuition, in being true to one's nature and authenticity. I also believe that this is where the highest happiness lies. The highest happiness is not an orgy. It is not erotic, although purely erotic forms of love can be fulfilling (although it might be simply pornographic). But it is not the highest form of fulfilment. This is because *eros* on its own is underwritten by desire of the ego (a linguistic illusion), where that desire is never able to be satisfied (Wilber 1983)¹⁷. The desire (*eros*) is always there so long as the person that seeks the highest happiness is driven by their ego. The ego and *eros* are a hedonistic couplet.

If, on the other hand a person has discarded the autonomous ego, compassion and *agape* are made possible. It is still love, but not erotic. Erotic love, in the absence of *agape*, obstructs authenticity and hence ecological sustainability. This is because it seeks possession of the alienated 'other', as the 'other' remains an object of erotic craving. It is pornographic. It does not let beings be. But actions driven by *agape* - being true to your nature and letting others be true to theirs, is consistent with Aptness, and the Will to Be, and is thereby authentic (hence virtuous). It is not different in type from the Aptness that drives the evolutionary process and hence adaptation - ecological sustainability. This is why I believe that the evolutionary process is able to be apprehended by people through personal mystical experiences mediated by *agape*.

How is this the highest happiness? Being true to your character, by discarding unauthentic ways of being, is fulfilling. It is 'being at home in the world' - belonging. Not being true to your character fosters tensions and anxieties arising out of this ontological condition of unauthenticity. Unconsciously you apprehend a sense of 'wrong' which is masked by suppressing those anxieties (see Fromm 1988, 1991) - often through appeasing the ego with

¹⁷This is what is so fundamentally wrong with utilitarian ethics, because it is based on a hedonistic conception of happiness. It is thus a pornographic doctrine that serves capitalism (also pornographic) very well.

erotic gifts by accumulating possessions. This serves to sweep the symptoms of egotism beneath the carpet, and helps to avoid solving the problem at its source - realising the linguistic illusion. The highest happiness, on the other hand, comes by casting off the source of these tensions, by dismantling the ego and apprehending the unity of the individual with the geography of the Self as *Sself*. Achieving such a condition allows you to be held by the landscape and contribute to holding it (see Campbell 1986). It is consistent with Aptness, with the way of Nature.

I do not suggest that *eros* be discarded. No, not at all. This thesis is not advocating some kind of self denying fundamentalist ascetism. I only suggest that *eros* should not dictate the morality of our actions. If it does we will continue to ruin the landscape as we have done for far too long. Instead we need to reassert the dialectical balance between Apollo and Dionysus - not a drug induced Dionysian frenzy, nor a self denying negation of the body. What is needed is an affirmation of both body and non-body. The body needs affirmation. This is expressed in artistic fashion. The body is a vehicle for expressing a celebration of creativity.

I believe in the flesh and the appetites,
Seeing learning and feeling are miracles, and each
part a tag of me a miracle.

(Walt Whitman - *Song of Myself*, lines 524-525)

But the source of this creativity lies partly beyond the body. If the source of inspiration lies only in the body, the celebration will not be spiritual. It will not be the landscape speaking through people. It will simply be people conversing with people. As Mercjowski said in the late 19th century concerning symbolism:

symbols must flow naturally and involuntarily from the depths of reality [Nature]. If the author invents them artificially to explain some idea or other, [they] transform them into dead allegories, which can awaken only disgust as does anything which is dead (cited in Cassou 1979:156).

Being held by the world by *moving with* the landscape (as opposed to against it) is a euphoric state. This ecstasy is commonly expressed in art by artists who capture this creative ecstasy in their work (Gablik 1991). It is like going down-stream in a river instead of battling against the current. Yet, people can never know what it is like to go down-

stream until they try. Attempting to explain a 'down-stream' sensation to someone who only knows 'up-stream' is like trying to speak to a mongolian in swahili. The 'down-streamer' sounds like an idiot.

I believe that Aptness can be experienced in interpersonal relationships. Aptness as *agape* is experienced as love. Not erotic love. But love as mutual compatibility and living in response to that immaterial compatibility. It is also able to be experienced through incompatibility, provided an appropriate response is enacted. It is still being true to one's nature, Apt, adaptive, ecologically sustainable.

To use a very simple metaphor, imagine two magnets. Imagine placing the north end of both close together. There is repulsion. Sustaining such a small distance is not Apt. It can be forced, held together with string, but this will be artificial - unauthentic. If left to be true, a distance will come about until there is no longer repulsion. But to stretch the metaphor a little, imagine that the magnets also have attraction at the same end. This attraction needs to be balanced by the repulsion. Too close becomes repulsion; beyond a certain critical distance it is attraction; beyond a greater distance there is neutrality. Now, the dynamics of 'attracto-repulsion' are determined by the mutual character of the true nature of both magnets (imagine the magnets are people). Some people are compatible as friends but not as a married couple (or something equivalent) - due to their true nature. Humans are social beings, and as such (on the most part), there will be a background of attraction. People are drawn together. However, as this distance narrows the attraction may become repulsion. Some people might be thoroughly compatible (without tensions) at an emotional distance of ten meters (a condition of Aptness), but quite incompatible at a distance of ten centimetres (these distances are metaphorical). Other people may still be compatible (i.e. no tensions, Apt) at ten centimetres but this compatibility is dictated by their true nature in an intersubjective relationship. Birds of a feather flock together.

Tensions only come about when the condition is not Apt. Achieving a condition of Aptness in relation to two people (or a network of people) is when the social dynamic is driven by *agape* (non-attachment). I call it *synagapeosis* - a Apt condition where attracto-repulsion is balanced out and the 'distances' are the product of the true nature of the subjects. This is the Will to Be working in human relationships. I contend that this condition of *synagapeosis* also occurs in non-human relationships. Spatial pattern in vegetation

communities can also be explained according to Aptness (adaptiveness) without ecologists having to stretch their imagination very far at all. In fact they have been saying this for many years. If a seedling germinates on a micro-site where allelo-chemicals inhibit its vigour it is likely to die. For example, a number of Aotearoa/New Zealand tree species such as *Leptospermum scoparium*, *Aristotelia serrata*, *Dacrydium cupressinum*, *Prumnopitys ferruginea*, and *Podocarpus totara* have leaf properties that inhibit the growth of seedlings in this way (see Brockie 1992:53). Similarly, if a light demanding species, such as *Nothofagus fusca*, needs a large canopy gap to germinate and maintain growth, but does not get it, it is selected out of the system (see Wardle 1984). I believe that the dynamics of Aptness as adaptability in non-human situations does not differ in type from the human example given above.

I am talking about love, but not erotic love. This condition can be achieved in any culture as every person as a human being has a true (i.e. authentic) nature. I do not mean a universal essence as is the case with the Humanist project (see Best and Kellner 1991). I mean an authentic contextual subjectivity. I believe that if the condition is Apt, driven by *agape*, community results spontaneously. A group of people cannot help but exist in a mutually compassionate way, if their relationships are mediated by *agape*. Compassion here arises out of our nature as social beings. Hermits can and do happen. This can be Apt as well, but if and only if, such a condition is true to the nature of that person. This is not an appeal to any universal discourse concerning human nature, as I believe that we all have a unique nature which arises as the dialectical product of the intersubjectivity of our existence as beings in Nature. My nature is not your nature. I am here in this landscape and you are there in yours. My self has a geography that is particular to me and my landscape (socially and geographically).

If a condition of *synagapeosis* is achieved in a social setting then, I believe that the social group has achieved a condition that falls into line with the evolutionary process, with ecological sustainability. This is because it is driven by the same Aptness that drives the evolutionary process. It is part of the same equation of adaptation, of Aptness, of authenticity, of indigenouness, of ecological sustainability. It is a moving down-stream, a *moving* with the Will to Be. It is evolution working to the 'grass roots' of interpersonal relations, mediated by mystical experiences of the presencing of Being in the social domain. It is the social ecology of unmitigated nonchalance. The ecology of letting go, of letting

beings be.

Here the last fragments of the humanity/Nature dualism are finally shattered. Ecology at last enters into the social domain without reducing sociology to ecology, or ecology to sociology. We get something that is bigger than both - a form of transcendental cultural ecology which I call eco-mysticism. I will not give it any grand title, because it has all been said before, in many different cultures, only perhaps not quite in this way. I have shown how and why a holistic process ontology combines with a dialectical, transcendental empiricist epistemology, in combination with soteriology to bring us to a point at which we can begin to frame an authentic question concerning ecological sustainability in general and in the Vunivia catchment in particular. What it does is substantiate the bioregional narrative concept, enabling us to talk about it more casually and confidently in the pages to follow.

8.8 THE BIOREGIONAL NARRATIVE REVISITED

Cheney (1989a) has provided a valuable framework for the development of the bioregional narrative approach. He begins by acknowledging the dangers in sustaining privileged or totalizing discourses in ethical praxis, demonstrating the need for both conceptual and existential deconstruction. Deconstruction bottoms out in nihilism at the level of language (conceptually) and the self (existentially). This leads to the conceptual possibility of ethical reconstruction mediated by a perspectivistic, contextualized notion of epistemic truth via social negotiation, where the source of coherence for that truth need not lie within language at all. This process of negotiation is then existentially extended to the spatial surroundings where the landscape is brought into the social discourse through primordial language. This is made possible through an identification of the self as existing in a unity with the landscape Self as *Sself*.

Liberating language from a normative self-referencing system of rules and predicates (which obstructs ecological sustainability) necessitates the realisation that any theory (as a narrative) is language all the way down. As such, there can be many truths in the same landscape. The second realisation required for liberating language from unauthenticity is to acknowledge that it is 'world all the way up' as Cheney (1989a) puts it, which provides the mandate for reconstruction, the possibility of authenticity in language, and hence ecological sustainability as culture.

A bioregional narrative, begins with truth as negotiation, and language as either primordial or derivative, and attempts to build a politico-linguistic framework that allows a culture to engage in a descriptive conversation with the surrounding landscape. The outcome is adaptation, Aptness, indigenusness, compatibility and ecological sustainability. The language that develops is able to grow from the local soil *in situ*. If it doesn't it will not be genuinely poetical or empirical as it will not be grounded in real experiences of the real landscape. And as Cheney puts it: "To prepare a theory, religion, or culture for export is to turn it into a potential tool for the colonisation of the minds of other people" (Cheney 1989:120).

The next task is to develop a practical framework for achieving such a condition as a means of rescuing a culture from unsustainability. This is perhaps the most challenging task humanity has before it, in the light of the deepening ecological crisis and the ever-increasing distance modern culture is moving from such a possibility. And in echoing Karl Marx - the philosophers have only interpreted the world, the point is to change it. But how can this change be brought about? It needs to be a political process. It needs to be soteriological. It needs to be emancipatory. It needs to be linguistic. It needs to be capable of going beyond human democracy and extend to a biospherical egalitarianism (as suggested in deep ecology) that includes the rest of Nature in human actions and decisions concerning cultural life. It needs to be free from epistemological and political structures that contradict or obstruct such holistic egalitarianism. But where might we begin?

I believe that a valuable place to start is to seek out the most oppressed human group possible. From there one will be able to study the condition of the lowest common denominator of human existence which finds itself in such a condition as a result of oppression itself. When viewed through their view-finder (i.e. their life experience) one is able to gain a perspective of the structures of oppression in operation. This oppression is grounded either in blatant violence or in clandestine, totalizing discourses of self-referencing legitimation. Humanity is part of Nature. By seeking to assist the emancipation of oppressed human groups one is doing something in Nature, with Nature. The human starting point enables us to locate the source of oppressive discourses which manifest their violence throughout Nature. If your language game is incapable of oppressing any being, buy ridding

itself of all forms of totalizing structures of control and manipulation your culture will be non-oppressive in all directions. It will be non-stoic, non-manipulative, letting beings be, Apt, adaptive, and ecologically sustainable. Such egalitarianism can be achieved through non-stoic holism as mentioned above, that sees the whole in every part. It is for this reason that I believe postmodern feminism to be an ideal theoretical starting point as it seeks to point to the source of oppression in politico-linguistic frameworks, where the subordination of women is one manifestation of such oppressive discourses (see Best and Kellner 1991 pp 205-214; Flax 1990; Fraser and Nicholson 1988, for example).

The holism and process rationality I see as so important can be planted into a language game through contextual discourses of difference. This is achieved by assimilating language to the local (contextual) situation (which is different from other places - hence 'difference') and shapes it to the local social and spatial reality. Language of this form is not concerned with overall coherence in any universal sense. The result is a mosaic of language serving numerous different purposes simultaneously. Contextualized language thus becomes one among many possible linguistic truths for a particular landscape. The importance is the way language functions, not the way it sounds. Different languages from different cultures can become indigenous to the same landscape - provided they are contextualized and creative as opposed to normative. Language of this type is able to articulate cultural conceptions of the self in a way that reinforces the contextual nature of a self that is tied to a particular landscape as *Sself*. This type of language game is common in tribal cultures but has been poorly understood by anthropologists in the absence of a non-totalizing and contextual conception of linguistic theory. Postmodern linguistic theory is one way of achieving this kind of understanding.

Tribal languages have, in many cases, been overlain with modernist language structures and meanings that transform not only the language structure but also the contextual self as subject. This has happened in Fiji where the meaning behind words in language have changed in spite of the words remaining. The meaning of Fijian life now has a basis in modern standards of rationality as mentioned before. This includes a modern conception of the self, a self that has been ripped up from the landscape. This is why I have rather provocatively suggested that, on the most part, Fijian culture is already dead.

But as Jay (1989) has suggested "*Psychology without ecology is lonely and vice versa*"

(cited in Cheney 1989a:122). This refers to the spatialization of intersubjective relationships between people and their living surroundings, between the self and the landscape. Furthermore, "The aboriginal landscape was a democracy of spirits where everyone listened, careful not to offend the *resource* they were a working part of" (cited in Cheney 1989a:113). This leads to mythic thinking as a way of carrying creative contextual knowledge of place through a culture. Myth is a language construct that contains the power to transform as a kind of vehicle of psychological development and transformation (see Neumann 1959; Gablik 1991; Stevens 1992; Campbell 1986). According to Cheney (1989a):

Postmodernism makes possible for us the conception of language conveying an understanding of the self, world, and community which is consciously tuned to and shaped by considerations of the health and well-being of individuals, community, and land and on ethical responsibilities for each. This postmodernist possibility is an actuality in the world of [some forms of] tribal myth and ritual (ibid.:123-124).

He makes a careful disclaimer that this is not always realised as an actuality in tribal cultures that have these potentialities and also that not all tribal cultures possess these potentialities. The task ahead is to explore whether the Fijian culture did or does have these possibilities/actualities and whether such is able to be employed as a basis for ecological sustainability in Fiji.

There is a strong connection between contextual discourse as a basis for a bioregional narrative and contemporary feminist theory on contextualism, narrative discourse, and standpoint (perspectivistic) epistemologies (e.g. Harding 1986). Prompted by a feminist critique of narrative and the concept of "home" by Martin and Mohanty (1986), Cheney (1989a) asserts that relations to people are elaborated through spatial relations and historical understanding where the importance stems from the contextualization of such relations and the avoidance of any purely psychological (anthropocentric) explanation.

As such, although the key to liberation from domination is narrative, it needs to be grounded not in a linear, essentialized narrative self but in geography. Our location becomes all important where the *Sself* and its geographical surroundings are bounded together in a "narrative which locates us in the moral space of defining relations" (Cheney 1989:126). This provides a liberationist arrow pointing to the importance of cognitive maps or mindscapes in relation to the simultaneity of social and ecological emancipation from oppressive, instrumental, and unsustainable, domination. Thus, in the shattered ruins of

deconstructed totalizing discourses emerges a contextualized discourse of place.

There is an important connection here between narrative, myth and art. O'Biso has recognised this in relation to Maori 'art' which was displayed in the United States in the Te Maori exhibition. She reflects:

...it had been difficult for the Maori people to discuss their art with Americans. There is no single word for art in the Maori language. A piece of wood has no significance. It is transformed through the art process. The contact with people, the words and stories built into the piece of wood during its making and in the centuries that might follow, turn it into a *taonga*, something treasured. The object is actually clothed with words, animated and transformed into a cultural object whose mana... are increased by continued association with people and events during its lifetime (O'Biso 1987:90-91).

Similarly, Lopez (1989) talks about narrative and its relationship with landscape as a means of apprehending the unity of what he calls the inner and outer landscape. For Lopez the birds of a place and their song are part of this landscape.

Perhaps a black throated sparrow lands in a paloverde bush - the resiliency of the twig under the bird, that precise shade of yellowish-green against the milk-blue sky, the fluttering whir of the arriving sparrow, are what I mean by "the landscape" (Lopez 1989:64).

Our inner landscape is also shaped by the outer landscape and one will influence the other (Campbell 1986). They share a dialectical unity. "The interior landscape responds to the character and subtlety of an exterior landscape; the shape of the individual mind is affected by land as it is by genes" (Lopez 1989:65). This sounds very similar to what Goethe is telling us in his plays. He was at pains to bring humanity and divinity down to earth and show how such a realisation would enable wisdom to unfold.

8.8.1 BELONGING TO THE LAND

The meaning of the landscape is geographically contextual, representing intersubjective relationships within a particular place in the cosmology, a cosmology which is connected to the landscape. This facilitates the realisation of politicized geography as opposed to the

land existing as a neutral *tabula rasa* where social and political events take place¹⁸ (see Jameson 1984). The place does not precede the human activities - it is comprised of these very activities and social, political and emotional undercurrents. From this standpoint it becomes easier to comprehend the Fijian notion of *Vanua* in its political, social, and geographical contexts. I, for example, do not live in or on the land of Otautahi/Christchurch - I am this place and this place is me. Both I and my hypostatized spatial surroundings comprise each other dialectically, the same can be said for the collective human population of this landscape as well as the non-human aspects of place. To take it a step further, the geographical context of life in a place constitutes an integral aspect of the *Sself*. For this reason *Sself* realisation cannot be separated from the very landscape in which the *Sself* came into being. Because the *Sself* is that landscape.

People grow to unconsciously identify, in some intangible way, with the place that nurtures them in their formative years (see Stevens 1992, pp54-164 for an account of the analytical psychology of Carl Jung in relation to childhood). They become that place, which becomes psychologically ingrained in their personality, and this in turn cultivates a sense of belonging. There is no guarantee that any such belonging will develop vis-a-vis a landscape if children are obstructed from experiencing their geographical surroundings at an early age. Such a condition is, however, endemic to modern urbanised cultures. Many children in modern societies grow to identify with surrogate landscapes mediated by television (see Postman 1987; Playfair 1990). I for one know the sense of euphoria that comes with hearing the theme music to certain favourite television programmes that inspired me in some way as a child. Upon hearing those sounds I suddenly feel childishly 'at home'. But thankfully, more 'at home' I feel when I taste the salty fragrance of the Wellington coastline, blended with the hot summer resonance of a symphony of cicadas and the shade of pohutokawa trees above the rocky shore.

But sadly, many modern children (of any race) grow up as aliens to the landscape that surrounds them (Fijian children growing up in Suva are an example). And it is no wonder that concern for the 'environment' is such a barrier to modern people outside an instrumental

¹⁸Zablocki (1971) shows how in modern urban social environments, identity is lost from the immediate physical community and security is found in isolation from it. In such situations people are unable to nurture communal relationships (which are so common in Fijian villages) necessary for a sense of belonging to develop.

utility concern. These instrumental concerns form the subtexts for countless modern environmental movements who are seeking to protect only the instrumental value of the natural 'resources' that they have an erotic (grasping, wanting) affinity with. This is in contrast to deeper environmental concerns that are the result of an immeasurable sense of loss of place, of landscape, and a loss of *Sself*¹⁹ suffered, not only by tribal peoples at the dismantling of their cultural landscapes, but also non-tribal peoples that have nurtured a spiritual connection with place (see Phillips 1987; Suzuki and Knudtson 1992).

This cultural condition has been achieved by many tribal cultures (not all of them of course) in such a way that what we in the West call 'art' and 'science' are woven together as culture itself. For Lopez:-

Art, architecture, vocabulary, and costume, as well as ritual, are derived from the perceived natural order of the universe - from observational meditations on the exterior landscape. An indigenous philosophy - metaphysics, ethics, epistemology, aesthetics, and logic - may also be derived from a people's continuous attentiveness to both the obvious (scientific) and ineffable (artistic) orders of the local landscape. Each individual, further, undertakes to order [their] interior landscape according to the exterior landscape. To achieve this means to achieve a balanced state of mental health (Lopez 1989:67).

In this way Lopez indicates his belief that the landscape can and does give culture a loom (standard of rationality) and threads (experiences) to weave a graceful life - hence the poem *Weaving* mentioned in chapter 6. For such a culture the landscape exists as an intricate web of countless interpretations, of many different truths, both human and non-human where the spontaneous product of that web of different perspectives comprises that landscape. Furthermore, the individual comes to realise that their own *Sself* is one of those connections of the web, and to dismantle the web is to dismantle the *Sself*. The net of Indra in Hindu cosmology forms a parallel to this notion which does not need a religious precedent for its realisation (see Campbell 1988). People are constantly in the process of unconsciously realising their place in the landscape in spite of its denial in modern culture. Contrary to Western thought since Aristotle, there is no objective ontological condition of place that stands prior to the unique subjective experiences that take *place* in such a space. As shown

¹⁹The loss of the *Sself* in modernised tribal cultures will be extremely traumatic as the very basis of identity and the meaning of life is destroyed. Modern Western people will find it difficult to comprehend this if they have never realised the self as *Sself*.

by Whitehead and Bergson space is not existentially prior to matter within it, nor is it prior to a unique subject (see also Capra 1975, 1982; Zohar 1989; Davies and Gribbin 1991).

