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ROLES AND MEANINGS OF 'LANDSCAPE'

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For MATTHEW

ROLES AND MEANINGS OF 'LANDSCAPE'

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Roles and meanings of 'landscape' are examined within a contemporary issue of resource policy.
An initial classification of meanings of 'landscape' is applied to the analysis of interviews with
fifty eight élite decision-makers and decision-influencers involved with the issue of trees and
plantations in the Canterbury high country. Additional analyses focus upon the metaphorical
structure of 'landscape', symbolic associations of 'landscape', and the functional role of
'landscape'. Patterns of oral usage are then compared with the attitudinal context of use as
represented by the concept of frame of reference. A second phase of analysis extends the scope of
the study to historical documentary sources. 'Landscape' usage is interpreted by its conceptual
role, its role as myth, and its political role. 'Landscape' meaning and use is shown to be plural,
dynamic, and contingent upon circumstances. Some implications for policy formation are noted.

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PREFACE

This thesis presents the results of an academic research programme spanning a number of years. It also expresses the outcome of a period of reflection upon my own identity and role as a landscape architect. My first draft proposal for research adopted an instrumental position concerning the role of 'landscape' in resource management. It shared the prevailing view of the profession of landscape architecture in New Zealand at that time, in believing that the concept of 'landscape' was 'misunderstood' by the majority of other professions and decision makers. I set out to correct this 'misunderstanding', to resolve the problems of communication that I perceived to arise from it, and to place 'landscape' and the profession of landscape architecture in a central role in resource policy formation and management.

Within a year I had shifted my position. My professional interest in, and commitment to, 'landscape' remained, but my readings had led me to believe that the concept of 'landscape' was theoretically and methodologically incompatible with the prevailing philosophy and practice of resource management. I developed an argument that 'landscape' represented a humanist perspective upon land management, in contrast to the technocratic and instrumental character of resource management. I started to develop an historical case study that was intended to explore and demonstrate this conflict.

However, as I became more closely engaged with the theory and methods of social research, and with the usage of 'landscape' in New Zealand, my position shifted again, to that which underlies my thesis in its final form. That is, 'landscape' is a particularly good example of the way that human understanding of the social and biophysical world is dynamic, contingent upon circumstances, socially and politically structured, and thoroughly 'messy' (Mitroff and Blankenship, 1973), even when it is structured by logical methods of investigation.

Attempts by particular professions or disciplines to define social and biophysical reality in a particular way are a necessary characteristic of collective action. At the same time they invariably express to some degree the particular interests of the group involved. The challenge faced by any critically aware practitioner or academic is to recognise the inevitability of this linkage, yet at the same time to maintain a personal commitment to informed and responsible social action.

I also encountered a second fundamental question in carrying out my research, related to the political dimensions of language. That is, the relationship between Maori and European interpretations of 'landscape' or its cognate words, if any. 'Landscape' clearly has European origins. I am not personally conversant with Maori language. I have therefore chosen to limit my investigation to the roles and meanings of 'landscape' within English language public policy, and within the usage of an élite group of decision makers and influencers. This included several representatives of Maori interests, but our conversations were in English, and thus focused upon a Eurocentric framework of concepts and understanding.

CHAPTER ONE: INTRODUCTION AND RESEARCH STRATEGY

The difficulty is to weave a net of words that in its ambiguity is as multitudinous and precise as the reality it tries to catch.

Olsson (1978:14)

A.   INTRODUCTION

'Landscape' means many different things to different people:

*   Landscape is all around us" (Meinig, 1979:3).

   I wouldn't know a landscape if I fell in it![1]

*   "Landscape is the same as beauty, and beauty is a spiritual category" (Soloukhin, 1980:112).

   If you love the landscape - it responds.

*   Landscape is about "the appearance of the whole, and the interrelationships of all things it contains" (Challenger, 1969:41).

   It's all to do with the landscaping bit.

*   Landscape "is that which is in, on or about the land and is concerned with the combination, use and manipulation of land and water relationships.....(Minister) we take it you agree" (Beard, 1977:16).

   What's all this bloody landscape nonsense?

1/   This quotation and those that follow in italics are taken from the interview transcripts of my case study.

*   Landscape is the focus of the profession of landscape architecture, which "can fit anywhere, everywhere and nowhere, and this tends to make it difficult to describe just what we do and also where, when and how we do it". (Aitken, 1982:2).

They are their own worst enemies.... yet what they're on about.... is very right.

This range of interpretations has lead to 'landscape' being described as important, slippery, ambiguous, or just plain difficult (Meinig, 1979; Relph, 1981; Jackson, 1984). The focus of my thesis is an investigation into the meanings and use of the word 'landscape' within a specific resource policy issue. The study also provides insights into the sociology of professional communication and into the way language responds to different social demands placed upon it. The path by which I arrived at this focus is outlined in the Preface to the thesis.

I chose the empirical and theoretical orientation for several reasons. 'Landscape' itself has a rich and complex history (Relph, 1981). One consequence of this is both plurality and ambiguity in meaning.[2] My initial review of usage in literature, statute and resource policy suggested that the diverse interpretations expressed in the opening quotations are typical of more general 'landscape' usage in New Zealand. This creates potential problems, and a research opportunity.

First, from a technical or instrumental perspective, diverse interpretations of words and concepts create a problem in the drafting of statutes and in the formation of resource policy. "While it is easy to list the objectives which people think are important, it is more difficult to determine exactly what some of these mean, and how they can be included in legislation in a meaningful way" (Ministry for the Environment, 1988b:11). Recent administrative and statutory reforms in the New Zealand public sector have sought greater 'transparency' (Boston, 1990). Plural meanings, plurality in meaning, and ambiguity thus become 'barriers' to communication that inhibit effective decision making (Miller, 1984; Bowonder, 1987). A clarification of usage and meaning of resource planning terms such as 'landscape' could contribute to the overall improvement of decision making in the public arena.

2/   I use the term *plural meanings* to describe the way that 'landscape' is given different meanings by different people in different situations. I use the term *plurality in meaning* to describe where 'landscape' is given different meanings within the same situation. By *ambiguity in meaning* I refer to situations where meanings are confused, overlapping, or are unspecified, with the result that any specific use of 'landscape' can legitimately be interpreted in diverse and potentially conflicting ways.

Second, plural and potentially conflicting interpretations of 'landscape' have also been perceived as a problem by some of the professions involved. During the 1970s, members of the landscape architecture profession in particular expressed concern at the way others 'misunderstood' the meaning and context of 'landscape', or 'misused' the word (for example, Gay, 1977). From this perspective, an examination of plural meanings and plurality of 'landscape' is a challenging example of research into the process of professional definition and interprofessional communication.

Third, and in contrast, plurality and ambiguity in language can be seen as an opportunity. Drysek (1982) argued that plural interpretations enable us to ensure that we achieve more complete understanding of complex issues. Some authors go further: 'Authority is not vested in external things, but in the power of defining internal relations. Here the medium is the word, and the process, that of naming' (Olsson, 1978:115). Words and language therefore express social interests, and plurality in meaning of 'landscape' may reflect competing social interpretations. My third reason for the choice of topic is that plurality and ambiguity provide an interesting social phenomenon, and an opportunity to explore the social construction of language and reality. In short, 'landscape' offers a potentially rich topic for social research.

Finally, my personal and professional roles as a geographer, landscape architect and planner add a further dimension to the study. 'Landscape' is an important but frequently unexamined concept within all these disciplines. My exploration of its use and meaning therefore represents a process of personal and professional reflection.

Taken together, my empirical interest in 'landscape', and my theoretical concern with the way professional communication is socially constructed provide the primary focus of the research. There is, however, a second empirical element to my thesis - an examination of attitudes concerning the topic of trees and plantations in the Canterbury high country. The second focus arises because in order to investigate the contemporary meanings and use of 'landscape' I needed a case study in which I could observe its everyday usage. Contemporary concerns about the management of trees and plantations in the Canterbury high country provided me with a focus for in-depth interviews, which I then analysed for 'landscape' usage. The case study topic was therefore a vehicle for my 'landscape' research, but in filling this role it became a second

empirical element of the thesis. The empirical and theoretical elements together provided a rich and stimulating field of research. They also posed a number of challenging questions in the choice of methods. In the next section, I describe the approach I adopted for the study.

B. STRATEGY

1. <u>Description of approach</u>

To recap, my research problem was concerned with the meaning of the word 'landscape' and the way it is used by contemporary decision makers and decision influencers in understanding land use issues. I was particularly concerned with the way different meanings are given to the word by different people. I have therefore been primarily engaged in micro-scale social research into a complex and elusive phenomenon.

I have adopted an iterative model of inquiry, that is, one in which both the theoretical framework and the empirical analysis evolve during the course of the study. It has been an interpretive approach, based initially upon qualitative analysis of in-depth interviews, and then extended to historical documentary sources. The findings are presented in the form of a theoretically informed narrative.

The overall procedure I adopted is similar to that pursued by Manuel Castells in <u>Grassroots and the City</u> (Castells, 1983). However my case study approach owes much to Allison (1969) and Mitroff and Blankenship (1973). Appendix I, Methodological Issues, contains a background discussion of the factors I took into account in choosing this approach.