Within this cultural geography of place the contextual voice must be recreated through a process of constant re-contextualizing, thus preventing distorted normative tendencies that result from the captivation of the language game under the misguided framework of totalizing and universalizing discourse. This contextual unity between people and place is able to be encultured through mythic images as metaphors for the relationship which extends well beyond the reach of language. This is how an ethics 'beyond good and evil' is able to inform a culture about its responsibilities in the landscape. As Cheney puts it:

An important aspect of the construction or evolution of mythic images is their ability to articulate such moral imperatives and to carry them in such a way that they actually *do* instruct; that they *locate* us in a *moral* space which is at the same time the space we live in physically; that they locate us in such a way that these moral imperatives have the lived reality of fact...For a genuinely contextualistic ethic to include the land, the land must *speak* to us: we must stand in *relation* to it; it must *define* us, and we it (Cheney 1989a:129).

This is the bioregional narrative, and this is how a landscape can speak to people, and through people, thus reciting its autobiography. It is an autobiography, because people are speaking from a position *within* the flux of Nature, and so it can be ecologically sustainable. If it is merely biographical, where humans speak in their own invented normative language referring to Nature as an 'other', then Nature will not be the author. There it is. There you have it at long last. A general theory of ecological sustainability that enables us to posit an authentic question concerning ecological sustainability in Fiji.

8.9 REVISITING THE RIVER OF SILENCE

Western philosophy and Western culture since the fall of Medieval Europe has a fear of water (i.e. the linguistic silence of nihilism) and finds all sorts of excuses for avoiding it. Truth defined according to logic (the rules of a normative language) does this. Metaphysics is afraid of nihilism to the point of denying its existence. As such, Western philosophers steer their discourses away from the river and try to prevent people from seeing it. Then one day, Nietzsche came along, discovered that logically defined truths are really fables, and in the process was confronted by the river of silence. He declared that this was a great

achievement, which it was. The modernists (who are afraid of water) told him to shut up, and tried to stop other people from seeing the river that Nietzsche pointed to. Nietzsche went to the waters edge and pointed to the other shore and shouted: "Look! There is a land beyond good and evil". But he never got there. He was happy to pass through nihilism conceptually but not existentially. He did not want to get wet. Heidegger came along and told us to get wet, as we need to pass through the silence *conceptually and existentially*.

Whereas Western metaphysics has been avoiding water for most of its life, mystical traditions talk about the water all the time, and talk about the need to get wet if we want to understand our condition. To get to ecological sustainability we must get wet. A mystical experience is the getting wet, the passing through the silence. This is what baptism in Christianity symbolises. Passing through the silence, the wilderness, the abyss: when you are hungry - eat, when tired - sleep. Listen to your intuitions, which are now able to be heard in the silence where language cannot venture. The busy traffic is gone and you can at last hear the bird song. Nomadism or something similar can also foster the same or similar level of detachment enabling peoples' intuitions to be heard (see Chatwin 1987).

Different traditions bring people to the water in different ways and at different rates. Scripture orientated religions, found in Asia and the West, take people there after a process of learning. Mystics and poets get wet and describe their experiences. This is the source of inspiration for their poetry. Many poets achieve this in the absence of scripture. This is why it is common for mystics and poets to be branded as heretics, as they get to where scripture points to by throwing scripture away.

Zen and the Christian *via negitivia*, both drag you straight to the water's edge, points to the water, and instructs you to get wet immediately. This is where mysticism begins - in silence, nothingness. Zen teaches you how to swim as it has developed a skilled swimming tradition. This is why I think that the equivalent of Zen practice (a form of meditation which in Japan is called *zazen*) is so valuable. It can be used in any cultural context - even Fijian culture. It is not a culturally specific doctrine of stories set up for export. It is non-cultural as it is non-linguistic. Any culture can turn language off. It is a method of listening to the silence, and upon hearing the echo of stillness one can bring those experiences into language and thus create language anew. Any language. A language that allows the landscape to speak, to recite its autobiography.

Now we can begin to understand the following statement by Ch'uan Teng Lu (a Zen master):

Before I had studied Zen for thirty years, I saw mountains as mountains, and waters as waters. When I arrived at a more intimate knowledge I came to the point where I saw that mountains are not mountains, and waters are not waters. But now that I have got it's very substance, I am at rest. For its just that I see mountains once again as mountains, and waters once again as waters (Ch'uan Teng Lu²⁰ cited in Watts 1957:146).

In normative linguistic state, our apprehension of the world around us is normative, and essentialist. We assume that what we are looking at is the whole picture. "This is a tree" we say and think that it is a true statement. "*I saw mountains as mountains, and waters as waters*". This is an example of the naive conception of essence from the perspective of the self. But upon passing through the silence of nihilism one begins to realise the what we called "tree" is not an autonomous being at all. There is much more to the 'tree' than meets the eye. The 'tree' is not an isolated phenomenon or 'thing'. It is an epiphenomenon of Nature. It is a part of the landscape and thoroughly interconnected with the rest of the landscape. At this stage the person begins to understand that it is not a 'tree' as the 'tree' is not an autonomous 'thing' at all. It is no-thing - nothing, viewed from the perspective of the Self. "*Mountains are not mountains, and waters are not waters*". This a realisation of the unity of existence. But this is not the end of the story, as the tree does have a being in the sense that it has a character of its own, even if it is interconnected with the rest of the landscape. "*But now I have got it's very substance...I see mountains once again as mountains, and waters once again as waters*". This is a realisation of the dialectic of essence and existence, apprehended from the perspective of the Sself (see Abe 1985 for an excellent account of the meaning of this well known Zen statement).

A bioregional narrative must be able to achieve this viz. an apprehension of the essential differences of beings, in the light of their interconnectedness and unity in existence. I am not yet able to posit my question concerning ecological sustainability, but I am very close. I must first go to Fiji again and take a closer look at culture in that country, in the light of the understanding made possible by the theoretical developments of the last three chapters.

²⁰Cited in Watts (1957:146).

PART IV
THE RE-ENCHANTMENT OF FIJI'S FORESTS

Throughout this thesis I have been attempting to show that there are many ecological differences between different human cultural groups. These differences can be traced to the rationality, world view and language games of different cultural systems, in combination with the landscapes that embrace such cultures. Ecologically speaking we are dealing with different functional 'species' even though we are supposedly referring to a single biological taxon viz. *Homo sapiens sapiens*. The dualism between humanity and the rest of Nature was dissolved in chapter 8. Because of this the notion of separating culture from ecology becomes a *non sequitur*. The ecology of a human group is in no way ontologically prior to its social character. They are one and the same. Dialectical thinking can decipher this. We are biological beings, but we are also social. The ecological dimension does not stand above the social, and the social does not stand above the ecological. Instead our character is simultaneously ecological and social.

I set out in the beginning of Part III to resolve this theoretical and common sense contradiction. First I looked into the social sciences for a critical account of social life in the landscape that did not commit the same mistake. I could not find a solution whilst remaining within the domain of the social, but instead found that a cultural perspective was more appropriate. This cultural perspective looked into the cultural aspects of the tools of inquiry and the cultural dimensions of the object of inquiry. It was at this point that I made my departure from a purely rational to a post-metaphysical theoretical perspective, as purely rational cultural epistemologies carried with them cultural misconceptions in the tools of inquiry. This helped to expose the cultural roots of the misconceptions relating to the humanity/Nature dualism.

The cultural system that has led to modernity is founded on a series of flaws in its underlying rationality which makes such a dualism possible. This flaw is the reification of language and its rules, and the extension of linguistic norms into the domain of the real world. This linguistic illusion leads to problems in the human interpretation of the world around them - epistemology, and in existential, psychological problems leading to anxieties that serve to alienate humanity from its place in the landscape.

The cultural system that has given rise to modernity and its epistemologies is a very different one from many non-Western cultural systems. Modernity is in Fiji, and Fiji is a modern cultural entity. Fiji also has pre-modern tendencies, but then so too has Europe. The critique of modernity was simultaneously a critique of the existing culture in Fiji irrespective of race. It was also a critique of the ecology of modern cultural systems in comparison with pre-modern cultural systems. This critique led me to understand the ecological character of these different cultural groups. Such cultural groups can be named according to their cultural and ecological character. This can help to expose which cultural tendencies are adaptive and which ones are not. The adaptive cultures are capable of achieving ecological sustainability. And this is what I originally set out to achieve in this research viz. an understanding of the question concerning ecological sustainability in relation to the forests of Fiji.

To help explain my thinking in relation to different cultural groupings I have developed a taxonomy according to politico-linguistic systems that underlie cultures. This taxonomy is only designed to help portray my story in a coherent form, which can then be used to frame my question concerning ecological sustainability. I contend that only a certain type of politico-linguistic system is capable of achieving a condition of ecological sustainability as a culture. I call this politico-linguistic system *Homo-Heraclitia agapensis*. It is a functional species, an ecological entity, an ecological niche. It is not universal, as it will need to be have its local form added as a sub-species. If such an ecologically sustainable politico-linguistic system existed in the Vunivia catchment I might call it *Homo-Heraclitia agapensis vunivia*. It would have a different ecological character to an ecologically sustainable culture of Fiji's upper Ba catchment, because the Ba landscape is a different landscape and would influence such a culture in a different way. This is a contextual taxonomy and I will explain its details in the pages to follow.

CHAPTER 9 - THE QUESTION OF ECOLOGICAL SUSTAINABILITY

9.1 A TAXONOMY OF DEEDS

An interesting aspect of Goethe's thinking was his reflections on the idea of the human essence. Goethe rejected the Kantian notion of a noumenal self which lies beyond or behind the world of experience or appearances as shown in his book - *Doctrine of*

Colours (published in 1810). Goethe explained his view in this way: "We exert ourselves in vain to describe the character of a human being; but assemble [humanity's] actions, [humanity's] deeds, and a picture of [human] character will confront us" (cited in Kaufmann 1980a: 23).

Goethe argued that humanity is its deeds, and I agree: *operari sequitur esse* - what we do follows from what we are. But what of these deeds? How are they arranged and are there patterns that can be recognised? Of course - we call them cultures. But they exist within a landscape and engage in a dialectical relationship with the rest of Nature - thus I call them eco-cultures. All cultures are eco-cultures as all cultures have an ecological character. This ecological character comprises its collective deeds.

In biological terms, the functional ecological character of an organism is termed its ecological niche. I believe that the actual functioning niche of any 'species' is far more important in relation to ecological dynamics than the genetic heritage of a 'species'. Any 'species' in the formal phylogenetic sense can have a number of functional 'species' in terms of the ecological character of different groupings within a genetic taxon. In ecology it is commonly referred to as intra-specific niche differentiation (or something similar). The importance of functional systematics in general has been recognised by many other ecologists in recent years. According to Keddy (1990) classification should serve two main purposes: (a) constructing phylogenetic taxonomies as a basis for determining evolutionary history, and (b) constructing functional classification for purposes of predictive ecology. Keddy (1990) argues (as I do) for an increased emphasis on the functional dimension.

Functional systematics in ecology has quite a well developed heritage where functional 'guilds'¹ have been identified for animals and plants (see Platt and Weiss 1977; Cody 1986; Day et al 1988; Gillison and Brewer 1985; Gillison 1988). Pianka (1983) has also recognised the importance of functional typology, as have Diamond and Case (1986), Terborgh and Robinson (1986) in relation to bird and mammal community ecology. Cummins and Klug (1979), and Cummins (1988) have used the concept of functional feeding groups in the study of aquatic invertebrates. Niche differentiation in animal species is commonly based on functional feeding guilds, whereas in plants it has been applied to the regeneration niche hypothesis (see Grubb 1977), and the resource-ratio

¹The concept of functional 'guilds' in plants can be traced back to Theophrastos (circa. 300 b.c.) (Keddy 1990), who was one of the earliest of the natural philosophers engaging in a discipline that was to form the conceptual basis for science (Kahn 1979).

hypothesis (Keddy 1990).

The recognition of different niche groups within a single phylogenetic taxon may lead biologists to rename them as sub-species, but to do so establishes a challenge to the basic concept underlying the species definition. As a functional ecologist I cannot help but recognise the importance of the actual living ecological character of a plant or animal grouping. In this sense the niche and the species concepts begin to merge into one. It amounts to the functional niche of a group of organisms that may maintain a form of unity by doing similar deeds. This is the way the niche is expressed and I call it the 'functional niche expression'. It is not the fundamental (i.e. hypothetical) niche but the realised niche. To clarify this it will be useful to look briefly into the niche concept. Whittaker (1975) tells us: "Within each habitat one can describe for a species its position in the space, time and functional relationships of the natural community that occupies that habitat. The species position in a community in relation to other species is its niche" (ibid.:77).

The fundamental niche is described as the abstract hyper-volume that sets the potential ecological boundaries of that species' niche space. The realised niche is the actual niche space that the species occupies in response to existing environmental factors such as nutrient availability, substrate, and competition (see Hutchinson 1967; Pianka 1981; Begon and Mortimer 1986). Some debate still exists as to the specific definition of different aspects of niche space in terms of 'fundamental' and 'realised' categories (Whittaker and Levin 1975; Cohen 1978; May 1979; Usher et al 1979). Colwell and Futuyma (1971) for example, use the terms 'actual' and 'virtual' niche to describe the potential and apparent niche expression in a species. Since the mid 1960s, however, the concept of 'ecological niche' has also been identified with resource utilisation in combination with reproductive success, which can point to a better understanding of niche space (see Pianka 1981). But in so doing, the species concept as a solely phylogenetic grouping becomes less valuable when interpreting the actual ecological character of a group of plants or animals.

I am studying human ecology. In phylogenetic terms we are one single species - *Homo sapiens sapiens*. However, it is quite obvious that functionally speaking we are not homogenous. Instead we are highly diverse. This diversity, I believe, can be explained in terms of culture - the actual living, functioning culture. And in this sense I am talking about the realised niche of a human group - the functional niche expression. The ecosystem cares little for what organism groups (including humans) look like. What they

do is far more important vis-a-vis ecosystem dynamics, evolution and adaptation. Ecological sustainability and indigenouness is an aspect of ecosystem dynamics in relation to human ecology. It is about human adaptation and evolution. So, I am at the point of being able to define culture as the functional niche expression and furthermore employ a nomenclature for such a purpose. This is my taxonomy of deeds. As mentioned above, I have come to recognise a number of distinct human 'deed' groups or eco-cultures, underwritten by politico-linguistic systems. I have found there to be at least two genera with numerous species and sub-species.

9.1.1 REVISITING HOMO SAPIENS

In the previous three chapters I have painted a picture of two major human cultural systems. One is characterised by an attachment to a normative linguistic condition, which has culminated in modernity, the other is based on a rationality of constant flux - tribal cultures and a number of mystical traditions. These two systems are broad categories and could be regarded as generic as opposed to specific. The normative form I shall call *Homo-Parmenidia* (as a genus), is named after Parmenides who argued in favour of the steady state rationality in the 6th century b.c. The descriptive genus, which makes ecological sustainability possible, I will call *Homo-Heraclitia*, after Heraclitus who attempted to convince those around him that (contra Parmenides) "all things flow". The species of these two genera will be many, and varied, as each will develop in their own particular way in their own landscape.

Recognition of this taxonomy can help us begin to see how a dialogue between Fijian culture and the West might be possible. I have traced in the West a rationality and a culture that is not different in type (in terms of the genus) from pre-modern Fijian culture, which originally gave meaning to words in the Fijian language. The pre-modern Fijian genus was of the *Homo-Heraclitia* form. This is not different at the generic level from numerous Western cultural tendencies. In chapter 7 I traced such a genealogy from Heraclitus through to my own work via Goethe, Schopenhauer, Nietzsche, Heidegger, and so forth. It is the Western forms of the *Homo-Heraclitia* genus that is capable of dialogue with Fijian culture.

The meaning of pre-modern languages in Fiji was linked to a process rationality (see Ravuvu 1987a, 1987b, 1988). The Westerners that arrived in Fiji in the 19th century carried their steady state systems with them in their heads. When they tried to understand the Fijian language they plugged their own steady state meanings into the

Fijian words, thus misapprehending the Fijian language game². Since then the penetration of modern culture into Fiji has meant that the cultural context of life, even for people of the Fijian race (for the most part), has changed to a modern one. The world that many Fijians now walk in is a modern world underpinned by a modern rationality. Because of this the Fijian language, for many people of the Fijian race, is no longer the language it was in pre-modern times. Because of this, even people of the Fijian race are losing sight of what it is to be culturally Fijian.

However, should a Westerner who walks in a process world (someone like Goethe) arrive in Fiji, they would be capable of beginning to understand translations without leaving the meaning behind. I believe that this is the primary task that the West must confront if it wishes to enter into dialogue with the Fijian culture, and any non-Western culture, without politico-linguistic coercion. It is also the task of modern Fijians who have any interest in rediscovering the meaning of Fijianness. A process rationality is the key to dialogue in Fiji concerning the relationship between Fijian culture and other cultures. Moreover, because Nature is in a constant state of flux any discourse concerning the question of ecological sustainability must be undertaken under the eyes of a process rationality. The pre-modern Fijian language game has a significant head start.

9.2 THE VANUA IS DEAD

A diversion into the *Vanua* will be useful to demonstrate what I mean in relation to the modernisation of the Fijian language game. The actual meaning of the word '*Vanua*' is being transformed in Fiji into that commensurate with the English word 'land' together with the modern utilitarian baggage that goes with it. And so, even for many Fijians the *Vanua* has been disconnected from pre-modern Fijian culture and disenchanting in the process. The mystery and the spirit of the *Vanua* is being lost to Fijian culture as its meaning has been transformed into a mundane social utility and a mere resource for economic exploitation. This is why Nietzsche's madman was introduced in chapter 4 who ran around Kedra village searching for the spirit of the land, but then announced that it had died. Because culture is recreated through language the Fijian culture has dramatically changed. Utilitarian meaning behind the word *Vanua* has surreptitiously

²I do not suggest that all Westerners did this as some would have understood Fijian culture by participating with it. However, most of the translations would have carried the Fijian words over but left the meanings behind. This is because most Westerners living in Fiji were not living in the Fijian cultural world.

crept in to the language game, veiled by the maintenance of the word as a symbol. This has happened through Fijian subservience to a hegemonic Western cultural system underwritten by a normative (*Homo-Parmenidian*) standard of rationality which has tarnished both the language and the *Vanua* itself.

This, of course, is not true for all Fijians, as many still maintain the meaning of the *Vanua*, which for them is still alive. But these people are commonly patronised by modernised Fijians, who refer to them as *kai colo* (backward), because their world view is not consistent with the disenchanting modern version sustained by many of their cousins. But it is the *kai colo* that hold the secrets of the *Vanua* close to their heart, and they are the ones that are capable of re-educating modern Fijians, and modern people of other races, who have all lost the meaning of belonging. The *kai colo*³ can teach us all about the true meaning of *vaka Viti*, and *vaka Vanua*.

The reality of the *Vanua*, encompassing people and place, has been dishonoured and tainted (one only has to look at contemporary environmental degradation to see what I mean). This has been done partly by Fijians themselves, who now act out in culture a non-traditional language game that has killed the *Vanua*, in the same way that Nature and God have been murdered by Western culture, as Nietzsche suggested last century. The *Vanua* is also being butchered by non-Fijians who brought with them a murderous culture in the 19th century. It was also being dishonoured and disgraced by violent and coercive pre-modern Fijian social and political systems that employed the chiefly system for egotistical and totalitarian ends.

I should make it clear that I do not regard 'tradition' as being virtuous in any *a priori* sense and do not defend 'tradition'. Instead I simply wish to contend that, in many cases, the contemporary Fijian language game (even though the same words are being used) is substantially different from the language game that developed and existed in Fiji prior to the arrival of Europeans in the 19th century. As such, many (but not all) of the people claiming to be practising 'traditional' Fijian culture today, cannot claim to be any more traditionally Fijian (in the sense of being tied to the Fiji landscape) than an Australian tourist whose (modern English) language game is tied to no landscape at all. This is

³The Fijian word '*colo*' means 'interior, and *kai colo* translates into - people from the highlands. Traditional wisdom can be found in places other than the highlands, as much of it still remains on outer islands, and even in coastal villages on the mainland. As such, the term '*kai colo*' is perhaps not appropriate, particularly in the light of its derogatory connotations.

because the modern Fijian language game is precisely that - modern. It is infused with the cultural meaning of modernity and can claim to be indigenous only to that landscape which modernity is indigenous to - Mars. Simply sitting on the mat every now and then and presenting a *sevusevu*⁴ in *Bauan*⁵ before singing songs and getting drunk on yaqona is an insufficient criteria for claiming to have Fijianness. I can do this, and I have done this many, many times, but I do not claim to be Fijian - I was even born in Fiji.