Castells (1983:339-340) explained his research procedure in the following terms:

1. "We started by asking some fundamental research questions... generated by the social issues arising from the historical experience..."

2.   "We asked these questions at a very general and tentative level, by using concepts and approaches inherited from intellectual traditions adequate to the issues we were trying to understand..."

3.   "We then proceeded to construct a provisional theoretical framework that... was comprehensive enough to stimulate our thinking and our observations along a variety of analytical dimensions".

4.   "...We then selected the social situations or cases whose observation could potentially be most fruitful for generating substantive analyses..."

5.   "The following step was to carry out the actual empirical analysis for each case... As a result of this work, new questions arose, some concepts were modified, some propositions were rejected, and new ones were incorporated..."

6.   "We then had conditions to summarise our thinking in more systematic form..."

7.   "...We re-analysed the specific cases..."

8.   "We finally integrated, at least in an indicative way, the theory and the analysis of the case studies".

I have interpreted this procedure as five steps, shown in Figure 1.

Figure 1 : **Research strategy**
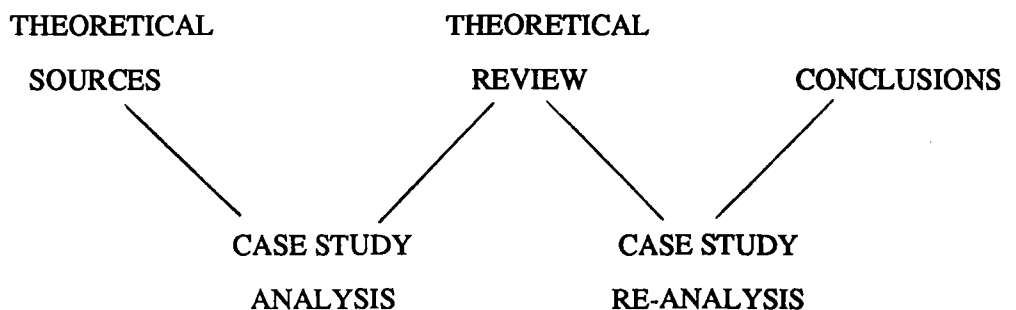
My theoretical sources are examined in Chapters One, Two and Three. Chapter One, Introduction and Research Strategy, defines the research focus and sets out the strategy I have adopted. Chapter Two, Landscape Meanings and Use, reviews the literature concerning 'landscape' usage. Chapter Three, Professional Communication, examines my theoretical sources concerning the contextual meaning and use of language, and concludes with a set of working propositions about 'landscape' meaning and use in the microscale context.

The case study analysis contains the empirical core of my thesis. In Chapter Four I introduce the case study topic, Trees and Plantations in the Canterbury High Country. Chapter Five presents my analysis of the attitudes of people involved in the case study, based upon my interview findings. Chapter Six sets out my analyses of 'landscape' usage in these interviews. I have examined the 'plain language' meaning of 'landscape'; the use of metaphor about 'landscape'; its symbolic associations; and the functional patterns of use of 'landscape' within an individual's conversation. In Chapter Seven I relate the findings of each analysis to the attitudes that provided the context for the different uses of 'landscape'. I also review 'landscape' usage in contemporary documentary sources relating to the case study.

My theoretical review is contained within a single chapter (Chapter Eight). It re-examines the working propositions upon which my contemporary case study was based, in the light of the empirical findings. As a result, some propositions are accepted, whilst others are qualified or rejected. I conclude with a shift of emphasis away from the contempory attitudes of decision makers that I had used extensively up to this point, to a wider and more historical interpretation of the case study material.

The case study re-analysis in Chapters Nine, Ten and Eleven contains three revised interpretations of the case study. The interpretations are, first, a consideration of the conceptual use of 'landscape', as expressed in the evolution of its meanings and in the metaphors that people use with 'landscape'; second, an examination of the myths of 'landscape' - that is, the way that 'landscape' brings symbolic meanings to the situations in which it is used; and third, a review of the political and social interest in 'landscape' - the way 'landscape' has been used by different individuals and groups to promote their particular needs and desires.

Chapter Twelve presents the conclusions of my research. I summarise the findings and discuss the potential for integration between the different analyses in the case study. I then suggest some implications of my study. I also include extensive appendices that provide background notes on my source material and research methods.

Castells' research goal was the generation of social theory at a tentative or provisional level. His theory was to be 'grounded' in specific social situations, providing a 'theorized history of a social phenomenon' (1983:340). The history drew upon aspects of existing formal theory. It was expressed in the form of propositions, and was developed through a process of illustration, challenge, modification and falsification.

My study also aims to provide a theoretically informed interpretation of a particular set of social phenomena. I use a similar process to Castells, by establishing an initial provisional theoretical framework, within which empirical material is collected and then subjected to analysis and critical review. There is, however, a significant difference in the scale of the research. Castells applied his method over a decade or more, across several large case studies, in several continents. With his co-workers, he aimed to contribute to a theory of urban social movements. The practical resource limitations of my own research lead me to offer a more modest contribution to theory, based upon a single case study.

2.   The form of my case study

Case studies are well established as valid research strategies within social science (Hakim, 1987). They have both advantages and disadvantages, which I discuss in Appendix II. In developing my strategy, I was faced with a choice between several small case studies, and one larger or more complex study. Several contrasting studies provide a greater opportunity for comparative analysis (Glaser and Strauss, 1968; Bulmer, 1984). However, it became apparent during the pilot phases of my research that the relationships being investigated were complex and elusive, and would require extensive detailed study.[3] As a result, it was not feasible to undertake several

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3/ As an illustration of this, I eventually undertook 58 in-depth interviews within my chosen case study, in order to achieve the 'saturation' needed in qualitative research (Bertaux, 1981).

different case studies to the depth needed for them to be useful. It became necessary to 'trade down' my research strategy from an ideal model (Hakim, 1987). I therefore decided to apply Castell's methods to a single, but complex study. It was at this point that I turned to Allison (1969) and Mitroff and Blankenship (1973) to revise my approach.

Allison argued that in order to understand a complex event it is useful to undertake several different modes of analysis.[4] Mitroff and Blankenship took the argument further, believing that complex social situations represent 'messy' problems, unsuited to conventional quasi-experimental analysis. They proposed an 'holistic experiment', which contains within it several radically different approaches to analysis - indeed, they argued that the more divergent the methods, the more rigorous and effective is the understanding. The theoretical implication of adopting multiple analyses of a single case study is that the research findings are primarily interpretive and cannot be used to 'test' formal theory in a definitive way (Glaser and Strauss, 1968).

My research strategy incorporated these ideas at two stages. First, I undertook several different analyses of 'landscape' usage in the interview material, from deliberately different starting points.[5] Second, my re-analysis of the overall patterns of 'landscape' usage in the case study extended these perspectives in the form of three separate but complementary interpretations of 'landscape'.[6]

The focus of my study is therefore initially upon the contemporary 'micro' scale. It provides a detailed theoretical interpretation of a particular situation, rather than a more widely applicable, but tightly specified contribution to general theory. Nonetheless, the micro-scale analysis contains within it the presumption that macro-scale influences will be reflected in some way (Knorr-Cetina, 1981).[7] My re-analysis of the case study draws some of these out.

4/ Allison subjected the single 'event' of the Cuban missile crisis to three analyses - viewing it from a 'rational' perspective, a 'bureaucratic' perspective, and a 'political' perspective.

5/ I analysed the interview transcripts for the plain language meaning of 'landscape'; for the metaphorical structure of meaning in 'landscape', for its symbolic associations, and for its functional use in conversation.

6/ Conceptual usage of landscape; myths of 'landscape'; and political aspects of 'landscape'.

7/ That is, interviews with a small group of people will show the influence of broad scale social processes, as well as the specifics of the situation itself. (Knorr-Cetina, 1988))

3.   Choice of methods

The final issue I had to address was the selection the methods of data collection. Castells again provided guidance. He argued (1983:341), 'It is our conviction that all research tools are legitimate and useful when they remain tools at the service of the research proposed...' He believed that research can achieve maximum methodological rigour by 'adapting the procedures... to the technical problems posed by each case'. In this study, my primary focus is upon the word 'landscape', and its meaning and use. I therefore considered the sources of evidence of language use that are available. There are two main types - 'naturally occurring' data such as everyday conversation, or documentary records, upon which the researcher has had no influence; and 'artificial' data such as interviews that have been generated in some way by the researcher (Silverman, 1985; Potter and Wetherell, 1987).

The approach I adopted was to combine interviews with documentary sources. These are well proven and complementary methods. Both interviews and documents are predominantly qualitative in character, and can be theoretically well integrated with each other (Greene and McLintock, 1985). They also fit well with the other aspects of my overall research strategy (Silverman, 1985). I concentrated upon interview data in my initial case study analysis, supplemented by contemporary documentary records. In the case study re-analysis I also made extensive use of historical documentary sources relating to the case study topic. I discuss my choice of interview procedures and documentary sources in Appendix II.