Many people of the Fijian race are no longer Fijian by culture. Race is not culture. However, scattered about the landscape the diminishing fragments of Fijian culture are holding on against a tide that is threatening to drown them for ever. These people, who are being misunderstood by others of the Fijian race, are among those who can save Fiji from ecological and cultural ruin. They are not the only ones, as there are also many people of other races, minorities in a similar way, who are capable of understanding what it means to belong to the land. But to hear them we must all put our prejudices aside, so that the different dialects of ecological wisdom, that are uttered in different sounding voices, can be understood. In this way someone like Goethe could speak with Ratu Sukuna and both would understand and agree: *noqu Kalou, noqu Vanua* (my God is my Land).

However, with all due respect, the modern chief has no clothes. Much of the Fijian culture is already dead. This is because the *Vanua* is dead, and without the *Vanua* Fijians have got nothing in terms of an authentic cultural relationship with the landscape, which is what it means to be Fijian (Ravuvu 1987a, 1987b). This dismal cultural condition equates well with the 'nothing' that most other people enslaved to modernity have. We are lost. We are all lost. And because we are all in it together, the imperative exists for us to all work together to establish a re-birth of the *Vanua*. This is the only option left for Fiji if it has any interest in ecological sustainability.

An uncoerced discourse at last becomes possible between Fiji and the West by exposing the eco-cultural genera that both 'cultures' share. Both Fiji and 'the West' have sustainable and unsustainable elements. Neither can claim to be more sustainable than the other. Neither can claim to hold *the* secret, or *the only key* to eco-cultural harmony.

⁴A *sevusevu* is a ritual conducted at the beginning of a visit to a respected household or village.

⁵*Bauan* is the national dialect of the Fijian languages.

The *kai valagi*⁶ can do this, as can the *kai India*, the *kai China*, the *kai loma*⁷, and the *kai Viti*⁸. For this reason all people living in Fiji, irrespective of race, must be invited to enter into a discourse concerning ecological sustainability in that country. Indigenusness is not about where you are from, but where you are going. Where you have been can be important, depending on what kind of culture you inherited from your ancestors. But because the landscape is always changing you must recreate your relationship with the landscape ever anew. Otherwise it becomes normative, non-adaptive, unsustainable. Anyone recreating a linguistically normative culture in Fiji (even if they are racially Fijian) is not indigenous. Anyone of any race can become indigenous to Fiji, but it depends on passing through the silence of the linguistic abyss, enabling the landscape to recite its autobiography through a bioregional narrative. If your ancestors were born in Calcutta you can still achieve this in Fiji. Because what is important is not what you look like or what your language sounds like - it is what you are, what you do, and what your language means.

I will return to my taxonomy in a few pages to follow, once the grounds for further linguistic differentiation has been elaborated. Before I do this I will take a brief diversion into ecological theory to show that my views on human evolution are not greatly different from existing ecological thinking. Indeed ecology is where my academic background lies, and human ecology is what I have been practising for the entire duration of this thesis.

9.3 POSTMODERN ECOLOGICAL THEORY

Having prepared the way for reconstruction by running the gauntlet of fundamental ontology I can now approach ecology with a recognition of the need to avoid lining it with coercive political or sociological structures. But what is different about this ecological theory of mine? Actually, it is not very different from a great deal of ecological theory of the late 20th century. It agrees with very much of what has been said in an enormous volume of papers and books written by those who are coming to grips with the constant process of Nature. Elements of process are emerging in modern scientific thought. Community ecology is a good example (e.g. Pomeroy et al 1988;

⁶This word means 'foreigner' but tends to refer to Europeans.

⁷People of mixed racial descent where one of those races is Fijian. Predominantly referring to part Fijian/ part European.

⁸This is the Fijian (Bauan) word for Fijian.

Agnew et al 1993; Pickett and White 1985; Veblen and Ashton 1978; Veblen and Stewart 1980, Whitmore 1982; Burrows 1990). But a few significant problems still remain, because this rationality, arising from a lengthy scientific tradition of dealing with the puzzles of ecosystems, is on the periphery of Western cultural thinking rather than a dominant cultural feature. Secondly, traces of stasis and reductionism remain even in modern ecology, which prevents many ecologists from letting go of their tight cultural and psychological grip on an imaginary solid state. Emergent features of systems are the rule, not the exception.

The difference is, that those who are attempting to ground their observations of process in some form of materialistic, mechanistic or stoic holism (i.e. seeking to find a logical ground for their discoveries), meet me coming in the other direction. It is this mechanistic and materialistic systems theory that I started from three years ago. Through relentless questioning I ran my theories through the "heavily soiled" wash cycle, thus cleansing them of what traces of political domination that clung to them. As a result, hopefully no totalising discourse is now able to stain my theoretical garments.

But why might a totalising discourse be so poorly suited to ecology? It is because each landscape is unique. This is true for all species. A Fiji kauri tree growing in the Wabu catchment is not the same as a Fiji kauri growing in the Vunivia catchment. They are ecologically different due to the differences in their ecological surroundings, and because they are not autonomous beings. They are beings in Being, and because of this, their relationship with their ecological surroundings is dialectical, and context dependant.

This also applies to human functional species. Each place is different and each human community that may engage in a relationship with that landscape will do it in different ways. This is not to say that similar types of ecological processes may not occur in many different places - they do, which is why I do not reject 20th century ecological theory. Instead I take it a little further in the opposite direction to certainty and verifiability, towards a perspectivistic, contextual, and localised theoretical domain.

I will not go into the finer details of demonstrating the coherence of an entire discipline of postmodern ecological theory. That would require another thesis. For the same reason I refrain from showing how quantum physics is able to lend credence to this epistemological formula. Space does not allow such excursions into every corner of this story. I give you instead its core. It is not a single theory, but a form of thinking which can be applied to many different subjects. The work of Waddington (1977), Prigogine

and Stengers (1984), Lorenz (1987), Sheldrake (1981, 1991), Best (1991), Griffin (1988a, 1988b) are examples of this tradition beginning to emerge in the biological literature. Bohr, Bohm, Capra, Zohar, Zukav are examples from the quantum physics domain. However, there is also much literature outside the traditional realm of 'science' that helps to support these views. The artificial boundaries established by modern science are not usually adhered to by postmodern thinkers (or those who are in much agreement with a postmodern or post-metaphysical approach). As such, one will not necessarily find a specific segment of this literature that comments solely on 'biology' or 'ecology'. For example, Goethe's plays are unlikely to be given out as standard texts in a modern university course on evolution, and yet I think that they are extremely relevant to this topic (see Gearey 1992 for example).

In other words, going out in search of a postmodern literature relating specifically to a particular modern discipline is likely to lead to failure. Instead you will find holistic thinkers that bring many different 'disciplines' together as a matter of course. Furthermore, this form of thinking does not always fit into the imaginary modern category of 'non-fiction' as many thinkers have long dissolved the non-existent boundary between 'fact' and 'fiction'. Instead what you get are narratives. A good example might be the book 'Songlines' by Bruce Chatwin (1987). There you will find a narrative on narratives. Chatwin explores the Aborigine songlines as a linguistic mediator between culture and landscape and exposes a bioregional narrative in operation. I believe that it is a story that reveals more about ecological sustainability than any text book on modern ecology I have seen.

Before revisiting the new taxonomy of *Homo* I will return to the political and linguistic component. This will lead back into the question of ecological sustainability in terms of the ecological character of different politico-linguistic systems.

9.4 MANAGEMENT OR DISCOURSE?

Cosmetic changes to a culture are made through 'management' which, although frequently undertaken with benign intentions, can actually serve to perpetuate an unsustainable economy and culture. Such a critical view of environmental management is similar to the neo-Marxist critique of the capitalist welfare state. The welfare state arose as a reaction to the Great Depression and was designed to protect capitalism from collapse (see Galbraith 1987). Such economic management does not solve the inherent contradictions of capitalism (such as value in exchange having precedence over value

in use). Instead it serves to manage an unsustainable economic system so that it survives in spite of its innate injustices (Levins and Lewontin 1985). This view does not imply that industrial socialism is any better. Indeed under the latter economic framework (if it is ever practised) most individuals in a culture simply get to share equally in the unsustainable exploitation of ecosystems (Bahro 1984).

A similar critique of environmental management is necessary in order to reveal what in management is merely patching up symptoms and leaving the causes unscathed. This is precisely what I have done in the preceding chapters, and in the process shown that patching up the symptoms of an innately unsustainable meta-cultural (meta-linguistic) system will not deliver ecological sustainability. Instead of management it becomes obvious that a cultural transformation is the only way that ecological sustainability can be achieved. And not just any transformation - a major linguistic turn. A turn in the relation between language, knowledge, truth, and myth. In the previous three chapters I have shown why such a turn is necessary, in this chapter I hope to show how it can be done.

A major touch-stone of culture lies in the language game. Another is the landscape. A third is perception of the world beyond the rules of language. A language game can negate the latter two if it has a deluded over-confidence in the capacity of the rules of language to disclose the 'truth' of reality. This is what has happened in Western culture since that wrong turn was taken by ancient Greek thinkers such as Anaxagorous, Parmenides, Democritus, Socrates, Plato, and Aristotle (Whitehead 1929, 1930). And yet, even back then Western culture had a conceptual alternative that could have saved it from the cultural malign that has (so far) brought it through centuries of totalitarianism of various forms, which are still alive and well in modern Fiji.

There are two major themes of change necessary for ecological sustainability to become manifest in cultural life in Fiji. The first is the establishment and operation of an ecologically sustainable culture in Fiji, the second is the same condition in the global situation. The necessity of the former is fairly self-evident, but the latter may need explanation. Imagine an ecologically sustainable culture functioning happily in a part of Fiji for a number of centuries. Such a culture achieves a bioregional narrative and allows the landscape to recite its autobiography through them. Indeed, this situation was probably achieved in many parts of Fiji in the past. Now, I do not suggest that a condition of ecological sustainability has been achieved in this situation - only an ecologically sustainable culture, and there is an important difference. For ecological

sustainability to come about there needs to be an ecologically sustainable culture *and* the ability of that culture to continue to be. This necessitates the removal of external obstructions to the on-going ecological sustainability of that culture. In Fiji external influences are very real, and very unsustainable.

A cultural invasion by an unsustainable, expansionist, hegemonic politico-linguistic system will extinguish an ecologically sustainable condition. This has happened in Fiji with the arrival of capitalism, but is also likely to have happened with the expansion of totalitarian tribal chiefdoms in premodern Fiji. These invasions from outside thwart the possibility of an ecologically sustainable condition in the landscape, but through no fault of the local culture. The eco-cultural harmony achieved in the local situation prior to the invasion was not *sustained*, it did not continue to be. It is for this reason that ecological sustainability will only be achieved in Fiji if, and only if, such unsustainable, expansionist, totalitarian cultural systems also cease to be.

'Sustainability' means an ability to be sustained, to continue to be, to endure without yielding, and to continue to do so in perpetuity. Ecological sustainability is not real if it lasts only for ten years. That is a contradiction in terms, inane, meaningless. A person who suggests that ecological sustainability can be achieved for limited periods has failed to comprehend the meaning of 'ecological *sustainability*' and have trivialised it to the point of absurdity. A front page newspaper article of the same calibre of meaning might read:- "Yesterday, the Fiji Government declared, in a cabinet decision, that the nation achieved ecological sustainability between 6.15am and 6.25am on the morning of August 23, 1994". Totally meaningless. It would be like holding your breath underwater for 36.02 seconds and then declaring that you are now a fish.

This thesis has achieved two major things:-

1. It demonstrated that a major source of unsustainability lies in modernity, and similar cultural systems that reify the rules of their language game as a sure path to ontological truth. This leads to unauthenticity, and unsustainability. It deconstructed this meta-cultural (meta-linguistic) system to demonstrate how such a culture could be dismantled. This was achieved by exposing the gaping holes in the ontological claims of its self-referencing tautologies (which it calls philosophy), which legitimates totalizing epistemologies, and consequent totalitarian politico-linguistic systems. Such a linguistic system left a substantial domain of reality out of the picture viz. that which lies beyond the reach of language. Furthermore, it was demonstrated that much of the information we gain from the world around us is apprehended from outside language and should be regarded as legitimate.

2. A creative alternative was reconstructed which did not harbour the same conceited overconfidence in the rules of language, but rather embraced its limitations as a tool. The basis of a contextualised linguistic system was shown to be capable of being constantly recreated by regularly passing through the silence of linguistic nihilism, thus constantly creating language anew. Such a linguistic system allows the constant flux of Nature to be explicitly recognised by a culture and brought into language. This provides a source of ethical instruction mediated by myth and ritual, where the coherence of culture lies not in the rules of language but in Nature. Hence the bioregional narrative.

As mentioned above, at least two tasks are necessary for ecological sustainability to come into being. This first is to establish an ecologically sustainable cultural system through the bioregional narrative. The second is to dismantle unsustainable cultural systems that will obstruct the achievement of an ecologically sustainable condition from actually being achieved. Both tasks involve a very challenging political process. I will show below that both tasks can only be achieved if the political style is essentially the same for both. However, I will acknowledge that the chances of both of these situations actually coming into being are very remote indeed. The reason for this stems from the nature of language itself, which all cultures have.

The achievement of an ecologically sustainable culture through a bioregional narrative is possible and has been achieved many times. However, because all cultures have language, which is used to 'create' a world for people (by 'world' I mean a subjective cognitive experience), there has been, and always will be, the possibility of oppressive cultural systems that will tend to obstruct their own ecological sustainability and that of other cultural groups. This is because language, any language, is able to foster the linguistic illusion of the autonomous self - the ego-self (as explained in chapter 8). A culture that tolerates such an illusion will also come to tolerate the political consequences of this linguistic condition. Egotism, which makes selfishness possible, also provides the seed for oppressive alienating actions that break the chain of *agape*, as the ego-self cannot let go of *eros* (desiring, grasping, wanting). Once the chain of *agape* is broken, the condition is no longer ecologically sustainable as it has become unauthentic - in contradiction to the way of Nature, which is what *agape* is. As a result, *synagapeosis* becomes impossible. In such a system the source of coherence for actions and ethical instruction no longer lie in Nature (through being true to your nature in Nature), but in language only. Because of this it is unauthentic.

Such an eco-cultural condition of egotism, which makes expansionist and hegemonic political systems possible, does not need to be legitimated by a sophisticated system of

coherent fables to continue to be. Many tribal cultures did exist and still do exist in this form of unsustainability (as an unsustainable culture). It does not differ in type from the unauthenticity that underlies a stoic culture, such as modernity. The only difference is that modernity, and its stoic predecessors in Western culture, invented a sophisticated system of logical fables (i.e. narratives) which substantiated and legitimated such egotism (unauthenticity). In other words, unauthentic cultures, even if they think that they are civilised, are still barbarians in an ecological sense. Stoic cultures (which legitimate egotism with philosophy), and unauthentic tribal cultures (which do not bother to logically defend their immodesty), are tarred with the same brush. They contradict and damage Nature in the same way - through the ego.

The only difference between egotistical tribal cultures and egotistical stoic cultures is that in the latter case, the technologies it produces as a by-product of logical scholarship, allow it to damage Nature (and each other) at a much greater scale. Should an egotistical tribal culture be given access to such technologies they are likely to do the same degree of damage - as the hegemonic Fijian tribes did with guns in the 19th century and continue to do so in this century (cf. the coups of 1987). A non-egotistical (authentic) tribal culture will be capable of using technology responsibly. For this reason technology (as a tool) is not itself a liability to the landscape, it is the culture of the hand that holds it (see Heidegger 1977). I believe that Fiji supported tribal cultures of the authentic and unauthentic types even though the Fijian language game in general was of the *Homo-Heraclitia* form. The *Homo-Heraclitia* form only begins to make ecological sustainability possible. The unauthentic Fijian cultures were the egotistical hegemonic ones. The authentic were the non-expansionist ones.

And here we are able to clarify our eco-cultural taxonomy introduced earlier. The eco-cultural genus *Homo-Parmenidia* positively obstructs ecological sustainability at the generic level because its language game is grounded in a steady state condition. *Homo-Heraclitia* (which supports a process rationality) makes ecological sustainability possible. However, some species within the *Homo-Heraclitia* genus will still remain unsustainable even though they sustain a process rationality. This will happen if they do not control the ego-self. As such, *Homo-Heraclitia egoensis* (an egotistical process species) is unsustainable. On the other hand, *Homo-Heraclitia agapensis* is non-egotistical and will be ecologically sustainable as an eco-culture. I believe that Fiji had both of these species in pre-modern times, I also believe that the West has these species, and had them in the past.

As such, no person can authentically claim that all pre-modern Fijians were expressing an ecologically sustainable cultural system, or that pre-modern Fijian culture is a model for ecological sustainability. Some forms of pre-modern Fijian culture were definitely not sustainable, some probably were. It is for this reason that it would be foolish to pick a pre-modern Fijian cultural system (such as Bau) and use it as a model for ecological sustainability. To do so would serve to cover over, yet again, the meaning of ecological sustainability, of authenticity, of *mana* in relation to the *Vanua*.

In acknowledging that all linguistic systems are capable of fostering the illusion of the autonomous ego-self, I must also acknowledge that the likelihood of the ego-self disappearing from humanity completely is probably out of the question. This being the case, the condition of ecological sustainability becomes essentially out of Nature's reach⁹. But ecologically sustainable cultures are not out of reach, only, they are likely to get disrupted every now and then by egocentric cultures that develop. This is perhaps the best we can hope for.

9.5 THE QUESTION

I hope to have shown, through the course of this thesis, that ecological sustainability is not something we can define in a positive sense. We cannot hold it conceptually as there is nothing for us to hold. Because of this the best we can do is try to define what ecological sustainability isn't. This is because its ultimate meaning cannot be uttered. This is rather like sculpture, where the essent of the being is revealed as things are removed. Part of this process of conceptual sculpture involves questioning; relentless questioning so that we can arrive at a point at which an authentic question can be put. The answer lies underneath. And yet the answer still can never be uttered. But like the sculpture we are able to see it.

In developing the above taxonomy in relation to the ecology of linguistic systems this narrative has reached a point at which the meaning of ecological sustainability is very close at hand. The best we can hope for is to begin to define what is necessary for ecological sustainability to be possible.

⁹The extinction of the illusion of the autonomous ego-self is needed. This may happen and is certainly possible (see Wilber 1981).

The question is:-

Is ecological sustainability able to be achieved in relation to the forests of Fiji?

To frame this question authentically I would need to ask:-

- A. Is culture in Fiji able to achieve a bioregional narrative that allows the landscape to recite its autobiography? and;
- B. Does a global eco-cultural condition exist that will allow this condition to be sustained?

To add to its authenticity I must now ask in relation to A.:-

Are people (of any race) in Fiji living in or able to move into a politico-linguistic framework consistent with the ecological species *Homo-Heraclitia agapensis*?

I believe that the answer is 'yes', but it would require a substantial cultural transformation in Fiji in order to achieve such an eco-cultural condition. This would involve a rediscovery of Fijianness for people who identify with this cultural system or the establishment of a new form of Fijianness for those of different cultural descent.

In relation to B. a further question must be added:-

Are cultures outside Fiji able to move into a politico-linguistic framework consistent with the ecological species *Homo-Heraclitia agapensis*?

I believe that the answer is:- 'yes it is possible, but it is unlikely to happen in the short term'.

I conclude that ecologically sustainable cultures are possible, but that ecological sustainability in general (which requires that all cultures achieve this) is possible but may take a very long time (hundreds, perhaps thousands of years). I also believe that the latter condition will only become possible when all members of all human cultures achieve the equivalent of enlightenment - an existential condition within the field of the Will to Be, where all relationships are mediated by an undercurrent of *agape*, as a collective realisation of the *dharmakaya*. I also think that this is what is meant by 'paradise' in Christianity, and 'nirvana' in Buddhism. It is certainly worth aiming for as a form of cultural and spiritual destiny. It stands as an turning point in the evolution of

the human consciousness, which is perhaps inevitable provided humanity is able to survive for long enough for it to come about. Wilber (1983) sees humanity as currently caught in the tragic 'middle ground' between the beasts and the gods. This is our place in the evolution of our consciousness, which has advanced from the pre-conceptual phase of life in blissful ignorance, to our current condition of ego-consciousness and the knowledge systems that this makes possible. There are many joys and many anxieties in this tragic paradox.

But the evolution of this consciousness, according to Wilber, will lead us to another phase at which we are all capable of leaving the ego-self behind as a distant and perplexing memory. Some cultures have constructed massive obstructions to this possibility, while others have kept the way clear. The latter are the ones we need to respect and learn from. Such wisdom is being nurtured in genuinely indigenous cultures, esoteric (gnostic) religions, and in the mystical spirit of the modern arts. Goethe's *Faust* may stand along side Meister Eckhart, those Australian Aboriginals still singing the Songlines, the Fijians who still understand the meaning of the *Vanua*, beside Cezanne and his paintings, William Blake, Walt Whitman and Thoreau. And we, as onlookers, will be able to recognise the method in their madness, and perhaps be inspired to awaken to the underlying poetry in ourselves.

9.6 ECO-POLITICS

I believe that no goal can justify an unjust means of achieving it. The goal is not an end at all but a new beginning. If this new beginning is stained by injustices carried over from a previous phase in history, those injustices are still there and will remain as long as they are defended in the new order.