4.   Conclusion

My research strategy was qualitative and interpretive. I present my findings in a narrative form, which highlights the nature of both the process I followed, and the conclusions I have reached. I adopted this strategy and approach in response to the character of the phenomena I was investigating. It also expresses my preferences as a researcher.

I intend that my thesis should be of relevance to both a specific land use issue (the management of trees and plantations in the high country) and to broader questions of resource policy formation. However, my interpretive strategy, and my emphasis upon 'landscape' use means that the linkage to contemporary policy and practice is primarily by analogy. I comment on these links where

appropriate, but do not make specific recommendations about the future form or content of policy in the Canterbury high country.

CHAPTER TWO: 'LANDSCAPE' MEANINGS AND USE

A. INTRODUCTION

This chapter reviews recent documentary examples of the meanings and use of 'landscape'. It has two main sections. I first present a classification of the range of meanings attached to the term 'landscape' in contemporary and recent literature.[1] This process of review and classification provided me with initial insight into the complex patterns of meaning and use of 'landscape'. It also provided a set of categories that I could use for data collection and analysis in the case study. However, the wide range of interpretations of 'landscape', and the multiple and overlapping meanings evident in the literature led me to conclude that this classification must be regarded as an heuristic device, subject to revision. The second section reviews how the meaning of 'landscape' has been analysed in previous studies. I found that the majority of research had focused upon macroscale influences upon meaning (for example, social ideology). Several authors have hinted at the context dependency of the meaning and usage of the word 'landscape' but there has been only limited empirical work in this area.[2]

B. 'LANDSCAPE' MEANING : A WORKING CLASSIFICATION

The theoretical starting point of my investigation into 'landscape' use and meaning was a semantic analysis of the 'landscape' literature. This drew upon published sources in New Zealand and overseas. I have identified three broad categories of meaning - 'landscape as land', 'interactive landscape', and 'perceptual landscape'. The first, 'landscape as land', includes the physical and systematic meanings of 'landscape' that focus directly upon the concrete phenomenon of land. The second, 'interactive landscape', describes the wide range of meanings in which 'landscape' refers to some aspect of the functional inter-relationship between

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1/   By this I refer primarily to professional and scholarly literature.

2/   There is, of course, extensive work upon the social meanings of a range of phenomena described as 'landscape' (for example, Tuan, 1977; Ley and Samuels, 1978; Meinig, 1979; Relph, 1981; Cosgrove, 1984;Perkins, 1988a, 1988b). But these authors did not focus upon the everyday social use of the word 'landscape'.

individuals, or social groups, and land. The third category, 'perceptual landscape', focuses upon 'landscape' as a human phenomenon derived from land but distinctly separate from it.

1. **Landscape as land**

I include five distinct meanings in this category - 'landscape' as physical features of land, as territory, as type of setting, as environment and as system.

a) Physical features

Geographical sources frequently refer to 'landscape' as the 'face of the earth' (Dury, 1986), or the surface features of land (Hartshorne; 1939). It is often expressed interchangeably with landform (Soons and Selby, 1982), and may include vegetation forms and patterns (Newsome, 1987). In this usage 'landscape' is "real, physical, tangible" (Melnick, 1983:88).

b) Territory

Webster's Dictionary refers to a second meaning of landscape "as the landform of a region *in aggregate*" (1971:1269) (emphasis added). Here, 'landscape' describes a particular combination of features, within a defined area (Sauer, 1963; Aitcheson and Grant, 1968). It implies a degree of unity between the features - an assumption that also underpins the phrase 'landscape approach' used to describe a process of land evaluation that delimits areas with distinctive biophysical patterns (Mabbutt, 1968).

c) Type of setting

Unity may also be expressed through the concept of landscape 'type' - for example 'natural landscape', 'cultural landscape', or more specifically, 'Canterbury landscape' (Cumberland, 1940; Holland and Johnston, 1987). The term 'landscape' is used here to describe a distinctive regional combination of biophysical and cultural patterns, or a distinctive type of cultural modification (for example, 'forest landscape', or 'urban landscape') (Saunders, 1971; Relph, 1987).

d)   Environment

In New Zealand, the idea of 'landscape' as an aggregation of biophysical elements has frequently been used interchangeably with 'environment' by the landscape architecture profession (M. O'Connor, 1981). "Landscape represents a section of the environment. It consists of the *natural* components, such as soil, trees, landform and water, as well as the various *cultural* components or developed forms, such as farms, recreational and engineered developments, and housing. " (Jackman, 1980:2).

e)   System

For some groups of users, 'landscape' is conceived and expressed systematically. This may focus upon soil - landscape systems, dynamic systems of matter and energy (Speight, 1968; Burns and Tonkin, 1982). Landscape has also been described as "as one living, changing organism" (Challenger, 1969:36) and used in the definition of ecosystems (Kelly and Park, 1986). At its most abstract, the term refers to inclusive and interconnected "ecological and geological systems" (Greenbie, cited in Vroom, 1976), or "mountain landscape systems" (O'Connor, 1984).

The common feature of all systematic concepts of landscape is that they must be perceived and characterised as systems, rather than as mere aggregations of objects and organisms. Several authors have made this perceptual dimension explicit. For example, 'landscape' is "a part of space near the earth's surface... a complex system of inter-relationships, and constitutes a distinguishable whole in its outward appearance" (Van der Poel, 1976:365). Jackman and Treeby designated this "most visible and the most interpretable product of the many physical and cultural variables which add up together to create the concept of 'total environment'" as "the total landscape" (1984:3).

2.   Interactive landscape

These systematic concepts overlap with my second category of meanings, 'interactive landscape'. In this, 'landscape' signifies a social reality in which social activity gives meaning to land.

a)   Planned or improved land

Stilgoe (1982) argued that land becomes 'landscape' when it is shaped and modified for permanent human occupation. It is therefore distinguished by human intentions. This meaning is also implicit in the popular usage of 'landscape', as 'landscaping' - the laying out and creating of a planned 'landscape' with picturesque qualities (OED, 1989). I use the description 'planned landscape' for any usage that explicitly links and limits 'landscape' to modified or managed land.

b)   Landscape as a code

When conceived as a physical reality that has been modified by humans, 'landscape' contains within it a record of human striving (Tuan, 1977). It therefore becomes a code (Meinig, 1979), a system of signs (Nuttgens, 1982) that provides a cumulative expression of past beliefs, values and activity (Dubos, 1972). As Challenger (1981:63) put it, "Perhaps we can use the landscape to gauge where we have come from". It can be read like a book (Thom, 1981). I use this description of landscape as a 'code' whenever it is presented in a neutral or passive way - for example, "Landscape *reflects* the cumulative effect of physical and cultural processes" (NZILA, 1980), a *mirror* upon culture and nature (Thom, 1981).

c)   Landscape as symbol

Some authors have used 'landscape' to mean a symbol that is *actively* invested with meaning (Meinig, 1979). "No landscape exists merely as an accumulation of physical factors. Simply by identifying it we embed in it character, meaning and symbolism beyond its intrinsic shape and form. The Maori names by which the great bulk of our landscape asset is identified - however mispronounced - are the survey pegs of heritage - memory, association and significance" (O'Regan, 1988:5). This usage assumes that landscape is more than a neutral code and that it is inherently meaningful. "No landscape... can express its full potential until it has been given its myths... by man" (Dansereau, 1975:152). 'Landscape' interpretation becomes an exercise in iconography (Scully, 1969; Howett, 1985; Daniels and Cosgrove, 1988), that seeks the symbolic ordering within 'landscape'. The word 'landscape' thus signifies a physical symbol for a range of values and attitudes.

d)   Landscape as a social idea

'Landscape' has been interpreted as an entirely social construction, an expression of

social power and interest (Eyles, 1985). "Landscape is thus a way of seeing", (Cosgrove,

1984:55), "a composition and structuring of the world so that it may be appropriated by a

detached individual spectator". Thus "The landscape as such does not exist" (Wedde,

1987:13). For these critics, 'landscape' "is not eternally in the land, but is an historically

determined way of regarding it: of imposing on the land a vision of the land as picture"

(Pound, 1987:57). It is an entirely social product, "a cultural, psychological and aesthetic

phenomenon... discovered-or invented, depending upon your point of view..." (Cooper,

1987:5). It can, however, be expressed in physical form - as painting, literature, or estate

improvement (Cosgrove, 1984; 1985).