Totalitarianism of all forms must be broken, even in its most meagre and subtle forms. If not, the seeds of oppression remain in the language game and the culture. Postmodern discourses argue for an explicit recognition of difference and contextualism in the very axioms of the linguistic equation. This helps a discourse, language game (and hence culture) steer away from universalistic and totalizing tendencies which themselves (in spite of the best intentions of its practitioners) lead us straight back into the problems we started with.

I do not suggest that all aspects of a modernist discourse should be thrown out with the bath-water of universalism and the primacy of reason. On the contrary, many modernist

discourses are bringing Western culture to the beginning of an understanding of the structure of oppression and domination. I for one was a former convert to a number of modernist discourses as I charted my course through the literature. During this thesis I went from a non-critical social perspective, to Marxism (because of Marx's dialectics and critique of capitalism), then ecological economics, then hermeneutics, followed by critical theory and critical social science (neo-Marxist). Phenomenology and existentialism were always quietly there in the background which helped to give words to my thoughts. At each point along this path I was astounded at the ability of these reflexive sociological frameworks to disclose more to me about the nature of oppression (an oppression also extended to the landscape) in modern society than I had ever before imagined.

However, I was also reading Heidegger during this time but could not understand him. Feminism (particularly eco-feminism) was also a major influence. Once I began to explore postmodern theory and postmodern philosophy (much of which was influenced by Heidegger, Nietzsche, and Wittgenstein) I started to find the beginnings of what made the most sense to me. The deeply rooted cultural aspects of alienation grounded in the language game were beginning to come clearer, particularly with the help of feminist theory. Ecofeminism showed me how oppression in relation to gender, through the creation of an 'other' in women, was also a major source of oppression in relation to every thing else, including the rest of Nature. Removing the source of this alienation, and dissolving all 'otherness' is a way out of both human and non-human violence. Asian philosophy, which had always been an undercurrent to my thought, had been loudly telling me this since my first exposure to process rationality in Buddhism in high school. Reading Capra (1982) early on in the thesis led me to realise that such a radical critique of the West was possible and supremely important to my quest. However, whereas Capra (1982) placed an emphasis on the use of Asian viewfinders for conducting such a critique (e.g. Taoism, Hinduism, and Buddhism), I felt the need to frame a similar critique of the West explicitly from within a tradition of Western thinkers, which is what I have done. This served to demonstrate that the West has always had a rich heritage of ecological wisdom (very similar to Eastern and tribal examples), only it had been covered over.

I had always been uncomfortable with the modernist viewpoint due to its inability to sufficiently dissolve the humanity/Nature dualism. I needed to be able to talk simultaneously about social life and ecology without having to keep changing epistemologies. I was also dubious about the question of truth and the way modernist

discourses claimed to know what it was. Wittgenstein then explained what I had always believed concerning the limitations of language and its relation to truth. I then began to read Nietzsche who introduced me to the ancient Greeks (particularly the dialectical world view of tragedy as depicted in Greek drama) and led me to Goethe and Schopenhauer. Schopenhauer helped me to understand why I could never agree with Kant, and also why I did agree with many Asian thinkers.

All of this helped me to begin to understand what Heidegger had been saying all along (or at least in his later works). Heidegger and Schopenhauer, who were comfortable with mysticism, led me to Eckhart. Eckhart helped me understand Dogen, which gave me a fuller understanding of Goethe and Thoreau. And Thoreau is where I started from when I was a teenager when I first read *Walden*, and he is still there now. Thoreau (and Watts, who was also there at that time) gave me the initial inspiration to do what I am now doing. I understood Thoreau then and understand him now, only in a much broader fashion. This grand hermeneutical process began with *Walden*, and has taken me back to *Walden*. The difference is that now I am able to line my story with my own experiences of my own 'Walden Pond' - Vunivia.

I trace this genealogy for you to expose exactly where I am coming from. It may also help to show how and why I went where I did. It will also show how and why the following pages are to be lined with a quite radical political discourse, and you will know where it comes from.

We have two politico-linguistic tasks if ecological sustainability is desired. They are 1. the establishment of a bioregional narrative, and 2. the rescuing of modernity (and any other normative politico-linguistic system) from unauthenticity. The question remains as to whether a method exists that is capable of fostering either process. I believe that there is and that it has all been said before. In this way, what I am doing is not discovering anything new, only helping to reveal that which has been covered over. I also believe that the political and epistemological style of one will also be able to be used for the other. I will begin by exploring how a bioregional narrative might be able to come about from a modern starting point in general. Following this I will look at how it could happen in Fiji.

9.7 OVERCOMING MODERNITY

One thing that tends to unite a number of postmodern frameworks is the agreement that modernity can only be overcome by running its full course thus completing itself. In the process it will discover the circular nature of its various story lines and see that these story lines are not grounded in the bedrock it claims to have found in reason. This process has already begun. Nietzsche was a major turning point in relation to metaphysics, where he showed that nihilism was philosophy's greatest achievement. This nihilism serves to cast out the foundations of totalizing political discourses that legitimate forms of oppression with philosophy. This is because such oppression can only be legitimated by a coherent moral discourse which employs the rules of language as its touch-stone for truth and virtue. But as I showed in chapters 6, 7, and 8 such moral discourses are indeed logical, but still have no basis outside language itself. Because of this the totalizing discourses that legitimate alienating ethical, social, political and scientific practices are without basis. This does not mean they are necessarily wrong, but it shows how they cannot claim to be necessarily right by virtue of being logical. This being the case the way lies open for their refutation in the absence of this rock-solid foundation.

There are many discourses that do refute various universalist practices, but the basis for such refutation is not logic. They tend to be grounded in non-logical discourses inspired by personal experiences, contemplations, and meditations of various forms. I do not suggest that they are necessarily germane or authentic simply because they are not logical. In this sense, I do not argue in favour of bestowing a position of privilege on illogical story lines. I only contend that they cannot be ruled out of court and must be listened to in social and political frameworks. This leads to the notion of a transpersonal democracy similar to the transpersonal ecology developed by Fox (1990).

Democracy implies a form of egalitarianism - the spirit or practice of political, legal or social equality. In a radical modernist democracy scientific forms of knowledge are brought down from their privileged position, and must engage in uncoerced discourse with non-scientific forms of knowledge. In a transpersonal democracy, knowledge itself must step down also. As Wittgenstein said - that which we cannot speak about we must pass over in silence. This silence must be brought into political discourse. But how? The silence refers to that which lies beyond the reach of language. It can be spoken about in metaphor, this is what myth is. Myths must be brought back into political debate. They must not be taken literally, but a culture needs them if the landscape is to be

allowed into the debating chamber.

Emancipatory movements cannot claim to be representative by proxy. Freire (1972) showed us that even the oppressed must be emancipated from those that claim to represent them. If this does not happen the oppressed will remain oppressed. If the landscape is to be brought back into politics in an uncoerced fashion it must be able to 'speak for itself'. This is not as far fetched as it first sounds. In the previous chapter I showed that if a bioregional narrative is happening the landscape is able to recite its autobiography through the language of poetic, artistic metaphor, myth and ritual. It is the landscape speaking *through people* just as it speaks through birds in their song. The 'landscape' includes people, their feelings, intuitions - that which lies outside language and its rules. Even in modern cultures there are people who can and do listen to the 'landscape' in this way. Only their stories are passed off as illegitimate in the modernist framework - illegitimate because they are not logical. But if it is logical then it is unlikely to be the landscape talking.

I believe that the modernist framework of critical social science and critical systems theory does provide a valuable template for the structural dimension of our politico-linguistic system. As described in chapter 5, critical social science is a prescription for a democratic praxis. It is a discourse designed to assist oppressed groups to bring about their own emancipation through an on-going process of action and reflection. This framework is well suited to the task of bringing about changes in modern culture, as it was developed within this context. It is a radical democracy, but without the illogical linguistic aspect that allows the landscape to speak, it is not radical enough. Furthermore, if the landscape is able to speak, then a discourse is able to move beyond democracy, where a culture engages in a conversation with the landscape as a matter of course. The political discussion is not between people but with Nature. This, however, can only come about following a process of change that makes such a transcendence of democracy possible. In the mean time democracy must be taken to its limits (see Mouffe 1988).

The details of the structure of this political process were summarised in chapter 5 but I repeat them here to place them into context. There are three principle functions in which each step leads to the next:-

1. The formation of critical theories which stand up to open discourse - statements arising from open discourse and consensus. This must begin with exercising a hermeneutic of respect in relation to all perspectives

engaging in such discourse.

2. The organisation of understanding (knowledge and wisdom) which transforms the consciousness of participants - authentic insights. This can be brought about by exercising a hermeneutic of suspicion in relation to the consciousness of the participants. The process must thereby be reflexive and phenomenological. This is the learning process of a group and is a social and political activity. Participants must aim at self reflection as part of the process of understanding their social condition and relationships with other members of the landscape. Each person should have an equal opportunity to question or affirm the validity of what is discussed. The process is more important than the result. The end loses its supremacy and the means becomes all important.

The style of this learning process as promoted by Habermas appears to have much in common with the Maori *hui* or the Fijian *bose*. Where it differs from these tribal frameworks is that the latter are explicitly mythical whereas Habermas' project is not. Cheney (1989a) correctly pointed out that some tribal cultures have achieved what a postmodern framework points to.

3. The selection of appropriate strategies for social change - prudent decisions. The solutions to tactical questions are developed, rituals designed or reaffirmed, ethical instructions are brought into the discourse (Carr and Kemmis 1986).

This outlook is similar to the framework underlying the critical systems theory of Flood and Ulrich (1990) but I add a post-metaphysical dimension in a similar fashion to Morrison (1994).

An important addition to this prescription is the need for participants to have the opportunity to engage in a process of self-realisation which is conducted personally and outside the political framework. Here the 'conversation' in this post-metaphysical pedagogy extends outward to the landscape. The psychological dimensions of this formula, I believe, should be transpersonal, in line with the transpersonal psychology of Campbell, and the analytical psychology of Jung, and Neumann, as opposed to the Freudian undercurrent of Habermas's work.

In the formula I present, the organisation of understanding in particular differs from the critical social science framework due to my emphasis on ritual as a mediator in the process of coming to apprehend the source of one's psychological and social condition. For Habermas (who is a Freudian) there is no basis in notions such as the Jungian 'collective unconscious' and the spiritual possibility of the *Sself*. For Freud, our

psychological condition was able to be explained solely according to sexuality, and spirituality was merely the games played by the super-ego (see Wilber 1983). But for Jung sexuality was part of the equation, but not all of it, and the divine was certainly beyond the individual. In transpersonal psychology, as it is with Jung, Neumann, Maslow, Sutich, and Campbell, our psychological condition is a reflection of our position in the process of self realisation in relation to our transpersonal surroundings including the landscape. There are sexually orientated aspects of the psyche, but the sexual undercurrent is able to be transcended towards spiritual relationships with other people and the landscape.

This is confirmed in Hindu cosmology, for example, in relation to psychological aspects of the process of self realisation, symbolised in the form of chakras or lotus points on the body. The first of the seven chakras is the *muladhara* (basic survival), second is the *svadhishtana* (sexual urges), the third (*manipura*) is that of empowerment. These three are the lowest of the seven chakras and need to be transcended through self realisation according to a form of virtue (*dharma*) that allows the individual to move through the remaining four chakras, the last three of which symbolise the highest of spiritual realisations for Hinduism (see Wilber 1983; Campbell 1986; Ross 1993). Such views encompassing the spiritual dimensions of psychology are also explored by Shelldrake (1981, 1991) who looked into cultural ecology in relation to his theory of an aspect of evolution by means of formative causation and morphogenetic fields.

I contend that these non-material, non-individualistic aspects of personal self attainment need to be brought into the equation of what amounts to a transpersonal democracy. I demonstrated the need for a soteriological dimension in chapter 8 above. This psychological and spiritual dimension does not need to be undertaken in the actual process of interpersonal human political discourse, but instead needs to happen along side this. The process of uncoerced political discussion, however, is able to facilitate this aspect of cultural development by allowing such discourses (that refer to self realisation) to be regarded as legitimate and useful. As such, political decisions are then able to take into account this psychological and soteriological part of culture, and as a result, provide resources for such activity. This might include the organisation of calendar events such as rituals, where these rituals are not branded as merely entertainment. Such rituals become essential to the authentic functioning of the community. Seasonal festivals are a good example.

However, an insufficiently egalitarian democratic system that argues that *the content of*

legitimate debate must be rational (as is the case with modern discourses), will not be capable of supporting such activities. To do this they will either have to bend their own rules or find a logical form of legitimation for what is a necessarily illogical cultural practice. Modernity must be overcome, not merely completed. The way it can be overcome is for emancipatory movements to recognise the legitimacy of illogical stories and illogical practices. The result is the establishment of a democratic politico-linguistic system in both *style and content*. Only then can it claim to be truly egalitarian.

This forms the basis for cultural change in modern cultures that can free us from modernity. It can only be undertaken by those who have no vested interest in the cultural status quo. The group that are most likely to be of this condition are the oppressed, and those who sympathize with them. It is for this reason that I believe a post-metaphysical feminist approach provides an appropriate viewfinder when in search of the touch-stone of oppression and alienation. Patriarchy is a by-product of such alienation made possible by totalizing politico-linguistic systems. So is environmental degradation. They are indicators of unauthentic cultural systems (see Radford-Reuther 1989; Merchant 1980, 1990; Salleh 1990, 1993 for example).

Those who sustain privileges made possible by a totalizing politico-linguistic system, are unlikely candidates for exposing a path to emancipation from such structures. This is because they will tend to defend their privileges, and in the process defend the oppressive structures that sustain their position. This is what often happens in environmental management. Environmental managers who wish to sustain their privileges in an innately oppressive society will not be capable of fostering the degree of cultural change necessary for ecological sustainability to come about. Instead 'pragmatic' incremental changes are supported in tight and tidy bureaucracies where allegiance is to the Act and the minister, and not to Nature. In the process the environment is managed in order to clean up our culturally generated mess. The symptoms of unauthentic cultural deeds are thus hidden from the general population and the impetus for a realisation of the need for change is continually washed clean. It is for this reason that so many different counter-cultural mystical traditions argue that the place to find the highest virtue is amongst the 'poor'. I tend to agree.

In my attacks on management I do not suggest that we simply sit down and let the planet be totally wrecked by unmitigated industrialism. But I do not think for a moment that stopping the forests of the Vunivia catchment from being felled will be sufficient for ecological sustainability. It can only buy us time, but that is about all. It might help to

point out to other people in a culture of the need for conservation efforts. But the process must lead to cultural change. If it stops short of this then we are only helping the capitalists of the future have nice resources to log at their leisure. Any modern protected area is protected only by the strength of law. Laws can change with the stroke of a pen and the waving of a few hands in even the best liberalist 'democracy'.

Stopping current destructive practices is not what I mean by management. By management I refer to the invention of models of how the world should be and then forcing it to fit the model. The actions of people attempting to stop the violence of the world is not of this same type. These actions are often grounded in a totally different ethical and linguistic domain. Such actions can be, and often are, driven by ethical instructions (moral intuition) coming from outside the rules of language. People are driven by their intuitions to think "this is very wrong" (see Naess 1984). Also there is no need to stretch the imagination very far to find logical reasons for not destroying forest ecosystems. Such reasons range from the need to protect a variety of resources, to the desire to maintain the habitat of a particular species of endangered animal or plant. But this is not the 'management' I refer to when I accuse 'management' of being another form of stoicism. It is mitigation, not control. But there is still a danger that such mitigation of environmental (and/or social) violence can lead to complacency, because the causes of environmental devastation that lie in totalitarian discourses may remain unscathed.

I believe that environmental mitigation is legitimate if, and only if, it is matched by an equivalent effort put into cultural self reflection which can help a culture discover the ecological and social flaws in its foundations. These are the flaws which give rise to the environmental degradation and social oppression in the first place. All forms of environmental mitigation must be seen as indicative of cultural failure vis-a-vis its relationship with its landscape. The landscape is not only the concern or the responsibility of the 'environment sector'. It engages in a relationship with all aspects of human culture, from tying your shoe-laces to building a house. Environmental mitigation can only be seen as a pathetic last-ditch effort to protect remaining unadulterated ecosystems from immanent destruction and to give people a little longer to re-discover their accountability to Nature. Such a process of cultural self reflection, in parallel with personal self reflection, can be fostered through a postmodern transpersonal democracy described above. This will not guarantee anything, but it will, at least not obstruct the kind of discourse needed, if ecological sustainability is to become remotely possible. You cannot force anyone or anything to be free - you can only clear away obstructions

to freedom.

If a process of cultural change were to succeed through the employment of a sufficiently egalitarian democracy, the democracy itself must not be discarded. It must remain as part of the on-going task of keeping a culture politically honest, of allowing uncoerced discourse to continue. In this way the means and the end are one and the same thing, as the structures employed as a means are also those that are capable of sustaining the 'end'. They take their torch from the same fire. But in reality, of course, there is no real end, only the constant possibility of ever-new beginnings. As Thoreau said: "healthy natures remember that the sun rose clear" - it is new every day. And furthermore we need to be capable of "anticipat[ing], not the sunrise and the dawn merely, but Nature [it]self!" (Thoreau 1980: 11, 16).

9.8 BIOREGIONAL NARRATIVES IN FIJI

A bioregional narrative in Fiji, by definition, must be contextually tied to the Fiji landscape. A bioregional narrative operating in the Andes will not successfully apply to the Vunivia catchment. The Vunivia narrative must grow from the landscape *in situ*. Before continuing, I wish to point out that much can be learnt, by any cultural group, from the many centuries of human experience of the Fiji landscape which the pre-modern Fijian culture had attained. I am not suggesting that because the Fijian people have been in Fiji for many centuries that they all developed a bioregional narrative capable of delivering ecological sustainability. People have been in Europe for a long time and many have found ways to wreck it for a long time too. However, I do believe that many Fijian communities probably did come close and some may have indeed achieved this condition. My reason for making such a statement stems from my demonstration in previous chapters that the pre-modern Fijian language games were of the *Homo-Heraclitia* (i.e. process orientated) form which is a necessary predicate for a bioregional narrative. Furthermore, the Fijian linguistic system and world view was mythical, it did not establish a basis for truth in logic or reason, and it was holistic (see Ravuvu 1987a). As to the form of holism it was - I am unsure. It is likely to have been of the non-stoic form due to the process undercurrent to the rationality. However, this question begs further research and points to where it should be conducted.

The reason I refrain from suggesting that the holism of pre-modern Fiji was non-stoic *tout court*, is that totalizing political regimes did develop from within that politico-linguistic system. Either, some forms of holism in pre-modern Fiji were an equivalent

to the stoic form or, simply the expansionist tendencies of many different chiefdoms were driven by little more than the mass egotism of their corrupted leaders who did not even seek to legitimate their politics in any system of morality. I think that the latter is most likely to be the case, as sophisticated systems of linguistic moral legitimation for oppressive cultural practices tend to require first the establishment of institutions of learning (playing with the rules of language) where such a practice is able to be encouraged. The West venerates such institutions as the very pillars of its culture, whereas tribal cultures rightly see little necessity for them.

It can be seen that the pre-modern Fijian linguistic system does provide an existing (although currently altered) framework capable of beginning the process of building a bioregional narrative in that country. This is a very general statement as I have not adequately studied the language to be capable of saying much more than this. As such it remains a possibility but a very real and tangible one at that. Other linguistic systems are also capable of providing a similar framework. Examples include Hindi, and Chinese (either mandarin or cantonese) which, like Fijian have their rational roots in an equivalent to Heraclitian soil (see Capra 1975; Watts 1957; Ross 1993). In this way an Indian (Indo-Fijian) can recover the meaning of process in Vedanta and the Bhagavad-Gita, a Chinese person can rediscover the Tao or the meaning of the Diamond Sutra and the Sutra of Hui-Neng. Other Pacific Islanders can recapture the meaning of process in their own pre-modern tribal culture.

European languages, however, have far larger obstructions to achieving a bioregional narrative, due to their development within the *Homo-Parmenidia* cultural genus. They are modern (like much of the extant Fijian, Hindi, and Chinese forms) but they have their roots also in *Homo-Parmenidia* soil due to the long history of the Western (Parmenidian) standard of rationality that preceded the evolution of the current forms of these languages¹⁰. European culture was not all of the *Homo-Parmenidia* type, however, as tribal cultures did exist which did not base their language game on a tradition that reaches back to the Greeks. Celtic languages are an example, and there is a rich history of the process orientated, mythical, holistic cultural and linguistic systems of pre-modern and non-modern Europe.

Western culture has, since the 15th century, been in an evangelistic stupor bringing the

¹⁰This is probably why Heidegger felt the need to invent his own philosophical language in order to avoid confusion.

savages of the globe into the fold of 'civilisation' - into stoicism. I have shown that the opposite is needed. We need to de-civilize the world if ecological sustainability is to become possible, as we need to free cultures from stoicism and its equivalents in totalizing politico-linguistic discourses. We, in the West, must let go of our most treasured prejudices (which have become fetishes) if ecological sustainability is to become remotely possible. Not only must Europeans do this but so too must other civilized peoples, currently under the influence of the stoic drug. This includes modern Fijians and other no-longer-indigenous peoples. It may be a hard pill to swallow but ecological sustainability demands nothing less.

Europeans can begin this task by uncovering this non-stoic heritage in places such as the pre-Socratic thinkers and poets (e.g. Heraclitus), process orientated Christian mysticism (e.g. by seeing the Bible as a text of meaningful myth (Williams 1978), reinterpreting Thomistic mysticism, Eckhart, and aspects of Byzantine Orthodoxy), apprehending the messages of Goethe, Blake, Wordsworth, Schopenhauer, Nietzsche, Thoreau, Whitman, Heidegger, and Whitehead¹¹, or reactivate Western pre-Christian process orientated mysticism (see Starhawk 1979; Stone 1979; Spretnak 1989; Ross 1993). This list is not, of course, exhaustive. It only serves to illustrate the innumerable possibilities for establishing a non-stoic, process orientated language game that is able to enter into meaningful discourse with pre-modern Fijian culture, and achieve a bioregional narrative in its own right.

Fijians will need to begin to appreciate that the land they call 'Viti' can grow many

¹¹Feminist readers may wonder why all of these people cited here are men. Yes they are men, and this in itself is a message that I hoped would emerge from between the lines. There are many men that, in the past and present, have embraced what has been called the feminine - the creative, the poetic, the mystical, the intuitive, as feminist theorist Ross (1993) called for us all to do. I have presented a genealogy of men who have contributed greatly to the deconstruction of the dominance of what has been called the masculine - reason, law, order, control, domination. In this sense this thesis is part of a feminist story, as it agrees to take up the feminist challenge and dismantle the basis of male domination in any society. Not all of the men cited in this thesis have a clean slate in relation to androcentricism or even misogyny. Nietzsche is a good example, and Heidegger has even been associated with Nazism i.e. he was a member of the Nazi Party prior to the Second World War, and some have argued that his philosophy is totalitarian to the core (e.g. Kaufman 1992). But an unprejudiced eye will have the serenity to recognise the contribution these men have made for social and environmental justice, particularly by showing us (men and women) how to deconstruct the massive accumulation of stories that men in the past have used to legitimate male domination, and environmental degradation.

different indigenous cultures. The large number of different languages that Papua New Guinea, the Solomon Islands, and Vanuatu are able to support in the same landscape are examples of such a possibility. Fijian racist nationalism is simply not an option if ecological sustainability is at stake. People belong to the land. The opposite is needed for any form of nationalism to become sensible. And the land can only belong to people if the world view of a culture is totalitarian in some way. This lies at the heart of the notion of property and ownership. For something to be owned it must first be alienated as an object - made into an 'other'. This is only possible if an autonomous notion of self and an atomistic conception of reality is sustained. But, as shown in chapters 7 and 8 such a view of the self and the atom is (ontologically speaking) an illusion created by language. You need an autonomous 'me' before you can have a condition of 'mine'. But the 'me' and the 'mine' have no basis apart from being linguistic illusions. The alienated object (another linguistic illusion) such as the land, then comes under the linguistic control of a dominating autonomous subject (another illusion). Back to stoicism.

The pre-modern Fijian world view (particularly amongst the non-expansionist groups) was not tarnished with such notions of ownership - the rationality was incommensurable with such an idea. For ownership of the *Vanua* to be possible the *Vanua* first had to die. It has long since died for many Fijians, only they do not yet recognise this. Some do realise this but are not being heard. As I keep saying - what remains important is what language *means* - not what it sounds like. And so, like the difference between race and culture, there is a difference between sounds (i.e. what language sound like) and meanings. And in this regard we must also remember that true *mana* (integrity, prestige), is earned, not merely inherited.

The different language games of all people in Fiji are capable of transforming into a linguistic system that makes an authentic bioregional narrative possible. This can be expressed in different cultural formulas, that are each capable of becoming indigenous, sustainable, and hence co-existing in harmony with all other beings in that landscape. This cannot happen over night but is an on going process of becoming. There is no single grand theory to be followed, as the character of the cultures that might be recreated as a result of such conversation with the landscape will determine itself. Sovereignty of the Fijian people can be maintained, but on a far deeper level than merely a Western idea of land tenure. The Fijian people will be able to maintain sovereignty over their cultural rationality, the meaning of words in their own language, and the integrity of their ancestors and future generations. A purely modern form of sovereignty in the way of a guarantee to ownership of land is not enough. The land is

not a commodity for sale. It is something to belong to. The Australian Aboriginals walked about on that landscape for 40,000 years or more, but never did they own it. Instead Fijian people will be able to maintain their *mana* vis-a-vis the landscape which itself grew from their relationship with the land. Other cultures can also earn *mana* in their own way in the same landscape.

In this regard, we must remember that we cannot turn the clock back and send all Indo-Fijians back to India, the Chinese back to China, the Europeans back to where ever they came from, and all other Pacific Islanders back to their homelands. Those wishing to do this have missed the point. It may serve those wishing to use the land for commercial purposes of personal gain. But it will not guarantee the integrity of the Fijian people or give them back any indigenusness to the land they once had. Many of the so called 'foreigners' now living in Fiji been there for many generations. And for that matter, what does this word 'foreign' mean? An unsustainable way of thinking is more foreign than having your ancestors born to another land. We are all foreign to some land, but does that make us inherently bad? The dilio (*Pluvialis dominica fulva*) is a migratory bird, but is it not indigenus to Fiji? What are now called 'Fijians' were once foreign to the land now called Fiji as they did not grow out of the rock and soil but arrived as immigrants to a new land, and later as immigrants to a land already occupied by local people.

People of the Fijian race and people of other races must, in their own way, *become culturally Fijian* if ecological sustainability is to happen. To argue that the practicability of this programme is unrealistic, is to ignore what is real about the land. And in the process of ignoring such a programme of radical cultural transformation, one discards the possibility of ecological sustainability. Should this be the case then, many environmental managers and environmentalists must admit that what they are advocating and implementing in the form of management is not necessarily ecological sustainability. Also it must be remembered that sustainability is not the end of history, it is not an ideal unchanging state. It is a constant critical means of 'becoming' in a landscape. There is no end - only means as process, and thus sustainability must be recreated each moment in the very fabric of our lives.

9.8.1 TRANSPERSONAL DEMOCRACY

What can this critique tell us about the best solution for dealing with deforestation in Fiji? If sustainability is what is sought then a transformation of culture in Fiji is

necessary. Such a transformation amounts to a regaining of meanings that already exist in Fiji that hide there beneath the surface of all cultures in that country. A process of discourse both within and between these cultures needs to be initiated or reactivated where they have died out. What of pragmatics? What about the realities of the international economic order that holds Fiji in its grip? It will not be easy. But at this point we must remember that the forests of Fiji are not alone in their plight.

Exploitation and alienation is a condition suffered by many different groups in that country, although the way it is manifested may vary greatly. For example, women of different races are subordinated in that country by different patriarchal systems which under values their contribution to social and economic life. Their condition is justified as the will of some universal transcendent agency, through misinterpreting metaphorical and allegorical myths of origin by taking them literally¹². The working classes, irrespective of race, are exploited for their labour; rivers are polluted, natural resources and rural communities are exploited by urban and transnational elites; political representation of the non-Fijian members of the population is disproportionately reduced (particularly the Indo-Fijian segment of the population) to what amounts to apartheid; and a large segment of the (racially) Fijian population is discriminated against by the Fijian ruling elite¹³.

Many different oppressed groups exist in Fiji, including those that represent a non-human oppressed realm - the environment. Social justice groups of various descriptions and those involved in environmental issues must acknowledge that, although somewhat

¹²Both the Fijian and European myths of origin are able to account form this (see Ravuvu 1987a) for an account the Fijian origin myth.

¹³Changes in the geographical and tribal distribution of power structures following the 1987 elections was a significant contributing factor behind the coups of 1987 which effectively restored the geographical and tribal status quo that had survived from colonial days. It is important to note that the tribal groups that were groomed into the civil service during the 20th century by the ruling British colonial government were the same tribal groups that secured power following independence in 1970. It was these tribal groups that supported the British annexation of Fiji in 1874 as it served to preserve their hegemony over other tribal groups which were at war with them at the time of British settlement. They effectively became willing or unwilling 'house slaves' to the ruling British and benefitted from the privileges that ensued. The perpetuation of these privileges coupled with the way political power has been taken up by certain Fijian groups is a major (yet much obscured) issue in contemporary Fiji politics (see Routledge 1985; Robertson and Tamanisau 1988; Sutherland 1989; Overton and Ward 1989; Bravadra 1990; Robie 1989; Lal 1988, 1986; Scar 1984 for example).

different in appearance, they all share one thing in common - their condition is the result of an unjust cultural order. As such, the locus of change needs to be cultural as well. As part of this change there needs to be a recognition of *unity* within the *diversity* of these many different interests, because it is a monolithic culture that has itself caused so many problems. Any problem of culture cannot be reduced to a single issue because of the innate diversity in social reality. The call for a reorientation of the politics of extra-parliamentary protest has come loud and clear from many postmodern theorists (see Peters 1991; Cheney 1989a; Young 1990; Phillips 1993), who recognise the need for an appreciation of this diversity. This is the politics of 'difference' alluded to in earlier chapters, which throws up a significant challenge to traditional conceptions of democracy.

The reduction of a political message to a single voice falls back into monolithic totalitarian structures that cover over many different legitimate social concerns. There needs to be discourse - conversation, so that the different views of different people can be heard. There needs to be dialogical communication (Freire 1972), as opposed to totalitarian instructions from 'on high', as is the case with liberalist democracy. Any government that claims that its role is to govern in the absence of true dialogue is totalitarian. This is the condition of almost every liberalist democracy in the world today, and in this sense Aldous Huxley, in the book *Brave New World*, was correct in his predictions of what would become of totalitarianism after the fall of the brutal fascism of the early and mid 20th century. Huxley saw how totalitarianism would change from the "government by clubs and firing squads" into a far more clandestine and efficient form where the "all powerful executive of political bosses and their army of managers control a population of slaves who do not have to be coerced, because they [have been conditioned] to love their servitude" (Huxley 1968:11). *Brave New World* is a biography of modern liberalism, only instead of an army of state managers we have a legion of corporations doing the same thing. And Huxley adds, "To make [the population] love [their oppression] is the task assigned, in present day totalitarian states, to the ministries of propaganda, newspaper editors and school teachers. [And furthermore] Great is the truth, but greater still from a practical point of view, is silence about the truth" (ibid.:11).

The locus of cultural change of the form required can only come from those who do not have a vested interest in the current oppressive and unsustainable cultural structures (see Freire 1972). A starting point and a constant means of emancipatory action rests in open discourse where each group is able to engage in speech where the access to speech is

not coerced by any single group. This is able to be conducted in parallel with conversations with the landscape as mentioned earlier.

Not all people would agree that a democracy is the best thing for Fiji. Democracy itself has even been called a facade by Ravuvu (1991) who comments on what form democracy has taken in colonial and post-colonial Fiji. Although Ravuvu argues that democracy is innately flawed and serves to benefit only the majority, I have shown above that this is true only for certain forms of 'democracy' such as liberalism (see chapter 5 for an account of liberalism, and chapters 7 and 8 for a critique of obstructions to egalitarianism). Participatory consensus orientated democracy which extends to the interpersonal level of politics, that includes legitimate narratives such as moral intuition, ethics and non-scientific discourse, does not exclude the minorities at all. Indeed it is the only way of ensuring that all are able to be heard on their own terms.

Furthermore, if the Fijian people are able to maintain the authentic meaning of their language game, through maintaining the meaning of the *Vanua* as a basis for meaning in their language, their culture will need to be capable of being recreated on their own terms. Being able to recreate one's culture in the absence of coercion by other cultures gives the Fijian people the "positive discrimination" that Ravuvu (1991) asks for without the oppression that would be sustained in his formula of cultural politics in that country. I agree with Ravuvu in his rejection of oppressive political structures that exploited the Fijian people for the last two centuries and that the Fijian people "have been made to feel helpless, and to lose confidence in themselves and in their ability to determine their own destinies" (ibid.:97). However, I am unsure who he refers to here - people of the Fijian race or people of the Fijian culture? Notwithstanding this unfortunate conflation of race and culture in Ravuvu's argument, I believe that the alternative presented by Ravuvu (whether he refers to race or culture) is not really an alternative.

The model for cultural life sustained in Ravuvu's argument is the same modern one which I reject as unsustainable. He advocates that a positive discrimination be practised in favour of Fijians in "education, politics, business development and other areas in which they are *lagging behind*" (Ravuvu 1991:99, my emphasis). Lagging behind? It sounds like this argument is in support of the kind of 'progress' sought in the Enlightenment which was underwritten by the historicism of people like Hobbes, Locke, Voltaire, and Turgot. In this way Ravuvu is just as Western as those he so vehemently attacks. He goes on to say that positive discrimination towards Fijians must continue

"until [Fijians] are on par, with those who have been well established through close contact with colonial and capitalist elites and institutions"(ibid.:99). This is merely an extension of the oppressive colonial structures that put Fijians in the position they find themselves in today, and thus would perpetuate the same structures that he spent the entire book criticising.

I believe that a cultural model that sustains stoicism of any form, irrespective of what race is plugged into it, is inappropriate for Fiji and would continue to damage the Fijian culture and the landscapes of that country including its forests. Under Ravuvu's model there is no guarantee of the sovereignty of Fijianness to anyone because the modern context of life with its rationality of universals and an ontological steady state is at odds with what it is to be Fijian in the authentic and sustainable sense. As alluded to above, I suggest that the first appropriate step is a rejection of a rationality that negates the limitations of language, the flux of Nature, and the innate differences between different places. From there on the possibilities are endless. These can be revealed through open discourse that does not place scientific, and knowledge based narratives in a position of privilege in that discourse over other narratives (such as intuition), which can only be recreated symbolically as metaphor and myth.

Such open and radically democratic discourse is a necessary condition for commonality to be found whilst retaining diversity. This enables community to develop and is a necessary condition for wisdom to be unearthed. It is a necessary condition for a culture to regain a respect for all of Nature. In Fijian culture, structures for such discourse already exist in the *soqoni vata* or *bose*, which are traditional types of meetings. The difference between the current use of the *bose* and the kind necessary for a true radical democracy is the explicit reclaiming of un-coerced discourse. As such, women must not be relegated to the dark shadows as is currently the case. Other cultural formulas in Fiji can re-discover a radical democracy in their own way and even learn from Fijians about how to go about it. Resistance to such a political model will, of course, be vicious, and it will come from those who most wish to protect their current positions of privilege either as oppressive rulers or as their house slaves.

Some people may now be willing to confess that ecological sustainability demands a much deeper analysis of culture than a mere tinkering with management problems. It is essential that such an inquiry does not sweep important issues beneath the carpet. To achieve this and to create a robust alternative, the approach must be openly critical. It must be able to call into question the assumptions that underlie tradition in order to test

the ability of the past to be used as a model for the present, given that tomorrow will always be full of surprises. Many people will be happy to admit that this onerous task of ecological sustainability through a cultural transformation is not an option. If this is so then perhaps this story may at least force some people to admit that ecological sustainability is, for them, unattainable. Otherwise they may be happy to change their definition of ecological sustainability. But to do this will no doubt herald environmental management successes in much the same vein as the military advances celebrated in Heller's 'Catch 22'. One night while everyone was asleep, a soldier sneaked up to the strategic map and moved the front line (a red ribbon on the map) to a point beyond their current real position. The following morning all of the officers and soldiers greeted the map with delight and threw a party to celebrate the meritorious acquisition of new territory. But of course, the gains were only on the map.

9.9 BOWING OUT IN STYLE - ECO-CHIVALRY

In this thesis I established a prescription that was able to substantiate and justify the bioregional narrative idea, showing how the landscape is able to recite its autobiography. I did this only after deconstructing the foundations of the unsustainable cultural basis of modernity, by demonstrating the ontological and epistemological flaws which it uses to substantiate its narratives. I make no apologies for being so casually tactless in my style of criticism which, at times, plunges into a rather polemical discourse. I also make no apologies for being so intensely critical of modern culture. It deserves such an exposure of its hidden social and ecological tyranny. However, the truth of it can only be established through negotiation and discourse. This story represents part of such discourse.

Critique is never enough. The tenor of a creative alternative tests the integrity of the critic. The creative response which this thesis embodies did not come from a professional mask. Instead my personal convictions emerged right here before you. This is why I ordained Don Quixote as the patron of my quest. Style is all important. And, in adopting such a confident style I had hoped to demonstrate that being a counter-cultural maverick can be enjoyable, and done with finesse and valour as it was with that man from la Mancha. Like that courageous knight errant of Castile, I do not expect to personally succeed in over-turning my culture. And if I appear to fail, I will do so without relent, standing firm in my convictions which will, no doubt, evolve the more I learn. I owe it to Nature to give it my all. The eventual turning may indeed come to pass, but I accept that I am unlikely to be here to see it.

What you have found in these pages are the innermost thoughts of an environmentalist who is not afraid to pursue an adventure in honour of Nature. In the process I took pleasure in confronting countless giants (philosophers of the Socratic tradition) and dragons (those driven by prejudice) and engaged them in fierce and unequal debate, in defence of Nature's integrity, in defence of ecological sustainability. Such a style, which I call eco-chivalry, is one in which the violence of lesser forms of environmental and social esteem is discarded and replaced with a commitment to break the cycle of social and ecological brutality itself. It takes courage to stand and receive the kind of criticism that comes, but more courage not to be tempted to pick up the tools of violence employed by those that torture the *Vanua* and each other. This is what I mean by eco-chivalry.

In so doing, I was compelled to defend the grace of Nature by means of the strength and excellence of the wit. Eco-chivalry is not to be confused with male dominated war-games as it was in past ages of mythical culture. Instead the word 'chivalry' is used to merely denote an aspiration to selfless conviction, valour and honour, mixed with poetical *savoir-faire*. The ideal is to disarm Nature's enemies (knowing that aspects of my own character are among them) so that they are no longer capable of hurting anything, anyone, or even themselves. Such traits are so thin on the ground these days, in the wake of so many blind, and naively iconoclastic modern societies where the energies of all people is directed into the selfish pestilence of the Great Me. This alternative style, however, does not deny the deeper meaning of myth, is poetical, and fulfilling. It requires bravery, which is also madness....

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APPENDIX 1 - A GENEALOGY OF DOMINATION

The positivist paradigm is a philosophical approach to natural and social science that has become the most predominant intellectual force in western thought since the second half of the 19th century (Carr and Kemmis 1986¹). Positivism is a form of scientific empiricism. Included in this empiricist tradition is the early positivism of Comte, logical positivism, Carnapian empiricism, Popperism, conventionalism, pragmatism, and the classical empiricism of Hume (see Outhwaite 1987; Hooker 1987 for example).

Empiricism refers to an epistemology based solely on sensory experience, thus rejecting any claims that knowledge can be derived from anything beyond the human senses. Empiricism could be regarded as a development within the Cartesian reductionist world view. I will explain the influence of Descartes below. In the empiricist view reality is regarded as inherently simple and mathematical and therefore can be described most precisely in mathematical terms. It accordingly relies on the collection of empirical data as the basis for uncovering objective knowledge from an objective reality. It also claims that by being quantitative and thus 'objective' the scientist can retreat from the investigation as a subjective personality through the empiricist claim to value neutrality. The ideal of empiricism is to objectively explain nature through statistical correlations and universal causal laws (see Gale 1979; Kyburg 1990; McLoghlin 1991; Oldroyd 1986 for explanations of empiricism).

The roots of empiricism run deep into the history of Western philosophy and can be traced at least as far back as the 17th century. One underlying feature in the development of modern science was the desire to be value neutral and thus objective in scientific inquiry. The desire to be value neutral was evident in the efforts of European scientists of the early modern era who were developing a new science that was to overcome the limitations of the hitherto existing intellectual climate based on the authority of tradition and the Church. An alternative epistemology was developed that attempted to communicate a message of reality in a language as if Nature itself were speaking. Such a language would not tolerate the subjectivity inherent in the human condition, such as emotions, ethics, or religious beliefs, and wished to allow Nature itself to speak uninterrupted. In his book 'New Organon' Francis Bacon wrote:-

I...dwelling purely and constantly among the facts of nature, withdraw my intellect from them no further than may suffice to let the images and rays of natural objects meet in a point, as they do in the sense of vision; whence it follows that the strength and excellence of the wit has but little to do in the matter (Bacon 1620:13-14, cited in Wiser 1983).

Through such an approach Bacon wanted to bring a form of egalitarianism into science. Plato had made access to knowledge hierarchically structured where it was mediated

¹Carr and Kemmis (1986) focus more specifically on positivism which is one variant of empiricism, although all of the empiricist formulas share much in common in terms of their ontology and the general epistemology. Differences tend to come in the form of variants in the finer details of epistemology (see Hooker 1987).

through the practice of reason and rationality carried out by philosophers. But under the influence of Bacon knowledge through objective science was available to all. Bacon was also critical of the Greeks in their armchair deductivism and set about to develop a form of science based on empirical induction using perceived facts to piece together explanations of Nature (Wiser 1983; Capra 1982). According to Bacon such a method would circumvent disagreements among scientists leaving consensus to be the judge of truth.