3.   **Perceptual landscape**

My final category contains those meanings that use 'landscape' to signify human perception or

experience of land.

a)   Landscape as inscape and experience

Yi Fu Tuan (1977) considered that the essence of 'landscape' is a mental structuring of

the world, and Dubos (1972) adopted the concept of 'inscape' to describe the

'prefiguration of reality' that structures our perception. In its original form 'inscape'

implied a spiritual source to this prestructuring (Milward, 1975). Lowenthal placed more

emphasis upon the importance of previous experience : "features and patterns in the

landscape make sense to us because we share a history with them" (1975:5). In

Stillman's words, "landscape mediates between physiographic reality and our ideas of

what it should look like" (1975:19).

b)   Landscape as a picture

Within fine art, 'landscape' refers to a particular artist's perception of land, "a picture

representing natural inland scenery" (OED, 1989:629). It is therefore a physical

phenomenon, but entirely separate from land, as a two-dimensional representation or

image. 'Landscape' is also referred to as the "background of scenery in a portrait" (OED,

1989:629). Both usages share an assumption that 'landscape' representation is rural, that it expresses compositional qualities, and that it is either natural or naturally appearing.

c)   Landscape as view

The idea of 'landscape' as a representation implies a particular viewpoint, "a view or prospect" (OED, 1989:629). It is still the perception of an observer, but is characterised by location, rather than the qualities of the observer. A tract of land therefore becomes 'landscape' when viewed from an elevated position (Chambers, 1972).

d)   Landscape as scenery

"Land", according to Tunnard (1978:41), "is the thing itself, while landscape is the phenomenon". Landscape is frequently equated with natural inland scenery (OED, 1989) - the general appearance of natural features. However, 'scenery' also implies a picturesque quality of appearance, and Meinig, whilst agreeing that "every landscape is a scene", argued that "landscape is not identical with scenery... (it) is ubiquitous and more inclusive, something to be observed but not necessarily admired" (1979:2). It thus becomes the appearance of land.

e)   Landscape as visual environment

The meaning of 'landscape' as appearance of land can be extended to our whole visual environment: "it defines the visual elements we perceive in our surroundings" (Park, 1981:67). 'Landscape', in these terms, becomes "the visual context of human experience" (Relph, 1981:62), our medium of 'encounter' with the 'lifeworld' (Seamon, 1979). Occasionally the visual aspect of 'landscape' is qualified: "Landscape, used in its broadest sense of 'environment', refers to the relationships of all physical, biological and cultural components which are expressed in the visual landscape (that part of the environment that is visually perceived)" (Rackham and Darby, 1981:1).

4.   Plural meanings

My process of classification has differentiated a range of meanings of 'landscape', that provide an underlying pattern to its usage. I draw two conclusions from this. First, the categories of

meaning I have developed are not discrete - they are best seen as overlapping bands on a continuum (Figure 2):

Figure 2 : **A continuum of meanings**

Landscape as land -----> <----- Perceptual Landscape

<----------Interactive Landscape---------->
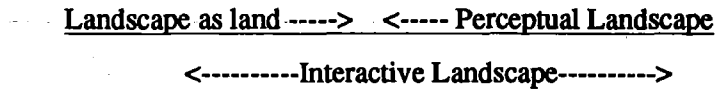
My sequential presentation of the categories is intended to emphasise this continuity.

Secondly, the evidence of plural, complex and overlapping usage within the literature emphasises that my overall theoretical framework must be capable of accommodating diverse interpretations of 'landscape'. The categories presented above are necessarily provisional, and represent an attempt at a 'best fit', that must be kept open to review and revision. Nonetheless, the overall structure of the classification has proven to be reasonably robust over a five year period of development.

C.   LANDSCAPE USAGE: PREVIOUS STUDIES

The plural meanings of the term 'landscape' have been analysed in the academic literature in several ways - by its etymology, by functional classification, by a consideration of underlying epistemological assumptions, and by a critique of its ideology.

1.   Etymology

Several authors have undertaken historical analyses of the word 'landscape', tracing the way its meaning has evolved in dictionaries, and in literary use. These include consideration of usage in English, Dutch and German (Troll, 1971; Relph, 1981; Tesdorpf, 1982; Stilgoe, 1982; Jackson, 1984). Swaffield and O'Connor (1986) provided a summary review of these etymological pathways and Appendix III contains detailed notes upon them. However, whilst etymological analysis can contribute to an understanding of the stages by which different meanings have

evolved, and can therefore provide insight into the sources of meaning, it does not explain why or how particular meanings are currently used in particular situations.

2. Functional classification

Functional classifications link the meaning of 'landscape' to the disciplines or professions that use it. Turner (1982/83) identified three types of use - the artist's 'landscape' (scenery), the geographer's 'landscape' (a tract of land), and the designer's 'landscape' (planned parks and gardens). Relph (1981) extended this classification to six types (Table One):

Table 1 **Functional classification of 'landscape' meaning** (after Relph, 1981)

1.	Landscape architect	:	Landscape as object
2.	Geographer	:	Landscape as features in an area
3.	Historian	:	Landscape as a record of history
4.	Architect	:	Landscape as townscape
5.	Academic	:	Landscape as the analysis of meaning in the environment
6.	Ideological	:	Landscape as expression of property ownership

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The significance of these two studies is to suggest that the meaning of 'landscape' in any particular situation will be dependent upon the professional training and role of the person using it. However, the classifications are at a very general level. They imply that usage is largely consistent within a discipline, and offer little direct guidance about how 'landscape' might be used by people who do not fall into any of the functional categories. Furthermore, some disciplines (for example, social geography) use several types of meaning. Both these studies appear to have been based largely upon reviews of literary usage and dictionary definition, and neither of them explored the way the classifications perform in an empirical example of everyday usage.

3. Epistemology[3]

Several authors have concluded that changes in the meaning of 'landscape' may be related to other developments in culture and understanding. Both Relph (1981) and Cosgrove (1985) argued that the visual and spatial emphasis of modern 'landscape' is linked to the development of perspective as a way of representing space. Relph extended this argument to identify parallels between ideas of 'landscape' and humanism - for example, in the way that the 'planned landscape' of public parks became the basis for landscape architecture in the nineteenth century, at the same time that broader concepts of public welfare were developing.

These studies suggest that the meaning of 'landscape' may evolve as the word is adapted and used to describe new scientific or artistic concepts, and as it is influenced by developments in closely related areas of knowledge. I return to this theme in Chapter Nine.

4. Ideology[4]

Finally, several social theorists have argued that the meaning and use of 'landscape' provides an expression of a particular ideology - an ideology of detached observation and spatial appropriation (Cosgrove, 1985). According to this analysis, 'landscape' is a way of controlling land, by painting it and redesigning it to express the ideals of a dominant class or culture. This interpretation of 'landscape' places its origins in Renaissance Europe. 'Landscape' then evolved to become a major influence upon the way landowners managed land in seventeenth and eighteenth century rural society in Britain (Barrell, 1972; Williams, 1973). It also became a means to impose colonial power in countries such as New Zealand because of the way it structured the description and representation of land (Pound, 1987). Wedde (1987) has argued that 'landscape' continues to express colonial and class interests in contemporary society.

3/ By this I mean a study of the forms of knowledge, or ways of knowing about and understanding reality. (Harrison and Livingstone, 1980).

4/ I use 'ideology' to express the notion that 'landscape' represents a way of seeing and understanding that characterises a particular class or society, but that is unrecognised by those using it. It is implicit and unexamined.

These ideological interpretations of 'landscape' have emphasised its essentially visual and spatial character, and focus upon the identification of common underlying assumptions. I believe they downplay the dynamism and diversity in meaning and use. However, there is potential to develop the concept of social interest in 'landscape' at a more detailed level. (See Chapter Eleven).

5.   Context dependency

Most analyses undertaken to date have therefore focused upon broad factors, such as etymology, disciplinary function, epistemology, and social ideology. However 'landscape' clearly exhibits plural and diverse meanings within particular statutes, resource policy issues, and even within an individual's writing. This suggests a much more dynamic and context dependent pattern of usage than that implied by the existing analyses. Three authors give some hint of this.

In an early review of the usage of 'landscape' within the discipline of geography Hartshorne (1939) argued that 'landscape' was characterised by confusion and ambiguity, due to three related causes. First, American geographers such as Carl Sauer had combined the meanings prevalent in the English language (that is, 'landscape' as the appearance of land) with contrasting meanings translated from German (that is, 'landscape' as area). Second, they confused the role of 'landscape' within geography, between whether it should be the object of study, or the conceptual basis for the integrated investigation of regions. Third, the meanings proliferated as influential geographers defined the discipline of geography in a way that suited their particular beliefs and objectives, and interpreted 'landscape' in a range of different ways to support their positions. So, although he drew upon etymological and epistemological arguments, Hartshorne also assigned the causes of diversity to the actions of individuals pursuing their personal concerns.

A more recent French project has analysed the way 'landscape studies' have been incorporated into statutory planning. Using interviews, questionnaires, documentary reviews and group discussions, Zarmati (1980) concluded that there were two important variables in the form and use of 'landscape' studies - the range of concepts used (that is the meaning of 'landscape'), and the context in which the study took place. By context she referred to the nature of the problem, the organisation responsible, the disciplines involved, the local and regional characteristics, and the objectives set. However, Zarmati did not present any information on the relationship between meaning and context, and the theoretical basis for the investigation is unclear.

Finally, Relph (1981) concluded his review of 'landscape' and humanism with a suggestion about the importance of context: "The fact is that in its four hundred year history the idea of landscape has taken on many meanings but left few behind, so that while there is some continuity in its sense, it has acquired a cumbersome baggage of artistic, popular, technical and academic associations. Of course, many of these ideas of landscape overlap and interpenetrate one another, so it is little wonder that the term is ambiguous. What is clear, however, is that it is quite impossible to take simple dictionary definition of 'landscape' and make it universal. The word has a multiplicity of meanings and making sense of them depends mostly on the context in which it is being used" (1981:58).