Within the Baconian view the entire context of science began to change to a pursuit of knowledge for purposes of the domination and control of Nature (Capra 1982). The latter view was sustained by the church where humans were to dominate Nature as directed in the book of Genesis (Ryan 1984). In Bacon's view Nature became personified, made feminine, and 'hounded in her wanderings', 'bound into service', made a 'slave', and 'put into constraint', where scientists would 'torture nature's secrets from her' (Ryan 1984; Capra 1982). The sexist language used by Bacon when referring to the rest of Nature was not new to science as the use of a feminine metaphor for 'Nature' was used as far back as Aristotle. But not only did the ancient Greeks use the feminine metaphor of 'Nature' but they also contributed to the entrenched Western ethic whereby this feminine object was provided exclusively for 'man'. In this regard Aristotle states "Now if nature makes nothing incomplete, and nothing in vain, the inference must be that she has made all animals for the sake of man." (Aristotle - *The Politics* 1256b 20).

Under the influence of Bacon such language became incorporated into his new science. The social implications for such a language and use of a feminine metaphor for the rest of Nature was to help reinforce the domination of women in modern society (Kheel 1989; Daly 1978; Harding 1986; Merchant 1980).

Given the context of social and political life in the late middle ages being dominated by the enormous bureaucracy of an authoritarian church entangled in political hegemony (Elton 1963), the scientific revolution can be seen as a refreshing departure. The dawning of the new science did not constitute an absolute rejection of Christianity, far from it. The early scientists were also reinterpreting the image of Nature through science as a direct experience of God's creation (David Bohm in Weber 1986). These early scientists were also contributing to a rising religious order. Theology and science were eager to crush alternative doctrines such as alchemy and witch craft which represented a threat to them both. Such a relationship between the church and the rising science is a testament to the holocaust of the late middle ages in the genocide of herbalists and witches (Kheel 1989; Ryan 1984; Capra 1982).

The views of Bacon were built upon by many involved in assembling the foundations of the modern scientific age. A notable example is Rene Descartes (1596-1650). According to Descartes, reality is inherently simple and therefore our knowledge of it should be precise (Wiser 1983). This desire for precision paved the way for the rise of mathematics as the language of the new science. Descartes claimed that mathematics was the superior of the sciences and he explicitly rejected the non-mathematical ones. This commitment to mathematics as the most superior of the sciences also represents a commitment to an empiricist ontology where mathematics is seen as the language of Nature (see Oldroyd 1986). Should Nature be inherently mathematical the human language of mathematics would represent the discovery of an epistemology that directly corresponds with reality. This is indeed what the early scientists (and many modern

scientists) believed they had found.

CARTESIAN REDUCTIONISM

Cartesian reductionism is a method of gaining scientific knowledge about the world. Descartes developed a methodological framework that greatly influenced the subsequent development of science. Reductionism as an epistemology (theory of knowledge) implies a certain theory of reality (ontology) in order that we may come to have knowledge about it. Levins and Lewontin (1985) have identified at least four ontological commitments inherent in Cartesian reductionism.

1. There is a natural set of units or parts of which any whole is made.
2. These units are homogenous within themselves with respect to the whole.
3. The parts are ontologically prior to the whole; i.e. the isolated parts come together to form the whole. The parts have properties which they lend to the whole.
4. Causes are separate from effects. Causes are the property of subjects, and effects are the property of objects. Causes may respond to feedback effects but there is no ambiguity about where the cause is, i.e. the location of the subject and the object.

Using such an ontology, complex reality is broken down into its simplest forms which are also broken down if possible. Complex structures are then reconstructed by progressing from the simple to the complex - from the part to the whole. Such a view is contrary to the view of Aristotle who suggests that "...the whole is of necessity prior to the part;" (Aristotle - *The Politics* 1253a20).

In terms of systems theory such a commitment to the reductionist method claims that the whole is no more than the sum of its parts. This is what a machine is, and for this reason Descartes coined the great metaphor of the modern age - that the universe as a machine. This notion has since spread from the physical to the biological and the social sciences in the form of the Cartesian reductionist paradigm. It has contributed to the biomedical model and the corresponding allopathic conceptualisation of disease and healing expressed in modern medical science (see Capra 1982; Davies 1991). Molecular biology and a great deal of modern genetics has also developed along these reductionist lines where a living organism is merely a complex machine made up of molecules and organised by special molecules called DNA.

The machine metaphor for living systems has been developed to great lengths in molecular genetics by what Levins and Lewontin (1985) describe as 'vulgar Darwinists' such as Richard Dawkins (1976) who describes living organisms as "robots... controlled body and mind" by the genes as merely a way of making other genes. Such a view would make the study of ecology and evolution as valid only if carried out by means of molecular biology and geology (Levins and Lewontin 1985).

Descartes' work can also be understood in terms of his dualist ontology where body and mind are seen as mutually exclusive. In attempting to define the self he could

conceptualise that the only thing that pointed to his existence was the fact that he was thinking. All other aspects of his existence such as his body were theoretically expendable, and from this he coined the well known phrase "*cognito ergo sum*" (I think therefore I am) (see Wisner 1983 for example). Such a view teaches people to conceptualise of themselves as a mind trapped inside a biological machine thus alienating body from mind.

The work of Isaac Newton (born in 1642) essentially realised Descartes' revolution in science by synthesizing the works of Copernicus, Bacon, Kepler, Descartes and Galileo into a unified theory of science (Oldroyd 1986). Prior to Newton there had been a conflict between the inductive methodology of Bacon and the rational deductive method of Descartes (Capra 1982). But in his *Philosophiæ Naturalis Principia Mathematica* (published in 1687) Newton introduced a mixture of both induction and deduction encompassing experimentation with systematic interpretation and deduction with experimental evidence. This piece of work is regarded by some as the most important single piece of work published in the physical sciences (e.g. see Hawking 1988). Newtonian mechanics formed the basis for modern physics from the realms of astronomy to subatomic particles. It also provides the conceptual basis for classical and neo-classical economics, political philosophy since John Locke (referred to below), many forms of modern science, and some forms of environmental management. The Newtonian paradigm has been the pre-eminent form of science for three centuries, challenged in physics only recently (in the 20th century) with the work of Einstein, Bohr, Heisenberg, Born, Schrodinger, Bohm, and de Broglie among many others, on quantum mechanics.

Newton contributed greatly to the tradition of empiricist ontology where Nature is assumed to be governed by mechanical mathematical laws with mathematics as the language of Nature. His mathematical depiction of Nature through differential calculus supposedly corresponded to reality itself (Gale 1979). Leibniz, who was a contemporary of Newton, also contributed to the development of calculus but differed from Newton in his metaphysical interpretation of the application of calculus. Leibniz rejected Newton's idea of ultimate particles as the building blocks of reality forwarding the alternative view of energy fields as the basis for material existence (Gale 1979). The field concept has, of course, become a central feature of contemporary quantum mechanics under the influence of Einstein, Faraday, de Broglie, Schrodinger for example (Kripps 1987).

The on-going schism in physics that developed during the 20th century is based on different metaphysical interpretations of the anomalies of quantum mechanics and arguments relating to the role of the consciousness of the observer, the Einstein-Podolski-Rosen paradox, and the wave/particle duality (Popper 1982; Krips 1987; Capra 1975, 1982; Zohar 1990; Weber 1986; Zukav 1979; Bohm 1980). Such challenges do not concern particular issues within the standard Newtonian scientific paradigm but relate to fundamental aspects of ontology that call into question the Newtonian paradigm itself. In other words the Newtonian ontology becomes unstuck in contemporary quantum mechanics. Other challenges to the Cartesian and Newtonian ontologies can also be found in a variety of disciplines including systems theory, mathematics, and the biological and social sciences (see Outhwaite 1987; Bhaskar 1978, 1979, 1986; Flood and Ulrich 1990; Field 1980; Levins and Lewontin 1985; Koestler and Smythies 1969 for example).

SOCIAL AND POLITICAL IMPLICATIONS

Developments in the philosophy and methodology of science were inextricably linked with social and political life. The emerging Cartesian/Newtonian scientific paradigm, which comprised the fertile soil from which empiricism later grew also found its way into political and social philosophy, thus influencing the scientific interpretations of social and political reality. It is important to briefly trace the initial construction of modern social and political theory as a breed of Cartesian/Newtonian philosophy, as these developments remain central to the assumptions that legitimate current social and political practices in modern Fiji. Modern applications of Cartesian and Newtonian philosophy arise in Fiji in neo-classical economics and economic development, the structure of the Fiji political economy, and in forms of environmental research and management.

The 17th century thus saw parallel epistemological developments in social and political theory. The work of Thomas Hobbes and John Locke were important contributions to political philosophy (Curtis 1981a) representing an embryonic political and economic branch of the emerging modern scientific age (Wiser 1983). Hobbes (1588-1672) was a contemporary of Galileo and Descartes and at one time worked as a secretary to Francis Bacon. Inspired by Euclidean geometry he attempted to graft it to philosophy and produce a new science of politics. His most important work in relation to this study was *Leviathan* published in 1651 (see Tuck 1989). He pursued a Cartesian notion of atomism in a social context where society is merely the sum of its parts with the individual comprising the natural social unit. He was a mechanical philosopher (Oldroyd 1986) who applied the Cartesian machinery to humanity. For Hobbes society is constructed for the individual. This theme became a fundamental assumption for liberalism that developed into a major intellectual force during the 19th century (e.g. J.S. Mill).

In the works of Hobbes the search for natural laws of human nature become prominent. Whereas the Greeks looked toward the character of the philosopher as the yardstick to understand humanity (e.g. Aristotle *The Politics*), Hobbes looked towards the passions of the solitary 'primitive' individual. People are seen to move towards pleasure and away from pain and the natural human condition is one of competitive struggle. Like Machiavelle, Hobbes sought to influence a particular political order, which in this case was the English monarchy at the time of the English civil war (Seaward 1991). His epistemology subordinates politics to economic life and moral order to the dictates of economic production. In this he set in motion the value of utility over quality for economic goods (Wiser 1983).

John Locke (1632-1704) became involved in the rising English protestant bourgeois movement which was attempting to secure constitutional parliamentary government against an Anglican monarchy (Curtis 1981a; Dunn 1984). Support for the monarchy came largely from the landed nobility, whereas the supporters of parliament were predominantly capitalists (Wiser 1983). Locke's self appointed task was to set the philosophical underpinnings of Newton's scientific work using empiricist techniques in philosophy which became very useful for the rising capitalist economic order. It also represented an early form of scientific naturalism where the methodologies and/or theories of the physical sciences were used for gaining knowledge of and interpreting the social world. In the process Locke (a protestant) broke away from the rationalism

of Descartes and Newton and developed a form of nominalism. This nominalism was not unlike the nominalism of William of Ockham (1285-1347) who criticised the apparent rationalism of Thomas Aquinas (Catholic). Martin Luther was influenced by Ockham, and came to set in motion the Reformation and the birth of protestantism in the early and mid 16th century (Elton 1963; Wiser 1983). Locke's protestant and bourgeois partisanship was a transparent undercurrent to his philosophy.

Locke referred to the human mind as a *tabula rasa*² upon which the senses record their perceptions and in the process prepared the philosophical basis for empiricist psychology used by the utilitarians. This theory of mind was to be used as the philosophical justification for various scientific undertakings of the time including mechanical philosophy and principles of causality. Such a world view held that practically all phenomena (including mental) could be defined in mechanical terms (Oldroyd 1986).

Locke's political thinking was, according to Curtis (1981a), a philosophical generalisation about the virtues of the English revolution of 1688. Locke provided a philosophical counter attack to the absolutism of Hobbes and contributed greatly for the liberalism that was to follow in subsequent centuries. In this regard Locke contributed to the growing popular debate such that private gain naturally contributes to the public good - the notion of enlightened self interest. According to Wiser (1983) Locke's argument was that private appropriation increased the amount of product available for others which is a positive condition. With Locke the value of utility over all other forms of value is given a philosophical boost. Unlimited appropriation supports unlimited productivity, which is said to be the primary source of social improvement. Such a view represented a substantial contribution to the capitalist morality later expanded on by Jeremy Bentham, Edmund Burke, David Ricardo and Adam Smith. Smith's famous term "the invisible hand" refers to the notion of enlightened self interest (see Galbraith 1987). The political expression of Locke's philosophy was an argument for a limited constitutional government (i.e liberalist) that did not limit private gain over public good. Locke's contribution to politics is also significant in the area of the structure of parliamentary government where he splits government into a legislative arm and an executive arm. This structure of government has been used throughout Fiji's European political history although it has since been modified with the new constitution of 1990.

On human nature, Locke's philosophy contributed to the ideas later developed in the French Enlightenment in the mid to late 18th century. Views such as individualism, representative government, property rights and free markets promoted in the Enlightenment became very popular both in European and North American politics. Thomas Jefferson, for example, was influenced by Locke and incorporated his ideas into the Declaration of Independence and the American Constitution (Wiser 1983).

THE ENLIGHTENMENT

Modern scientific thought was championed during the years of the Enlightenment by prominent theorists such as Voltaire, Diderot, and Turgot. The science of Newton and the politics of Locke were popularised in the years leading up to the French Revolution in 1789. Locke's view of human nature as guided by physics was consistent with the

²"*Tabula rasa*" refers to a clean slate.

language of Newton and thereby legitimised in the eyes of Voltaire (Wiser 1983). The notion of enlightened self interest appealed to Voltaire as it justified the control of government as sought by the French revolutionaries. A major contribution to the popularisation of reductionist science was Diderot's Encyclopedia. This work involved the establishment of a new tradition in the scientific world view. Science was placed above the church as a worldly authority although God was still seen as the author of the Cartesian machine.

An important ethic to rise from the French experience was that of universal human 'progress' which, according to Curtis (1981b), became the animating and controlling idea of Western civilisation. Non-western cultures are seen as primitive and in need of civilisation. Such ideas were to become canonised as the illustrious moral cornerstones of European colonialism and the social and cultural conversion of tribal peoples unfortunate enough to become objects of Western cultural evangelism. Condorcet 1743-1794 promoted the ideas of modern historicism (Curtis 1981b) where 'progress' is interpreted as a pre-determined historical trajectory that leads all cultures towards the celebrated end point in human cultural evolution - a condition equivalent to noble French society. Voltaire also viewed history as a trajectory of human intellectual development leading from the barbarian to the civilised. This view was also supported by Turgot (Wiser 1983) who described three stages in human intellectual evolution which proceed in the order given below:-

1. Barbarian
2. Greek philosophy/ Christian theology
3. Modern scientific

The third stage is supposed to be one of renewed equality through the workings of enlightened self interest (Adam Smith's invisible hand). These views were developed at a time of European colonial expansion and an intensification of the internationalisation of industrial capitalism. During this time Adam Smith was promoting the ideas of an economic nation in his book *The Wealth of Nations* published in 1776. Smith promoted the internationalisation of capitalism from the economic base of a single nation state as part of the development of the industrial revolution (Galbraith 1987; Barber 1967). It was during this time that England colonised Ireland and India with its newly expanding Empire where the lessons of Smith were put into practice. The internationalisation of capitalism and its partnership with colonialism is, of course, a crucial component in the cultural history of Fiji which was officially established as a colonial economy in 1874.

HUME, KANT AND CLASSICAL EMPIRICISM

Science went through a period of transition during the 18th century with the substantial contributions from David Hume (1711-1776) and Immanuel Kant (1724-1804). Significant in the philosophical works of Kant and Hume was their break away from the rationalism of Descartes and Newton which paved the way for classical empiricism. For Kant no real things actually existed apart from our theories or concepts of them - hence Kant's transcendental idealism (Bhaskar 1975). Hume on the other hand put forward the notion that the mind cannot know cause or effect, only their empirical manifestations. Because we cannot know cause or effect we cannot know causal laws, but we can find evidence for them in empirical research. This, according to Hume, is both necessary and sufficient for scientific knowledge to be possible (Outhwaite 1987).

Whereas rationalism claimed to know reality through reason, Hume claimed that even if natural laws did exist they cannot necessarily be known. This is due to Hume's 'problem of induction'. According to Hume induction is not proof, and induction is limited to what the human senses are capable of perceiving. Hume states that: [T]here can be no *demonstrative* arguments to prove, *that those instances, of which we have had no experience, resemble those, of which we have had experience* (his emphasis, cited in Oldroyd 1986:114).

Inductive reasoning suggests that past experiences can be accurately extrapolated to future predictions. But inductive arguments cannot be turned into deduction. For this reason there will always be a division between *a priori* and *a posteriori* knowledge. Notwithstanding the problem of induction, empirical science from the time of Bacon until the present has relied very heavily on inductive reasoning as a basis for knowledge and explanation. In response to Hume's criticism of empiricism vis-a-vis induction people such as Kant, Mill, and Herschel worked to develop and strengthen the logical-empiricist scientific tradition (Oldroyd 1986).

According to Kant the use of Cartesian rationalism did not succeed in increasing the sum of human knowledge (Curtis 1981b). As mentioned above Hume had already stated that the problem of induction prevented humanity from knowing causes which suggested that science was not firmly grounded in a hole-proof ontology. Kant disagreed with this and submitted that the rationalists had failed due to their attempts in building *a priori* knowledge without statements of empirical fact. In this sense metaphysics without induction was not contributing to knowledge. Kant wanted to demonstrate that rationalists could prove statements that were in total contradiction to each other. Kurt Godel's incompleteness theorem in mathematics has since shown this in the 20th century in arithmetic (Chaitin 1991). In this sense deductive proof could work to prove and disprove the same statement and for this reason Kant believed that *a priori* deduction alone cannot be used as a means of *increasing* knowledge. In short Kant adds weight to the empiricist argument and to the notion that every event has a cause. This view was also held by Leibniz (1646-1716) who argued that everything has a ground - a reason (see Caputo 1978). Kant raised an argument concerning perception that differed from his predecessors. Whereas Newton had conceived of an absolute space and time, Kant saw space and time as functions of perceivers where they are buried in the human psyche. According to Kant the fact that humans experience a three dimensional Euclidean spatial world is a feature of human experience, not of reality itself. This is not inconsistent with the views of Capra (1982) and Bohm (1980) where reality as we perceive it is a three dimensional projection of a multiple dimensional reality. Kant's moral philosophy was one of his major contributions and established a basis for moral worth on inner reasoning. Kant's metaphysics of morals is discussed in chapter 7.

LIBERALISM

Liberalism and utilitarianism were emerging philosophies that were used in England to protect the privileges of the commercial classes in a rapidly growing economy during the industrial revolution (see Bottomore and Rubel 1961; Marx 1967). The theoretical neutrality of utilitarianism served to foster the partisan interests of the business community (Wiser 1983). The theory to support such a practice was developed by Jeremy Bentham.

Bentham believed that public good could only be achieved politically if it coincided with the private interests of politicians. He advocated regular elections in representative government, free press and official information and thereby led the process of reform in English parliament where political power was gradually transferred away from the landed nobility towards the representatives of the rising commercial class. Bentham's conception of science was one of naturalism as he believed that the methods of the physical sciences were appropriate for use in understanding social reality, although he suggested that the social sciences needed the precision of physics to become valid. He used the reductionist methodology in the political sciences where the complex is reduced to the simple. Politics is explained in terms of the individual and the individual explained in terms of their primitive passions (Wiser 1983; Mill 1963). In this he continues in the tradition of Hobbes and Locke.

Bentham wished to solve what he called conceptual social fictions, which in his view included justice, power, rights, and community. According to Bentham, "Community is a fictitious *body*, comprised of the individual persons who are considered as constituting as it were its *members*. The interests of the community then is what? - The sum of the interests of the several members who compose it." (Bentham 1789, cited in Wiser 1983:296). John Stewart Mill (1806-1873) continued in the utilitarian line but sought to reform Bentham's style of liberalism into a more humanitarian form. Mill's major works include *Utilitarianism* (1863) *On Liberty* (1859) *A System of Logic* (1843) and *Considerations on Representative Government* (1860) (see Wiser 1983; Curtis 1981b; Mill 1963). His writings did much to modify utilitarian ethics along classical empiricist lines (see chapter 7). This philosophical view begins with the observation of constant conjunctions between events. On this Outhwaite (1987:21) quotes Mill from *A System of Logic*:-

We have no knowledge of anything but phenomena; and our knowledge of phenomena is relative not absolute. We know not the essence, nor the real mode of production, of any fact, but only its relations to other facts in the way of succession or similitude. These relations are constant; that is, always the same in the same circumstances. The constant resemblances which link phenomena together, and the constant sequences which unite them as antecedent and consequent, are termed their laws. The laws of phenomena are all we know respecting them. Their essential nature, and their ultimate causes, either efficient or final, are unknown and inscrutable to us.

For Mill the purpose of all science (both natural and social) is to establish the causal laws for each observed event. The emerging rational political order was informed by modern empirical science of this form. J. S. Mill was a contemporary of Auguste Comte who was the first to use the term 'positivist' in relation to scientific analysis.

EMPIRICISM AND CAPITALISM

The influence of empiricist science extended well beyond the laboratory. By the beginning of the 19th century Cartesian reductionist science and its empiricist offspring were well established in Europe. Reductionist science had made significant inroads in the social, physical, and political spheres, present day legacies of which can be found, of course, in the political economy of modern Fiji. Capitalism was expanding having benefitted greatly from this science with its political reductionism, *laissez faire*

liberalism, ideas on human nature and universal progress, technology and the industrial revolution. The consolidation of the nation state paved the way for the internationalisation of capitalism. However the roots of this movement run far deeper in European cultural heritage.