Existing studies of 'landscape' therefore provide a range of useful insights into its usage, but focus largely upon broad scale patterns and factors. There is some circumstantial support for the idea that the detailed context of use influences 'landscape' meaning, but there has been little direct examination of this possibility.

CHAPTER THREE: PROFESSIONAL COMMUNICATION

A.   INTRODUCTION

My review of 'landscape' meaning and use in the existing literature made it clear that in order to develop a theory and method that extended beyond the existing broad classifications of 'landscape' meaning, to address its everyday usage in professional communication concerning resource policy I would need to turn to additional sources. I took as my starting point the idea of 'context dependency'. In this chapter I first describe the theoretical sources I have used to develop my contextual analysis of 'landscape' usage. I note the main characteristics of each source and explain the particular contribution they make to my research. I then present a concept of 'frame of reference', which provided the basis for my empirical case study. The concept is defined, and I put forward a set of working propositions that express the roles of 'frames of reference' in 'landscape' usage.

The overall sequence of theoretical investigations in Chapters Two and Three follows the evolution of my thinking - commencing with an extensive overview of 'landscape' meaning within academic literature, and then focusing increasingly upon the investigation of contemporary usage within a specific case study. It reflects my growing awareness that in order to make sense of the way 'landscape' is used in professional communication and resource policy, it is necessary to consider the immediate context in which it is used. I adopted the analytical concept of 'frame of reference' as a way of modelling this context.

B.   CONTEXTUAL FRAMES: THEORETICAL SOURCES

1.   Frames of reference - an introduction

Social scientists now widely accept that the meanings of words and concepts are related to the context in which they occur. Torgerson (1980) and Miller (1985) offered two examples of this in planning and resource management. Both focused upon the attitudes and perceptions of expert

groups when dealing with particular resource policy issues, and are therefore of direct relevance to this study.

Torgerson examined the way that different cultural and professional 'frames of reference' were expressed in evidence given to the Berger Inquiry into the oil pipelines in North West Canada. He argued that the meaning of statements and information presented in such situations can only be properly understood by 'scrutinizing the whole context in which the precise data and relationships have been obtained and established' (1980:12). Torgerson identified two levels of 'contextuality' - the individual's 'picture of self in context', and the social and ideological norms, procedures and assumptions of the study as a whole. An individual's 'picture' must therefore be seen against, and may reflect, a broader set of values.

Miller focused his attention upon the conflict that can emerge between different professional groups when they attempt to resolve a complex interdisciplinary problem. By analysing the characteristics of competing strategies of pest control that had been put forward to tackle spruce budworm in Canadian forests, he concluded that expert groups have their own "coherent sets of beliefs and values [that] provide a frame of reference within which actions and events are interpreted and made meaningful" (1985:236). Miller suggested that the effectiveness of communication within and between professional decision-making groups will be determined by the extent to which the frames of reference of the groups and individuals involved are compatible.

The significance of these studies is to suggest that in order to understand the meaning, or meanings of any particular concept used in the formation of resource policy, it must be analysed within its operational context - what other values and ideas are being expressed with it, by whom, and with what purpose?

The theoretical construct I have used to investigate the context dependency of 'landscape' meaning and use is the 'frame of reference' of the people involved. Terms such as 'frame', 'reference frame' and 'framework' occur widely in the literature dealing with the context of social interaction and communication, and have been used at several levels - an individual's 'frame', a group or organisational 'frame', or a broader cultural 'frame'. In each case, 'frame' is used to describe a coherent pattern of concepts, categories, values or relationships.

Definition of the content of a 'frame' depends upon the theoretical perspective the researcher adopts. In this study I have drawn particularly upon five source areas - cognitive psychology, discourse analysis, symbolic interactionism, situational policy analysis, and multiple perspective analysis. This selection of sources enabled me to develop a concept of 'frame of reference' that fulfills three roles. First, it is a theoretical construct of considerable power, providing a basis for the provisional explanatory propositions about 'landscape' usage around which the case study is structured; second, it is a robust empirical tool for data collection; and third, it is a useful analytical device.[1]

2. Cognitive psychology

The theme that I have drawn from cognitive psychology is that the people involved in a resource policy or land use planning issue each possess a coherent set of personal beliefs, feelings and intentions. This will influence the way they view an issue, and determine the way they use concepts such as 'landscape' when talking about resource policy and land use issues.

The idea of a psychological 'frame of reference' (Eiser, 1986:13) derives from Kelly's theory of 'personal constructs', by which 'man-the-scientist' (sic) seeks to "predict and control the course of events". "Man", Kelly argued, "looks at his world through transparent patterns or templates which he creates and then attempts to fit over the reality of which the world is composed..." (Kelly, 1963:4). More recently, Eiser has extended the model, arguing that individuals will simplify their perceptual and social environment to make it conceptually manageable, and try to organise their responses to fit into their existing 'frame of reference' (Figure Three). As a result "people with different attitudes tend to regard different aspects of an issue as salient" (1986:65). From this I would expect people to use 'landscape' in a way that fits their overall approach to a problem in resource policy, and for some people to make greater use of the concept than others, depending upon their particular concerns.

1/ My concept of 'frame of reference' has evolved during the progress of the study, as different problems and opportunities emerged. In its final form, the concept provides a metaphor for both an aspect of social reality, and for the process of interpreting reality. It is therefore similar to Irving Goffman's concept of 'frames' (1974), although I was not aware of this parallel in the earlier stages of my work. This concept is examined in section six, below.

Figure 3 : **Cognitive frames**
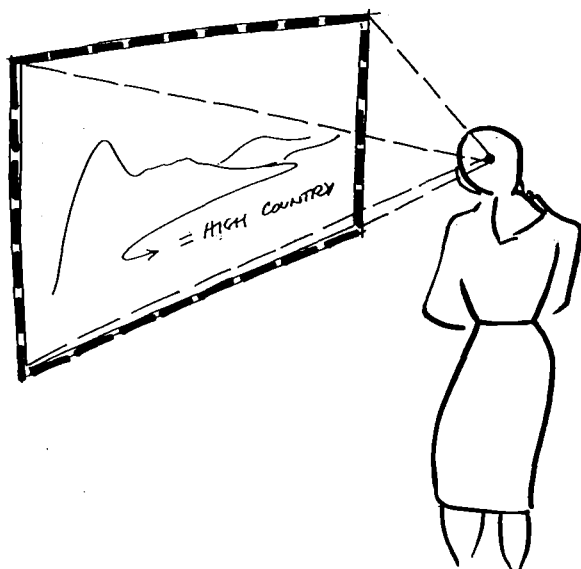
Cognitive psychology of the individual does, however, have a number of shortfalls and limitations in its application to studies of social communication. Antaki (1988) argued that verbal explanation and written communication are heavily influenced by the social situation in which they take place, so that methods which focus upon measuring the cognitive structure of the individual may distort or obscure the <u>social</u> meaning of words and concepts such as 'landscape'. Kuipers (1982) also warned against assuming that structural metaphors used in the development and description of cognitive theory (for example, Kelly's use of 'templates') actually represent the patterns of either mental processes, or communication.

A further problem for my study is that the types of formal interview method typically used to measure attitudes within cognitive psychology tend to confer structure upon the way in which terms such as 'landscape' are used, and thus impose a bias upon their meaning, or meanings. Cognitive psychology therefore provides a useful theoretical insight, with the general concept that an individual thinks (and responds) to situations in terms of a personal frame of reference.

However, this needs considerable qualification and refinement if it is to be used to investigate the everyday social use of a word such as 'landscape', when dealing with issues of resource policy.

3. Discourse analysis

Discourse analysis focuses more directly upon the everyday expression of concepts and attitudes. Discourse may be taken to include "all forms of spoken interaction, formal and informal, and written texts of all kinds. So when we talk of 'discourse analysis', we mean analysis of any of these forms of discourse" (Potter and Wetherell, 1987:7). In this study I have drawn upon three particular approaches: an analysis of oral explanation that searches for similarities and consistencies between and within different people's accounts of a resource policy issue; an analysis that searches for variations in these accounts; and an analysis of similarities and differences in meaning and usage of terms used in historical documentary sources. All three use qualitative approaches.[2]

The first approach I have used assumes that the record of words spoken by a person being interviewed represents an accurate record of their beliefs and attitudes (Gilbert and Mulkay, 1981). By systematically identifying the similarities in the use of words (such as 'landscape') a summary of each person's oral 'frame of reference' concerning an issue is built up (Figure Four). This can, in turn, be compared with other people's accounts, and a generalised model of beliefs and opinions, and of 'landscape' meaning and use can be developed.

2/ Context analysis (see Nachimas, 1976) provides a quantitative alternative, in which the content of a text (or transcript of an interview) is systematically coded and analysed statistically. However, there are two major problems in applying this approach to my study. Firstly, it is difficult to interpret the meaning of the results, or to assess the significance of the use of a word when it is expressed solely in aggregated numerical data. Secondly, the process of coding is time consuming, and very inefficient if applied to a situation where the word being investigated occurs only infrequently or intermittently (as happens here).

Figure 4 : **Oral framing**
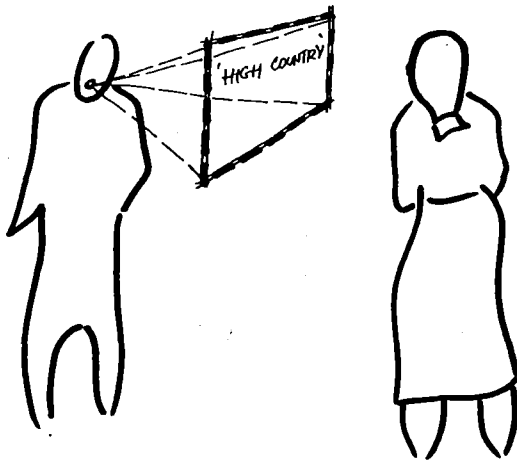
Potter and Wetherell described this form of discourse analysis as a 'realist' approach, that uses the linguistic analysis of an individual's speech as a way of gaining access to an underlying social reality of shared ideas, beliefs and attitudes. However, they criticised it for the way it tends to suppress the variability of social accounts. Citing an example in which a re-examination of interview transcripts had revealed two distinct repertoires of meaning (as opposed to the earlier identification of one only), they argued for a greater attention to *variations* in language. "In general, we find that if talk is orientated to many different functions, global and specific, any examination of language over time reveals considerable variation. A person's account will vary according to its function." (1987:33).

In their terms, a 'realist' approach therefore seeks out consistencies in the meaning of 'landscape', whereas a 'functional' approach seeks out variations, and tries to explain them by referring to the role the word was playing in any particular situation. In this study, I have used both approaches, treating them as separate, but equally valid analyses.[3]   The third approach I have used is a qualitative textual analysis of historical documents (Pitt, 1972). This searches for both consistencies and variations in the formal published use of 'landscape', by either particular individuals, or disciplinary groups.

3/   Their theoretical integration is achieved in two ways. Firstly, by conceptualising the two studies as complementary analytical positions (Allison, 1969). Secondly, by arguing that each reveals a different aspect of reality, expressed by Goffman (1974) as 'multiple' frames (see below).

4.   Symbolic interaction

The recognition of contextual influences upon meaning implicit within discourse analysis leads to my third source, symbolic interaction. Symbolic interaction is the name given to a sociological tradition originating in America during the 1930s (Joas, 1987).[4] It "portrays the social world as generated by social interaction among people; interaction that itself produces, and is shaped by, participants' interpretations of the world. Furthermore, this process of interaction is formative and creative..." (Hammersley, 1989:193-4). Symbolic interactionist research focuses upon microscale social activity and explores the way that the meanings of words and actions arise out of the interchange between people. The particular contribution it makes to my concept of 'frame of reference' is an emphasis upon social 'situations', in which meaning is socially constructed in a reflexive way (Blumer, 1969) (Figure Five). This means that individuals consciously adopt roles, and develop the meaning of words and actions in cooperation and interaction with others. So the meaning of a word like 'landscape', for example, in a particular policy context, depends upon the socially defined needs and roles of those using it.[5]

Figure 5 : 'Social' frames
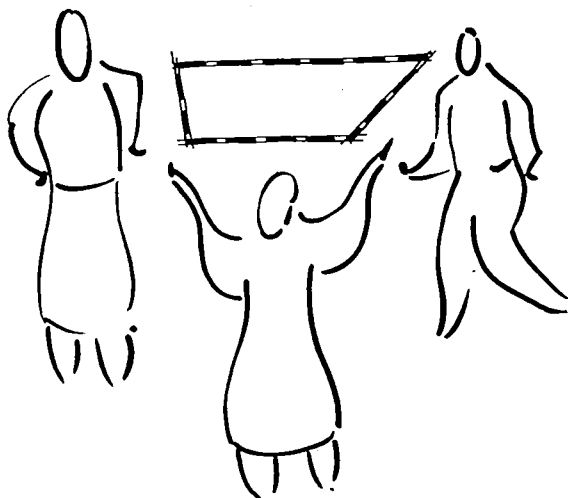
4/   The term itself originated with Herbert Blumer (Hammersley, 1989), but the origins of the approach lie in the broader ideas of pragmatism that were developed during the early twentieth century by writers such as Pierce, James, Dewey and Mead (Blumer, 1969; Joas, 1987).

5/   Much symbolic interactionist research concentrates upon 'role' playing activity itself - so that interviews, for example, are studied as social phenomena in their own right, constituting social 'events'. This creates a dilemma as to whether the primary focus is upon the content or the role of talk (Silverman, 1985). In this study I emphasise the former, due to my primary interest in the use of 'landscape', although I also examine the role that 'landscape' plays within a person's conversation.

5.   Situational policy analysis

The fourth source I have drawn upon uses the idea of a frame of reference in the investigation of policy. Situational policy analysis is one of four approaches to policy analysis that I have identified as using the concept of 'frame of reference'.[6] The analysis focuses upon the specific social, organisational and political context of decisions - for example, the way the 'frame of reference' of a particular organisation influences and structures that organisation's outlook upon a resource policy issue (Walther, 1987; Dunster, 1987).

The contribution that situational policy analysis makes to my study is in the way 'frame of reference' is used to refer to the shared institutional context that people bring to a policy issue (Figure Six). It suggests that people from similar institutional backgrounds, or with similar roles, will conceptualise resource policy issues in similar ways. This will contrast with the 'frames of reference' of people from different backgrounds. Thus 'landscape' usage will depend not only upon an individual frame of reference and upon its immediate social context of use, but also upon the shared values of a wider group - for example, a professional association.[7]

Figure 6 : **Institutional frames**
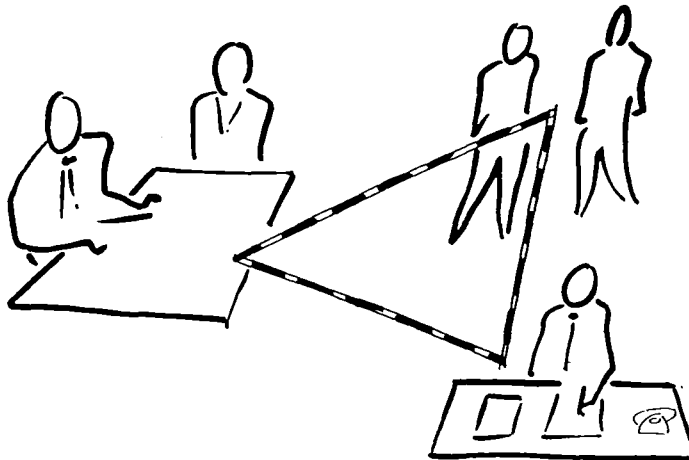
6/ The other three are : (1) Dimensional analysis - methods which measure policy makers' attitudes along bi-polar scales (for example Costantini and Hanf, 1972; Van Leire and Dunlap, 1981; Maggiotto and Bowman, 1982). These use similar methods to the cognitive psychological approach discussed above. (2) Structural analysis - that investigates the overall structure of social processes affecting policy (for example Drysek, 1987; Sabatier, 1987; Douglas, 1986; Manning, 1988). These express a wide range of theoretical positions. (3) Framework of analysis - the use of 'frame of reference' to refer to the analyst's approach to a policy issue. (for example Allison, 1969; Mitroff and Blankenship, 1973; Bowonder, 1987). (See final section of this discussion).

7/ Both Torgerson and Miller, whose 'contextual' studies were referred to earlier, adopted this approach.

6.   Integrating frames

Cognitive psychology, discourse analysis, symbolic interaction, and situational policy analysis each contribute valuable 'frame' concepts to my study, and provide ways of conceptualising the professional context of 'landscape' use and meaning. It is essential, however, that they are compatible when drawn together.

In this section I first describe an idea of frames that draws the preceding concepts together in terms of the perspective of the individual decision maker. Second, I describe how Goffman's 'frame analysis' helps the analyst conceptualise different 'frames' as diverse ways of interpreting reality. Third, I describe how the 'frame' metaphor can also be used to provide an integration of different methods of analysis.

a)   Decision making frames

Rein offered a frame concept based upon the metaphor of perspective. He argued that "a frame is a way to understand the things we say and see and act on in the world. It consists of a structure of thought, of evidence, of action and hence interest and values. In brief, a frame integrates theory, facts, interests and action" (1983:96). The particular significance for my study is the way he focused upon links between understanding, thought and action. Rein believed that facts, theories and values are interdependent, and their relationship is constantly evolving as decision makers and influencers formulate and reformulate problems and issues. Thus a 'frame', or "view of the world" (1983:99) integrates personal characteristics with social and institutional factors in the context of particular issues and imperatives for action (Figure Seven). It provides me with a basis for 'contextual' analysis that draws together the personal, interactive and institutional 'frames' described earlier, into a dynamic individual 'decision frame' that I term a 'frame of reference'. (See Section C, below).[8]

8/   Note: This differs in emphasis from the cognitive frame of personal construct theory in that the 'frame' used is dependent upon the circumstances in which it is used - and hence includes elements of relevant social and instututional frames.