The fragmentation of the European Holy Roman Empire that followed in the wake of the Reformation in the 16th century³ provided the political environment for a number of major developments that were to contribute greatly to the rising capitalist order. One was the rise of the nation state, another was the replacement of the monarchies with parliamentary democracy, a third was the Protestant work ethic and individualism.

The emergence of reductionist science from the ashes of medieval life was paralleled by the rise of capitalist economic theory partly because reductionism served to substantiate this style of political economy. Because of this, theoretical advances in capitalism also represented advances in the development of science. Many scientific philosophers were also political commentators and social theorists. This became particularly noticeable in the period beginning in the late 18th century where western monarchies were being replaced by various forms of parliamentary democracy. Francis Bacon had a seat in the English House of Commons and later became the Lord Chancellor of the Realm. Thomas Hobbes supported the failing English Monarchy, John Locke was a parliamentary revolutionary. Parliamentary democracy was a political manifestation of the rise of the capitalist class who, dissatisfied with monarchies, sought political power and representation for their commercial interests under the banner of liberal utilitarianism.

The monarchies, as a legacy of feudal medieval Europe, were threatened by the rise of the capitalist class as support for the crown lay in the landed aristocracy. Their claim to moral authority tended to rest with their allegiance to the Papacy (or the Anglican Church in the case of England) whereby the church as the earthly representative of God claimed to be the only legitimate holder of the key to truth. The rise of science thereby encompassed a direct challenge to the existing political-economic order of the monarchies and the church. Science therefore facilitated the rise of capitalism as the emerging political-economic order by stealing worldly authority from the church which supported the monarchies and vice versa.

With the French and American revolutions of the late 18th centuries came the dawning of a new era which witnessed the amalgamation of liberal democracy, science, and capitalism. It was in this period that colonialism began to take on a new flavour. With the influence of monarchic polities pushed aside together with the rise of the nation state colonial expansion of the European economic powers shifted into a higher gear. One the main reasons for this stems from the social character and internal contradictions of

³The 16th century is not a long time ago in terms of forest or landscape ecology. At the time of the Reformation many Fiji kauri trees currently being logged on Vanua Levu would have been saplings or mature trees. It is important to remember that the time scales involved in cultural ecology must reflect the dynamic functioning of the ecosystems concerned. The cultural influences in Fiji to be discussed in chapter refer to changes that have taken place over the last 3,00 years. For this reason discussing events in the cultural history of resource use in Fiji such as the rise of a major economic system is not merely a trivial sideline.

capitalism itself.

Excess capital generated through monopoly conditions needs to be re-invested. If it is invested in the domestic market production will increase and prices will fall, followed by a fall in profits. A company can avoid this by investing the excess capital in a foreign market so that domestic prices remain high. This provides a substantial motivation for the securing of foreign markets and foreign production as doing so will allow domestic production to continue at high prices whilst exporting the inherent contradictions of capitalism to other countries. This transforms the class character of capitalism into an international class system where rich countries exploit the labour and resources of poor countries (see Anell and Nygren 1980; Mandel 1983; Lenin 1978 for example).

Thus the inherent unsustainability of capitalist production and its external effects are hidden from the general population of the stronger capitalist countries. This provides an ideal political environment for a continuation of unsustainable production as the social checks and balances have been exported. At the same time the poverty in the exploited countries is portrayed in the rich countries as reflecting the primitive nature of human society in these so called uncivilised and backward parts of the world. Racist doctrines such as social Darwinism thus served 19th and 20th century international capitalism very well as part of the grand equation of imperial expansion (see Anell and Nygren 1980). The missionary movement was also captured by the capitalist colonial regime. For a start it had the appearance of a benevolent attempt to civilise the unfortunate heathen savages of the colonies. However, for the successful expansion of an economy into a country like Fiji the indigenous population (which are to help sustain the government bureaucracy through the payment of taxes) needed to be socially, and economically transformed, so that they would take up wage labour on colonial plantations. This was particularly true for English colonialism (such as Fiji) where colonial policy demanded that the colonial government was largely self sustaining.

A further economic spin-off provided by colonialism was that the domestic economies of Europe could grow from the absorption of cheap imports from the colonies and the standard of living in general was seen to increase (Anell and Nygren 1980). This improved the lot of domestic workers and so reduces antagonisms between the working class and the capitalist class in the metropolitan core. A further advantage of this form of international capitalism was that it catalysed nationalistic tendencies among the workers of the metropolitan countries. Workers in one country began to compete with workers in other countries for a place in international production. Thus any likelihood of international worker solidarity was undermined. This served to protect a rapidly growing unsustainable economic system riddled with social injustices.

The relationship between science, politics and economics did not end with colonialism as they all developed further into more sophisticated forms, particularly since the beginning of the 19th century. One such development which served all three well was the movement from classical empiricism to positivism. This not only helped to set the scientific context for capitalism and its supporters, but it also became the basis for socialist movements as well. One of the projects of Karl Marx (1818-1883), for example, was to promote scientific as opposed to utopian socialism (see Engels 1947). Influential in Marx's early thinking was the works of Saint-Simon (1760-1825), whose secretary for a time was Auguste Comte (1798-1857). Comte was an influential figure

in empiricist social science with his conception of 'positivist' science although Marx rejected Comte's conception of society.

This appendix has provided a genealogy of the modern status quo resident in Fiji. It serves to demonstrate that the current condition of the modern world view, modern industrial economic systems, and modern political structures are not the inevitable product of universal laws of human nature. Instead they are the result of a long and drawn out process of cultural transformation influenced greatly by political, social, religious, and ideological factors. It helps to place modern Fiji in an historical context where the cultural influences of Europe can be seen. This appendix also serves as a prelude to the discussion of positivist science undertaken in chapter 5.

APPENDIX 2 - TRANSCENDENTAL REALISM

In developing and defending a methodology for studying the ecology of culture in relation to the question of ecological sustainability I have sought to establish a coherent theoretical basis for analysis. What I present here is a theory of science which is capable of being employed as a form of naturalism which studies social reality as an ecological phenomenon. Unlike positivism, this theoretical framework is grounded in the notion of intersubjectivity. It is also careful to accept the limitations of knowledge of any form, but realises that evidence for aspects of reality lying beyond the reach of sense perception and language can be sustained. Furthermore the source of coherence for such aspects of reality beyond the reach of human sensibilities may also lie in that domain and hence be illogical.

Kant established a bifurcation of ontology separating reality into two distinct domains. One is the domain of the noumena, the other the domain of the phenomena. The former (according to Kant) lies beyond sense perception and includes an objective realm of the 'thing in itself'. The realm of phenomena includes that which is accessible to us in sense awareness. I believe that the Kantian division is useful but I do not sustain the view that the noumenal real is in any way objective. I agree that such an inaccessible domain does exist but I see the division between the two as merely the result of human limitations. In other words, I do not regard them as two separate worlds. Instead it is one reality in which a small sub-set of that reality includes a. the domain of human sense awareness (i.e. potentially or actually empirical), and b. that within the reach of language (the linguistic world). An example of a. would be the sensation of pain. An example of b. would be the linguistic concept of 'up'. Pain is a sense perception and hence accessible to humans. The concept 'up' is a linguistic norm and has meaning only within language. There is no such ontological condition of 'upness' outside the linguistic domain (in this case English). What we call 'up' in the English language might be defined as 'away from the centre of the earth' in an ontological sense, but the notion 'up' is a relative entity. Two English speaking astronauts might agree that 'up' means towards the bow of the craft. It is relative, not absolute.

This notion of a domain that is inaccessible to either sense awareness or the reach of language lends itself to the concept of a transcendental condition. The theory of science as developed by Bhaskar is 'transcendental realism'. Realism broadly holds the view that there are real 'things out' there as opposed to reality being a projection of the mind as is the case with idealism. Some forms of realism sustain a 'correspondence theory of truth' (see Leplin 1984). Such a view suggests that a statement is true if it corresponds with how Nature is really is. This theory of truth makes one major assumption in relation to ontology - that the ontological condition of an event is self evident.

I do not support a correspondence theory of truth for this reason, simply because I do not believe that ontology is quite that simple. My interest lies primarily in ontology (theories about what reality is like), as opposed to epistemology (how we organise our thoughts and theories about that reality). The question under scrutiny is the meaning of ecological sustainability. I do not simply wish to spend my time organising my thoughts on this subject, I instead seek to uncover ontological meaning of an issue (ecological sustainability) which I believe has been obscured by the very nature of our Western

rationality.

Although I do not sustain a correspondence theory of truth I am a realist in the sense that I believe that there are real things out there, but unlike Kant I do not believe that these 'things' are in any way objective in the sense of an objective 'thing in itself'. This perspective is explained through the course of chapters 7, and 8. The pages to follow consist of an account of a theory of science explained in relation to debates in the philosophy of science.

A META-THEORETICAL BASIS

Debates in the philosophy of science have tended to focus on the epistemological basis of the natural sciences on one hand, and the intrusion of the methodologies of the natural sciences into the social sciences on the other. Within the natural sciences, as they developed over the last few centuries, a number of different schools of thought have arisen. These include the broad camps of rationalism (Descartes and Newton), classical empiricism (Hume), transcendental idealism (Kant), and logical positivism (Popper). Within the social sciences there is - positivism (Comte and later Durkheim), dialectical materialism (Marx), hermeneutics (Weber and later Gadamer), critical theory (Habermas), and postmodernism (Foucault, Lyotard). Some of these traditions claim to be universal in their application in both the social and physical worlds. Notable examples include positivism (as suggested by the Vienna Circle and its more recent disciples), and dialectical materialism (as articulated by Levins and Lewontin).

In the current study of culture in Fiji the relationship between culture and landscape is of central importance. For this reason both social and physical realities are under investigation simultaneously, and as such a unifying methodology is sought where the realms of the social and the ecological are able to be studied as a single domain.

An attempt will not be made to merely reduce social reality to biological relations which is a mistake of functionalism (e.g. Durkheim), or ignoring ecological reality in the wake of an over-emphasis on the importance of social relations as Marx did (Catton 1989). The outcome will be a meta-theory that reveals and reinforces the dialectical relationship between the spheres of the social and that of the ecological via culture. One way of achieving this is to retreat a step further from the theoretical canvas and head straight for ontology - a theory of reality (not merely a theory of knowledge).

Many theories of science focus on how to legitimate this or that form of knowledge system. The approach presented here asks instead "what forms of knowledge are possible". This is undertaken by maintaining a central focus on ontology (theories about reality).

EMPIRICAL OR TRANSCENDENTAL REALITY

The word 'empirical' refers to what is experienced or experienceable by the human senses. 'Transcendental' refers to a domain that is partly accessible to the human senses but which also exists beyond the capacity of the human senses to access it. The word 'transcendental' should not be confused with the term 'transcendent' which refers to a domain that is wholly inaccessible to human sense perception. The practice of metaphysics asks questions such as "what must the world be like in spite of the

existence of human thought or experience?". And "is reality more than what we can perceive?" Empirical science does not employ such metaphysical questions and asks that truth only be discernable from what can be experienced. But such a practice of truth judgement necessarily requires a reality which consists only of that which is accessible to the human senses. The possibility of unexperienced or unexperienceable aspects of reality (or experienceable outside logic or reason) are either ruled out of court or said to be of no relevance or significance to the authentication of truth. This view of reality is necessarily anthropocentric and confident that nothing more than what is manifest to human sensory apparatus can exist. Such is the case in an empiricist ontology.

A transcendental ontology does not deny the value of empirical knowledge, but does deny that empirical knowledge is necessarily universal. Here aspects of reality could be unexperienceable. This does not claim that unexperienceable reality can be a basis for knowledge but it does point to the limits of empirical knowledge about reality and indeed the limits of knowledge itself and the need to accept mystery. In this fashion empirically testable claims about reality *can* be correct but are not *necessarily* capable of disclosing the whole picture. To make sense of this point it will be useful to discuss the difference between ontology and epistemology.

Ontology is a theory of what reality is like, whilst epistemology is a theory of how we might come to have knowledge about that reality (see Johansson 1989). Another way to visualise this is to regard epistemology as a theory concerning the organisation of maps, and ontology as theories concerning what the landscape is really like that makes map drawing possible and sensible (Bhaskar 1975). It must be made clear that the map is only a map, and can be no more than a map. Knowledge is not the landscape itself. In this sense knowledge can be seen as a form of cartography. But we must ask the question - "can we know all of reality or is knowledge necessarily limited?" In other words, is reality equal to or greater than what is accessible to human sense perception and/or language? As Outhwaite (1987) has pointed out:

"No serious account of knowledge can begin without the assumption that 'to be' is more than 'to be perceived'. And no theory of science is conceivable without the assumption that what we are pleased to call laws of nature operated in the same way as they do now before humans evolved and *a fortiori* before they began to do science" (ibid:19).

In other words is 'being' really the same as 'knowledge of being' or is it something more? If 'being' is reducible to 'knowledge of being' or perception as is the case with empiricism, then there is no world outside knowledge or perception of the world. This means that either the rainbow only exists if you are there to see it (idealism), or the rainbow only exists if humans are capable of perceiving it (logical empiricism).

The ontological problem of being vs knowledge of being points towards one of the most significant debates in philosophy (Johansson 1989; Bhaskar 1975). The interpretation of this question also divides philosophers of science into two broad camps. On the one hand there are those who claim that being is the same as knowledge of being (the map is the territory), and on the other there are those who admit that 'to be' is more than 'to be perceived' (maps describe the territory).

Throughout chapter 5 a number of different schools of thought in the philosophy of science have been mentioned. We have seen idealism, realism, empiricism, positivism, materialism, rationalism, and relativism for example. What makes the description or definition of these different schools difficult is the fact that many of them overlap or exist as combinations of each other. Thus we get transcendental idealism, logical positivism, empirical realism, materialist realism, dialectical materialism, transcendental realism, relativist empiricism for example.

Differences between a variety of theories of science are described below where ontologies are separated from epistemologies¹.

1. Ontologies (there are effectively 2 broad ontological camps):-

- A. Idealism - there is no territory - only maps
e.g. Kantian transcendental idealism, Hegelian idealism
- B. Realism - there is a territory and we construct maps
Empirical realism (including logical positivism)
Materialism (including Marxian dialectical materialism)
Transcendental realism

2. Epistemologies (there are basically 2 broad camps):-

- A. Rationalism (Descartes, Newton) - the map is the territory
Nominalism
- B. Empiricism (Hume) - the map is not the territory

As mentioned earlier most theories of science have developed as *epistemologies* with ontological assumptions rather than *ontologies* with epistemological possibilities. This adds to the confusion as the conflation of ontology with epistemology ('being' as reduced to 'knowledge of being') has served to obscure the picture. Bhaskar (1975) calls this the epistemic fallacy.

Ontological idealism sustains the idea that reality is merely an extension of the human mind or thought. Here the objects of science are theories and models, and that there are only theories or models, no actual things, laws or events that are existentially independent from human thought. There are only maps.

Ontological realism suggests that there are real things 'out there' that science finds, and which exist independently of human thought processes. However there are some major differences within the realist camp which can be divided into two main branches. On the one hand there are the anthroporealists which claim that things are only real if they are perceived or perceivable by the human senses. For anthroporealists there is a territory which is separate from the map, and the territory is totally accessible to the human senses. The other group include the transcendental realists which acknowledge the possibility of things existing independently of human knowledge and independently of

¹Keith Morrison (pers. comm.) helped to clarify this taxonomy - see Morrison (1994).

human sense perception i.e. things do not need to be perceived or be perceivable in order to exist (Bhaskar 1975). Under this view there is a territory, and humans construct maps to understand it, but the territory is not completely accessible to human perception or cognition.

Rationalism, as an epistemology, sustains the view that ideas perceive reality directly as reality is rational. Here authentic knowledge can theoretically be gained entirely through *a priori* reasoning due to the rational nature of reality and the assertion that God (a rational being) created both reality and the human mind whereby reason allows us to reveal God's creation in the world and ourselves (see Capra 1982). Here the territory is the map.

Empiricism as an epistemology acknowledges that experiences perceive projections of reality, not necessarily reality itself. But the empiricist camp is sharply divided depending on the ontology used. On the one hand there are those that mould an empiricist ontology with an empiricist epistemology (e.g. positivism) where reality is, in totality, perceived or perceivable and that an epistemology based on that experience is merely an epiphenomenon of reality. Here the map is part of the territory. A refinement of this line of thought is held by logical positivism where theories are only valid if they are empirically logical and able to be reduced to mathematical equations. This group also sustain an implicit commitment to epistemic ethnocentricity. Here objective knowledge is possible in spite of ones cultural background provided positivist scientific methodologies are used. Rationality is seen as universal and not culturally specific. Here there is only one valid map - that of modern positivist science.

A second broad empiricist group includes those who sustain a relativist empiricist epistemology where, knowledge is seen as a map, but not the territory. This view does not commit the mistake of epistemic ethnocentricity and sees truth as culturally determined. A transcendental realist ontology and a relativist empiricist epistemology is the philosophical formula employed and defended in this research.

If a transcendental realist ontology is used with a relativist empiricist epistemology then, although truth and reason are culturally determined and hence only internally valid within that culture, different cultures can see and name the same manifestations of reality in their own subjective epistemologies. "One tree" and "*e dua na kau*²" can refer to the same manifestation of reality in the same landscape from two rationally different yet internally rational cultures. Under this view different cultures can construct their own maps of the same territory, according to their own standards of rationality. These maps can be accurate and authentic even though they are unintelligible or irrational to other cultures. This is because they are looking at the same reality through their own subjective, culturally specific viewfinder.

For example, consider the ontological reality of the landscape of part of Northern Queensland, Australia. One culture constructs a map of this territory - a modern scientific topographic map. The map is constructed and recreated on paper or computer. This map is accurate (i.e. corresponds to the territory in a way that is consistent with the calibration techniques employed) and serves a cultural purpose of authentically depicting

²"e dua na kau" is Fijian (Bauan dialect) for "one tree".

the relative position of landmarks such as rivers and mountains. Another culture also constructs a map of the same territory - an Aboriginal dreaming or songline. This map is constructed and recreated orally, but still accurately describes the territory for a different cultural purpose of navigation and the maintenance of a spiritual relationship with the landscape. Both maps are very different from each other and one culture can *prima facie* make no sense out of the map constructed by the other culture without understanding the meaning behind the respective symbolisms and the cultural purpose of the map.

At this point some would argue that such a view plunges into nihilism where there is no meaning to anything and no solid foundation for any knowledge. If truth is only relative and only culturally determined there would be no possibility of common truths held between different cultures except by pure accident. However, such nihilistic tendencies can be avoided provided the notion of truth is adequately defined and if ontology and epistemology are maintained as separate realms. Lukes (1987) for example, has already shown that cross-cultural communication is common and indicates the existence of truths that are not culturally exclusive.

TRANSCENDENTAL REALISM

Transcendental realism is a meta-theory of science that has been developed in recent years by Roy Bhaskar (1975; 1979; 1986). This meta-theory has been applied to the natural sciences and explored as a form of naturalism³. Its application to the social sciences has been explored by Outhwaite (1987), and its compatibility with postmodern thought has been investigated by Woodiwiss (1990).

Transcendental realism defended here is an ontology with epistemological possibilities. It refers to a reality that exists independently of human knowledge and culture even when the reality that is under investigation is within a culture. It is appropriate for the practice of a form science that is epistemologically cautious and ontologically robust. Because it is an ontology it explicitly employs metaphysics in the practice of science. In this way metaphysics does not operate apart from the various sciences but considers precisely that world from the view point of what can be said about it by *a priori* argument. An example of an *a priori* argument of central importance to science is: science finds things empirically (through experience via the senses) which means that there must be a world which exists independently of science for it to find.

This formula is different from other forms of realism in a number of important ways. According to Bhaskar (1975) empirical realism requires naturally occurring closure of systems, a mechanistic conception of action and denies science as a social activity. Furthermore, Bhaskar argues that to reduce knowledge to the accumulation of empirical 'facts' commensurate with sense experience, and to view the sense experience as the objective basis of knowledge which literally defines the world, results in and is dependant on the development of an ontology of atomistic events.

³'Naturalism' here refers to a methodology or theory of science that can be used for understanding both the physical, non-human world (natural science) and the social world (social science).

Considering the differences between ontology and epistemology Bhaskar suggests that there are at least two dimensions of science. The transitive and the intransitive. The *intransitive* dimension comprises the objects of our knowledge (a philosophical ontology) which *exist independently* of that knowledge (contra idealism) or independently of human experiences (contra empirical realism). If this can be established then there must be a second dimension - a culturally determined relative *transitive* dimension where changing knowledge of unchanging reality is possible. Oxygen used to be known as phlogiston in the transitive dimension, but the discovery of oxygen as an advance on the idea of phlogiston did not change the molecular structure of the element. It is merely a change in the transitive dimension of changing knowledge of the world, not of reality. Under this view, knowledge consists of the construction of maps that attempt to explain the territory but are not the territory. Under transcendental realism, knowledge can be seen as a form of cartography where the map can be accurate but is not necessarily accurate nor complete. The transitive objects of science are *socially active* components of knowledge. Books are examples of transitive objects of science, but what the books are about (i.e. the reality they attempt to explain or describe) may be intransitive. Conceptual models, theories, mathematics and other languages are examples of transitive objects of science.