Figure 7 : **Integrating frames**
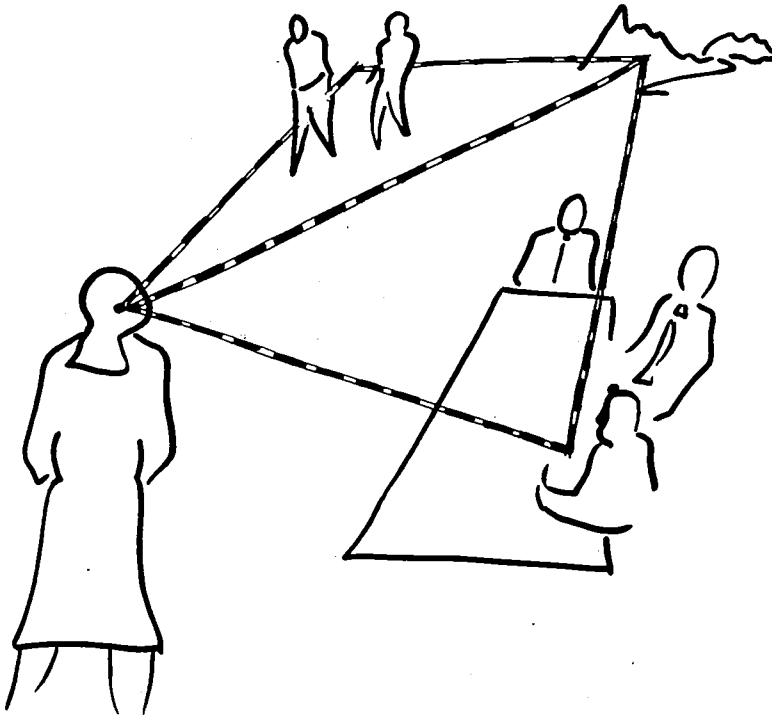
b)   Multiple frames

Goffman adopted the term 'frame' to describe how face to face encounters are
experienced and interpreted by social players (Goffman, 1974; Collins, 1988). He argued
that any social situation (for example, a meeting to determine policy on land use)
constituted a frame, within which interaction takes place. The term 'frame attunement'
describes the way individuals 'picture' themselves in that context (Torgerson, 1980).
Goffman used the 'frame' concept to analyse and explain the forms and processes of
small group social activity. The essential characteristic of this approach that makes it
valuable to my study is Goffman's suggestion that 'frames' exist at several levels - for
example, the individual, the small social group, and the broader society. By extending the
concept of 'frame' from a single level of reality to multiple realities, Goffman's work
shows how the different concepts of 'frames' that I have discussed so far can be
combined without compromising their individual characteristics.

His underlying assumption was that social and physical structures exist independently of the individual, but that they must inevitably be socially and individually interpreted.[9] From this, Goffman built up a dynamic and multi-layered view of reality, that has both physical and social dimensions, which give the overall context an hierarchical quality (that is; physical reality - social reality - individual reality) (Figure Eight). It also has an 'emergent' quality, as new combinations evolve (Collins, 1988).

Figure 8 : **Multiple frames**
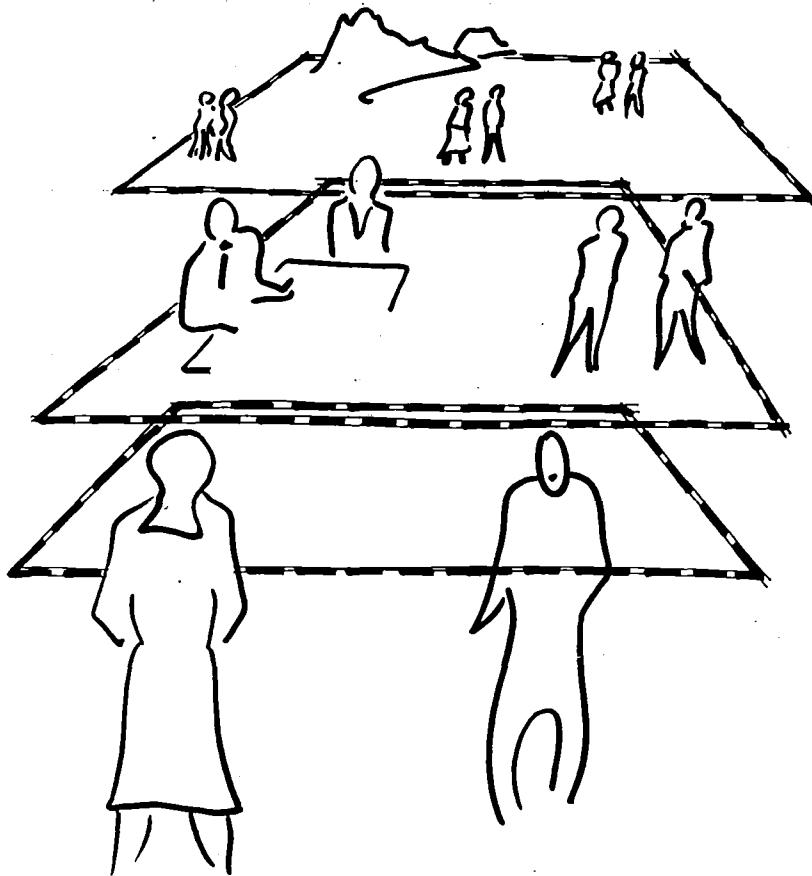
This multiple perspective allows me to develop an approach that recognises firstly, that individuals bring their own frame of reference to a situation; and second, that this frame may contain elements from several other frames. In any particular resource policy issue, this 'multi-layered' reality may therefore include the underlying biophysical forms and processes of the area in question; the accumulated social understanding of these forms

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9/ A position described by Collins (1988) as "realist". I discuss one interpretation of 'realism' in Appendix I.

and processes; the social, cultural and organisational norms and values that structure the way groups and individuals respond; the particular values of specific interest groups; the situations in which they interact (for example, planning hearings); and the personal experiences, perceptions and values of those involved. The meaning and use of a term such as 'landscape' is dependent, in part, on each of these frames.

c)   Analytical frames - multiple perspective analysis

Multiple perspective analysis uses a 'frame' metaphor to describe the analyst's own perspective upon a situation. It suggests that different analysts produce different interpretations of an event or situation (or concept), depending upon their initial assumptions (Allison, 1969; Bowonder, 1987) (Figure Nine). Application of several *different* frames of reference to a particular problem, can therefore deepen and extend understanding by broadening and diversifying the analysis.

Figure 9 : Analytical frames
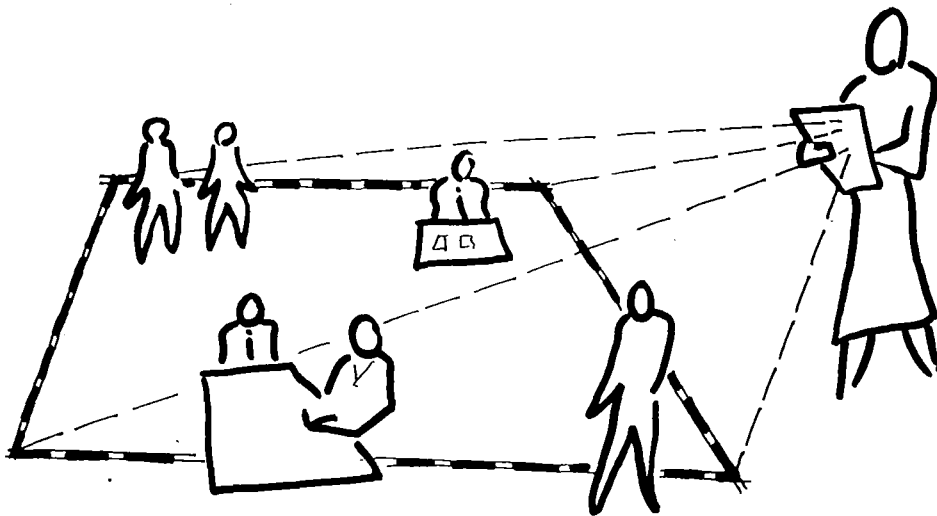
This approach contributes several valuable insights. First, it provides a way of linking the ideas of a 'frame of reference' drawn from different theoretical sources such as cognitive psychology, situational policy analysis, and discourse analysis, by suggesting that they may each be conceptualised as different analytical perspectives. Second, it provides a robust methodology for investigating the multiple frames of social reality postulated by Goffman, allowing a different type of analysis to be applied to the different

'levels' of reality. Third, the adoption of multiple analyses increases the theoretical richness of the case study (Castells, 1983).

'Landscape' meaning and use can therefore be legitimately analysed from several different analytical perspectives. There are, however, differing opinions on the best way to relate multiple analyses to each other. Bowonder (1987) argued for the combination of different perspectives in order to achieve a 'comprehensive' view of complex problems. The results of each analysis are expected to be complementary. This is similar to the model of 'triangulation' proposed by Denzin (1989), that uses several independent methods to cross check observations of social phenomena.