In addition to these two dimensions of science Bhaskar (1975, 1986) has suggested a stratification of reality. These include the domains of the real, the actual, and the empirical. The domain of the real refers to an intransitive dimension where generative mechanisms (tendencies) may exist but do not necessarily become manifest at the next level - the actual. Two opposing forces may cancel each other out and effectively make nothing happen, such as when gravity pulls down on a book, but the opposing force of the structure of the shelf prevents for book from falling. No *event* happens in spite of the existence of real generative mechanisms that interact in the real world. The next level is the actual, where *events* do occur as a result of generative mechanisms, but these *events* are not necessarily accessible to human sensory perception or cognition. This refers to transcendental possibilities that lie beyond our ability to perceive them empirically. The third domain is the empirical where events are *experienced* or experienceable.

EXPERIMENTAL CLOSURE

The notion of causal law is partially discarded in a transcendental realist account where what are deemed laws in empiricism or empirical realism are regarded as tendencies only. This stems from epistemological difficulties with the identification of these 'laws' and the idea that laws may change, as we have no grounds for claiming that Nature is fixed. A caterpillar living on a kauri tree may have reason to believe that the tree is immortal - a legitimate belief grounded in experience and communication with earlier generations via oral tradition or 'books'. However, there are no metaphysical grounds for ruling out the possibility of radical change in the normal state of affairs vis-a-vis the life of the tree given the limited capabilities of the caterpillars in experiencing the sum total of their reality. To claim that the tree could die would be absurd and ruled out if the caterpillar society authenticated knowledge via empirical methods only. However, a transcendental realist caterpillar society would have no choice but to grant it as possible that the tree could die and thus revise their 'law' viz. "kauri trees never die" to a tendency such that "kauri trees live a long time". The latter epistemology is more cautious and recognises the limitations of empirical techniques of gaining knowledge.

The identification of tendencies and possibilities does not stop a society from practising science but it does assert that the results of research are necessarily provisional.

There are also philosophical problems in the empirical methods of law identification which call into question their ability to be regarded as fixed laws. This comes from the problems of experimental closure. Bhaskar (1975, 1986) makes it clear that causal laws (tendencies) do not exist in the transitive dimension. They are intransitive. This means that in an experiment a scientist may observe the constant conjunction of events but these are only the empirical manifestations of laws (tendencies) not the laws themselves. Any experiment can go wrong but this does not change the law concerned.

According to Bhaskar (1986:28):-

Experimentation is deliberate intervention in the course of nature. It is *practically necessary* to the extent that the experimentally designed, produced and controlled sequence would not have occurred without it. It is *epistemologically significant* to the extent that the causal law it enables us to identify and test holds outside and independently of the experiment. Conversely, reducing laws to constant conjunctions...commits the empiricist either to the absurdity that scientists actually produce, i.e. create the laws of nature (...voluntaristic super-idealism) or to the self-immolation of denying either our causal agency or its significance in science (...reductionistic and/or deterministic hyper-rationalism).

Bhaskar suggests that empirical realism relies on ignoring this ontological distinction. He states "[causal] laws cannot be *both empirical and universal*" because only the constant conjunctions of events within experimental closure are empirical, whereas the causal laws (or tendencies) that generate the events are not. Also, once the prevalence of open systems (in Nature) is acknowledged the empiricist is forced to insert a *ceteris paribus*⁴ clause in each law defined within experimental closure.

Also, experiments can only be valid and apply to the world outside experimental closure if reality exists in an atomistic state where bits are autonomous and come together to form the whole in a mechanical fashion. Experimental science that searches for causal laws within experimentally closed systems commits itself to ontological atomism, assuming that the behaviour of the object of an experiment will be the same when artificially isolated from all circumambient conditions as would be the case outside experimental closure. Bhaskar (1986) calls this the assumption of transfactual identity. In addition to this are what he calls the assumptions of essential independence (parts are autonomous), actual separability (that the object of investigation can be separated undamaged from its extra-experimental surroundings), physical reproducibility (that what happens in extra-experimental reality actually happens within the experiment), spatio-temporal generality (the problem of induction), and plasticity of context to human manipulation and control.

In summary of experimental reasoning Bhaskar (1986) suggests that where x = a causal law (tendency) and y = the constant conjunction of events, x cannot be reduced to, defined or analyzed in terms of y . This is because x (but not y) exists in open systems;

⁴All other things being equal.

and y (but not x) is praxis dependant (i.e. dependant on experimentation) and exists in experimentally constructed closed systems. This he calls the 'ontological gap' in experimentation between causal laws and empirical events which the empiricist cannot bridge, because the existence of the gap comprises the condition of the existence of the activities under examination. Experimentally verifiable scientific knowledge and the implicit atomistic ontology it requires in order to be sensible is the achilles heal of the empiricist tradition.

THE PROBLEM OF INDUCTION

The practice of science as an empirical doctrine has been confounded with difficulties in attempts to solve the problem of induction as first articulated by Hume (see appendix 1). Some theorists according to Bhaskar (1975) claim to have 'solved' the problem by saying that science is deductive in character (e.g. Popper). Others have attempted to strengthen inductive arguments (e.g. J. S. Mill). Inductive conclusions have been reduced to probability judgements (e.g. Carnap), justified pragmatically or attempts made to vindicate it in practice. Bhaskar (1975) believes that none of these approaches have succeeded and that the underlying questions remain unsolved viz. 'can we assume that the course of Nature will not change?' and 'can we believe that a statement or theory is true?'

The problem of induction continues to arise if we seek to accept evidence as a fixed law. But if we do not claim to be finding fixed laws there is no need for inductive argument, and similarly if we are not attempting to convert explanations into predictions then induction is also unnecessary. Induction implies the desire to employ a certain degree of certainty in the practice of science. However uncertainty is endemic in an empirical discipline that is attempting to understand a reality that can and does transcend the empirical realm.

In the light of this, Bhaskar (1975) asserts that induction is only justified when:-

- A. A model of a mechanism exists which allows us to say 'when Eb then Ea'.
- and*
- B. When we have knowledge of the mechanism that generates Eb from Ea.

In other words, induction is only justified when the generalisation concerned is a law of Nature. But we cannot know if it is a law or not because laws are not empirical - only their empirical manifestations are (Bhaskar 1975). This is because in an experiment we must create a closed system in order to concoct a *ceteris paribus* situation which constitutes the necessary conditions for the observation of the constant conjunction of specific events. This allows scientists to observe the empirical manifestation of laws (tendencies) - not the laws themselves because the laws (tendencies, generative mechanisms or Nature of things) exist in the intransitive dimension independently of the existence of humans and their experiments. Furthermore, reality exists in open systems, which means that the definition of laws must necessarily be accompanied with *ceteris paribus* clauses every time, or laws as empirically evidenced in closed experiments are deemed applicable in closed systems only (i.e. cannot necessarily be applied in Nature or outside experimental closure). As mentioned above, an atomistic ontology is necessary in order to make sense of experimentally derived laws. Such an ontology is

the result of philosophic predication - it is a linguistic convention assumed to exist in Nature (see chapter 7).

The problem of the application of generalisations from empirical instances only becomes a problem if we are attempting to know or claim to know more about reality than is humanly possible. If scientists, as humans, accept the limitations of their cognitive and perceptual capacities by acknowledging a transcendental (as opposed to empirical) realism, the problem of induction dissolves. Thus, if science can remain content as a potentially precise *explanatory* (as opposed to predictive) discipline the problem of induction disappears and science can make the 'quantum leap' into an ontologically robust and epistemically cautious form.

Instead of trying to define the practice of science in terms of induction or deduction, transcendental realism employs what Bhaskar calls retroduction (praxis). This involves the process of utilising the transitive dimension to explain the happenings of the intransitive dimension. It can be defined as a dialectical process whereby the object of investigation changes from the phenomenon to the explanation and back again in an ongoing fashion⁵. Retroduction is the building of a conceptual model by utilising ones cognitive resources and controlled by the logic of analogy and metaphor in such a way that if the model were to exist (i.e. if the map were ontologically accurate) it would explain the phenomenon in question. However, more than one explanation will serve to account for the phenomenon concerned (more than one map can be drawn of the same territory). It is for this reason that the explanation itself must be repeatedly called into question and explained - i.e. it is a critical process. The practice of retroduction as a method may involve the following:-

1. The identification of the phenomenon in question;
2. The construction of explanations which are empirically tested which leads to the identification of the generative mechanisms which causes the phenomenon;
3. The generative mechanism, once identified, becomes the object of investigation (even when the generative mechanism is non-experienceable; this will not stop a scientist from collecting empirical evidence that points towards its existence).

This formula is similar to hypothetico-deductivism but employs ongoing retroduction as a dialectical process where the phenomena *and the explanation* are the objects of study.

A transcendental realist formula of science embodies the movement from our knowledge of manifest phenomena to knowledge of the structures that generate them. It differs from empirical realism by not stopping with empirically accessible reality (phenomena) as an object of investigation. This is because there may be empirical evidence (which is not necessarily logical or rational) for a generative mechanism that exists only in the intransitive domain and may be inaccessible to direct empirical inquiry.

⁵This is similar to the praxis of Habermas, and Freire (see chapter 5).

SUMMARY OF TRANSCENDENTAL REALISM

Some of the central themes that characterise transcendental realism as developed by Bhaskar include the following:-

- It is an ontological doctrine with epistemological possibilities.
- It sustains the view that causal laws be regarded as tendencies.
- It regards most of philosophy as over-emphasising epistemology at the expense of ontology.
- It sustains a relativist epistemology.
- There are transitive and intransitive objects of science.
- There is an important distinction between the domains of the real, the actual, and the empirical.
- It agrees with the empiricist movement in science but denies the empirical claim to universality and more specifically it denies an empirical realist ontology.
- Philosophy is a necessary part of the practice of science but is not the final judge of science.
- The conception of explanation involves the postulation of explanatory mechanisms and the attempt to demonstrate their existence through retrodution as opposed to the employment of induction or deduction *per se*.
- It is a form of science that is explanatory not predictive.
- It insists that science is a social activity.
- There is no justification for science as a social activity to hold a privileged position in a society. But science should participate with other groups in a society in the democratic practice of uncovering knowledge through open and critical discourse⁶.

The question must then be asked - 'is it possible for such a meta-theory to be justifiably employed in the human sciences?' We must now explore the possibility of transcendental realism as a meta-theoretical candidate in the practice of social science. Because this theory of science has shown to be possible for the natural sciences, where empirical

⁶This aspect of the social practice of transcendental realism was not made explicit by Bhaskar but was discussed by Outhwaite (1987) and Woodiwis (1990). The form of transcendental realism as developed here is not inconsistent with postmodernism (see Woodiwiss 1990).

methods and epistemic caution are embellished with metaphysics, the use of such a methodology in the social world implies a form of naturalism.

THE POSSIBILITY OF NATURALISM

Bhaskar (1979) believes that the question of whether social reality can be studied in the same way as Nature is the primal problem of the philosophy of the social sciences. Traditionally naturalism claims have come from the natural sciences via positivism which claims to be a unifying methodology of science based on the Humean notion of law. It is primarily in the context of a positivist naturalism that anti-naturalism has developed in the social sciences (ibid.). In this sense many of the arguments against naturalism are really arguments against positivism. The criticism of naturalism from the perspective of the social sciences has shown that *positivist* naturalism cannot explain social reality which is comprised of meaningful objects, where the understanding of meaning is of central importance (Outhwaite 1987) (see chapter 5).

According to Bhaskar (1979) and Outhwaite (1987) the anti-naturalism sentiment arising in the social sciences is the erroneous practice of equating naturalism with a positivist naturalism. Thus the naturalism as portrayed in the social sciences is that same old straw figure which is repeatedly burned at the anti-positivist tribunal. Many social theorists seek to maintain the distinction between the natural and social sciences. But the contrast soon dissolves if the metatheoretical account of the natural sciences mutates into a form that is also diametrically opposed to positivism as is the case with transcendental realism. For example transcendental realism, of the form developed by Bhaskar, sustains the following views:-

- Experimental activity and practical activity involve an analysis of causal laws as expressing the *tendencies* of things not the constant conjunction of events.
- The development of scientific knowledge entails that scientific inferences must be analogical and retroductive, not simply inductive or deductive. This is consistent with the views held by Checkland (1981) where the metaphorical meaning in general systems theory have been mistakenly taken literally in hard systems thinking.

and at the social level;

- The predicates that appear in the explanation of social phenomena will be different from those in the natural sciences.
- The procedures used to establish the predicates will be contingent on and determined by the properties of the object under study. For example, we would not be justified in using a thermometer to measure the height of a tree or class theory to advise someone how to terminate a telephone conversation. In this way epistemologies and their methodologies can differ between different objects of investigation, but they can also be consistent with a unifying ontology that sustains a unity of humanity and the rest of Nature.

- The principles that govern the production of such predicates in the social sciences will remain substantially the same as they are in the natural sciences.

In this way the form of naturalism developed and defended in this thesis does not represent an intrusion of the natural sciences into the social realm. Instead it embodies a reformulation of the principles of both the natural and social sciences in order to establish an account of the social relationships within humanity and between humanity and the rest of Nature. It is this account of science that makes a transcendental cultural ecology possible *as a form of science*, where one can sensibly study the relationship between humanity and the rest of Nature whilst dissolving the humanity /Nature dualism.

GLOSSARY

<i>A priori</i>	Prior to experience. Deductive reasoning, e.g. 'all triangles have three sides'; non-empirical.
<i>A posteriori</i>	After experience; inductive reasoning; empirical.
<i>A fortiori</i>	More importantly; with greater force.
Atomism	View that reality is reducible to indivisible 'bit' - atoms. An ontological position that sustains reductionist epistemologies.
Axiom	Established principle used as a basis for further deduction; underlying philosophy; assumed to be self evident.
Being (upper case 'B')	The ground (basis) of existence.
being (lower case 'b')	A thing which exists as such.
Categorical	Absolute, unconditional. Applies to Kantian ethics and the 'categorical imperative'.
Categorical imperative	An absolute, unconditional 'ought' as a universal, fixed moral instruction.
<i>Ceteris paribus</i>	All other things being equal.
Cognitive	That which is known as truth; understood as knowledge. Cognitive meaning is meaning held within the sphere of knowledge (as opposed to intuition).
Contextualised	Non-universal; specific to context, as in contextualised discourse.
Deduction	Applying general <i>a priori</i> statements to particular instances.
Dialectic	interplay of polar opposites seen as one and the same, i.e. different aspects of the same whole; e.g. yin/yang, male/female. See tragedy.
Empirical	Experience; experienceable by human perception.

Empiricism	The view that sensory experience is the only source of gaining knowledge.
Epistemology	Theory of how we gain knowledge about reality.
Essent	The core of what something is as that something
Essentialism	View that things have a unique essence independent of our classifications. It tends to refer to a naive conception of essence which ignores the complexities of intersubjectivity.
Existential	Pertaining to ones personal existence.
Hermeneutics	A process of coming to understand deeper meanings either from texts or from real social or ecological situations. If you watch a movie once you get a degree of understanding. See the same movie twice and more meaning is revealed. A third time and more still etc. The hermeneutical understanding comes from the overview gained and then the clarity of the particulars improves which in turn helps the clarify the next viewing of the whole and on it goes...
Historicism	Term for a range of views having a common emphasis on the importance of understanding theories, institutions, actions within their historical periods. Sometimes followed by claims that comparisons across periods is impossible.
Holism	View that parts can only be understood in terms of their place within the whole of which they belong to. There are different forms of holism. Totalising forms of holism (e.g. stoic holism) see the whole as greater than the sum of the parts. A non-totalising holism is one where the parts and the whole interpenetrate each other where neither have any prior ontological existence - the whole is in every part.
Idealism	Doctrine that all reality is mental or in the mind, or a view that denies the existence of a fully mind-independent reality.
Ideology	A system of interconnected ideas. Often referred to as false or biased ideas where the system as a whole serves as an instrument to the bias.
Induction	Generalising from particular observations.

Intersubjective	The interaction of two or more subjective agencies.
Intuition	Apprehending information as a form of 'knowing' from outside reason, language or thought as such.
Intuitionism	The view that knowledge of morality can be based on intuition.
<i>Ipsa facto</i>	By that fact; thereby. A fish is <i>ipso facto</i> an animal.
<i>Inter alia</i>	Amongst other things.
Knowledge	That which is comprehended through cognition and linguistic norms. Knowledge is that which applies to the information held linguistically (i.e. within language) and organised according to an established set of rules (e.g. reason). It contrasts with intuition, and sense perception.
Language game	Term coined by Wittgenstein to denote a language and the conventions (rules) it has as a basis for its internal organisation and consistency. A linguistic system that follows its own logical grammar (i.e. its own rules).
<i>Laissez-faire</i>	A term used in economics for non-intervention of government in economic affairs.
Materialism	Form of metaphysical monism which holds that every real thing is material in character.
Mechanism	View that everything can be explained in mechanical terms; view that Nature is a giant machine.
Metaphysics	Philosophy dealing with non-empirical knowledge. Effectively ontology.
Monism	Metaphysical view that there is only one basic category; one basic kind of 'stuff'.
Monolithic	Having a massive uniform structure that does not permit variations on that structure.
Naturalism	Use of a theory or methodology common to the natural sciences and the social sciences.
Nihilism	Absence of meaning - nothingness. Also absence of truth, or moral value.

Nominalism	View that only particulars are real, and that general terms apply to particulars on the basis of their mutual resemblance. For example, there is no such property as 'redness' only red things.
<i>Non sequitur</i>	That which does not follow from what precedes it. If b does not follow a (either logically or existentially) then b is a <i>non sequitur</i> in relation to a.
Normative	Having the force of a norm; following as a convention. Non-descriptive.
Noumena	Things that exist but which are not perceived or perceivable; opposite of phenomena (after Kant).
Object	Passive 'thing' that is acted upon by a subject. A 'thing' is only an absolute object if it is not active as a subject in any way, having no subjectivity, free will, creativity or intrinsic value.
Objective	Objects revealing themselves through no influence by any subject i.e. no relative or contingent perspective - an absolute perspective where reality is expressed totally uninfluenced by subjectivity.
Ontology	Theory of reality.
Perspectivism	View that there are not truths out side particular perspectives (a form of relativism).
Phenomenology	The study of phenomena in relation to the means of perception. Studying the subjectivity of both the object and the subject of study.
Phenomenon	Something seen or perceived to exist; empirically real.
Politico-linguistic	Refers to the interpenetration of politics and linguistics. Linguistics as a mediator in social communication is political and can have differing political characters.
Polemical	Contradictory argument; controversy; point directed against a particular opponent.
Positivism	A broad school of scientific thought closely aligned to empiricism. Holds the idea that positivist (empiricist) knowledge is the only valid form of knowledge, and that positivist science is the only legitimate means of gaining knowledge.

Praxis	An on-going process of action and reflection.
Praxiology	A method of praxis.
<i>Prima facie</i>	On the surface; at first glance.
Privileged discourse	A narrative (such as a theory) that claims to have a perspective on reality that is higher than another (i.e. a privileged view of a situation).
<i>Qua</i>	In the capacity of; as.
Rationalism	Theory of knowledge that the mind or intellect (as opposed to the senses) is the only or main source of knowledge.
Realism	The view that a world exists independently of the mind to which our statements might correspond if such statements were true.
Reductionism	Theory of knowledge (epistemology) which assumes that in order to understand something we must break it down into constituent parts and study the parts. Corresponds to an atomist theory of reality (ontology).
Reflexive	Self reflective in character.
Relativism	View that truth is relative (particularly in relation to epistemological stand points). There are different forms of relativism, some relative at the level of knowledge (allowing for universals beyond knowledge e.g. intuition), and absolute relativism, which argues that there is no possibility of general truths.
self	Conception of identity as an autonomous individual.
Self	Conception of identity in unity with ones physical and social surroundings. Creativity is vested for the greater whole (totalising self identity).
Sself	Conception of identity as a unique (creative) being in unity with the broader Self. Creativity is both localised and vested in the greater whole (non-totalising self identity).
<i>Savoir-faire</i>	Ability to say and do the right thing.
Solipsism	The view that the person proposing the view is the only entity that exists.

Sophism	A misleading argument or proposition.
Stoic	Totalising cosmology that assumes that reason is capable of 'mapping' reality in its totality. Derived from the philosophy of the ancient Greek Stoics.
Stoicism	View that the universe is a rational whole in which all things happen for the best (i.e. good). Deterministic. A 'wise' stoic is someone who has learned to accept what ever happens.
Straw figure	Usually known as 'straw man' - argument against a position that no one holds.
Subject	An active agent that stands in relation to an object or other subjects. Exists in a dualism with object. A subject also refers to an agency that engages in active perceiving (e.g. a scientist).
Subjective	Observation that is influenced by the subject in an observation.
<i>Tabula rasa</i>	Blank slate.
Tautology	Circular argument. Statement that is necessarily true due to its logical form. Generally regarded as devoid of information.
Totalising	A perspective whereby there is a conception of an unified totality (sometimes seen as universal). This can embody forms of holism which sees the whole as greater than the sum of the parts. It is stoic in character.
Tragedy	Refers to a dialectical interplay between opposing forces, sometimes portrayed as such in drama.
Transcendent	Only that aspect of reality that exists beyond human sense perception or experience.
Transcendental	Both empirical and that which lies beyond empirical reality; both empirical and transcendent.