In contrast, Mitroff and Blankenship argued that the 'reality' of complex social situations is itself 'messy' and legitimately open to different interpretations. "....different systems analysts can and will conceptualise the 'same' system in radically different ways. The problem of an holistic methodology is how to assess these potentially divergent conceptualisations" (1973:343). They proposed a 'discursive' approach, that highlights differences between analytical frames in order to stimulate further analysis. Drysek described this as an hermeneutic activity (1982:322) "defined as the evaluation of existing conditions and the exploration of alternatives to them... through an interchange between frames of reference of analysts and actors". Progress in understanding is therefore achieved through the 'confrontation' of different frames, rather than by their convergence. Reality is assumed to be multi-faceted (Silverman, 1985) and differences between accounts of reality reflect differences in the context in which it is experienced (Garfinkel, 1986). Thus, a story which describes patterns of 'landscape' meaning and use in regard to a particular resource policy issue is likely to be dynamic, fluid, and at times contradictory.

The position I have adopted in investigating 'landscape' usage accepts that the influences upon usage, and the patterns of usage, are part of a multi-layered reality. I have investigated this by multiple analysis. That is, I use different methods of analysis in the belief that they will reveal different dimensions of a situation, and thus provide a more complete understanding. I have followed Allison, (1969), and Mitroff and Blankenship, (1973), in choosing deliberately *contrasting* approaches to analysis, in order to explore a

wide range of possible dimensions and interpretations of a situation. I do not make any assumption that the different analyses will necessarily provide a cross reference upon each other.[10] The different perspectives *may* reveal common features, but may equally produce divergent results, depending upon the nature of the assumptions they start with.

This overall approach leads me to expect to find broad patterns of social meaning of 'landscape', more specific group meanings, and highly individual meanings and use. Each is 'real' at the level at which it is expressed and experienced. The range of sources I have discussed provides the 'frame' concepts needed to investigate these multiple levels of reality (Figure Ten).

Figure 10 : **Multiple realities**
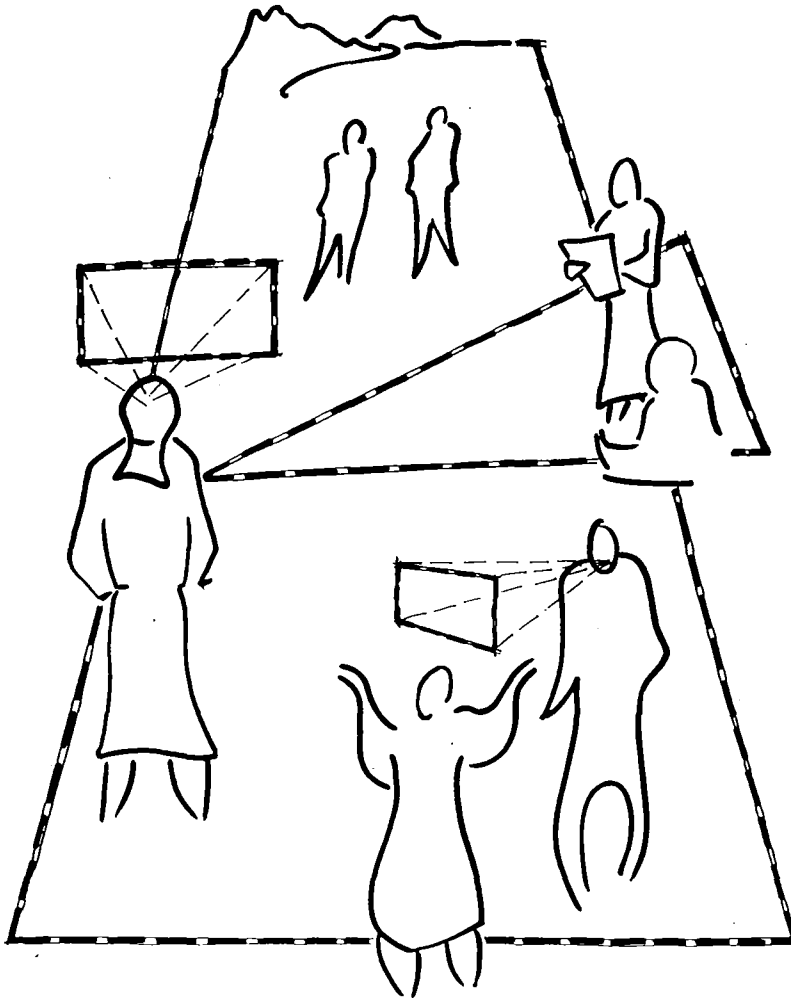
10/   That is, methodological triangulation - see Denzin, 1989; Greene and McLintock, 1985.

E.   FRAMES OF REFERENCE: DEFINITIONS AND WORKING PROPOSITIONS

This section proposes a definition of 'frame of reference' based on the sources described above, and develops a set of working propositions concerning 'landscape' usage and its context for subsequent use in the case study.

1.   <u>Frames of reference - definition</u>

I offer three definitions:

i)   A 'frame of reference' is an analytical model of beliefs, feelings and intentions concerning a specific resource policy or land use planning issue.

ii)   A 'personal' frame of reference refers to the beliefs, feelings and intentions that are openly expressed by an individual when discussing an issue.

iii)   A 'common' frame of reference refers to a distinctive combination of beliefs, feelings and intentions that is common to a number of individuals.

2.   <u>Frames of reference - assumptions</u>

These definitions of frames of reference adopt some underlying assumptions:

i)   The 'individual' may be either a decision-maker or a decision-influencer, henceforth termed a 'player'.[11]

ii)   I describe my concept of 'frame of reference' as a model (Manning, 1988) rather than either a set (Ward and Russell, 1981) or a structure (Antaki, 1988). It is more than a set because it contains both terms and the relationships

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11/   This is intended to imply that the individual has some autonomy of action, within broader social norms.

between them. It is a model rather than a structure, because it is the <u>analyst's</u> interpretation of these relationships.

iii)   I assume that a personal frame of reference expresses some characteristics of an individual's personal construct (Kelly, 1963) or cognitive structure (Eiser, 1986). However, I do not take it to be a comprehensive articulation of them, nor to have a one-to-one relationship with them.

iv)   The beliefs, feelings and intentions expressed in a frame of reference are those which are articulated by the player, and not theoretically predicted, measured or inferred by the analyst. This adopts the "open soul doctrine" (Harre, 1976), which accepts speech at face value. However, it does not imply that these <u>fully</u> express a player's beliefs or feelings. Nor does it suggest that players are aware of all the social and cultural influences that help create and structure their beliefs. It merely assumes that they believe what they say.

v)   A personal frame of reference may appear to express a reasonably coherent explanation (Antaki, 1988), when viewed from a particular analytical perspective. However, different analytical approaches may reveal evidence of inconsistency, ambiguity or plurality within the same account. This may indicate that the player is referring to several different and not necessarily congruent levels of reality - different 'frames' within the same individual (Goffman, 1974). At this stage, however, my presumption is that each individual's account will be open to initial interpretation as a coherent frame of reference, albeit subject to subsequent reinterpretation.

vi)   A 'common' frame of reference will include beliefs and feelings that are shared by different individuals, and terms or concepts that are used in common with others. It is therefore part of a larger social reality, and interacts with it. However, individuals with a common frame of reference are not necessarily part of the same social <u>sub-group</u>. Rather, they have adopted similar approaches to an issue, which indicates the likelihood of some common influences, but not necessarily direct interaction between them.

vii)   An individual's frame of reference may express cultural and social values derived from broader world views or ideology (O'Riordan, 1981; Cotgrove, 1982; Eckersley, 1989). It may use signs or symbols derived from shared language (Saussure, 1974), and may express group or organisational 'norms' (Miller, 1984; Sabatier, 1987).

viii) The modelled frame of reference is specific to the resource policy issue being investigated.

3.   Working propositions

I am now in a position to sketch out several working propositions. As indicated in my overall strategy (Chapter One) their purpose is to provide a direction for empirical investigation and analysis, and to "stimulate thinking and observations along a variety of analytical dimensions" (Castells, 1983:339). They are not intended to be testable hypotheses in a formal experimental sense, as neither the theoretical sources, nor the phenomena under investigation, are suited to categorical, causal specification in a statistically falsifiable form. However, they will be subject to critical review and interpretation in a qualitative sense (Silverman, 1985). The propositions are presented in three sets. In combination they provide a provisional theoretical framework for the initial analysis of my case study.

4.   Propositions concerning frames of reference

The opening set of propositions is concerned with the context of communication about a complex resource policy issue.

Proposition One : The openly expressed beliefs, feelings and intentions of an individual player involved in a resource policy arena can be summarised as a personal 'frame of reference'.

Proposition Two : An individual's 'frame of reference' will draw upon other 'frames' of reality such as disciplinary norms or world views. It may therefore reveal elements of conflict and ambiguity.

Proposition Three : The players involved in an apparently complex arena will express a range of different frames of reference.

Proposition Four : There will be a limited number of 'common frames of reference' that encompass most, if not all, of the established players in a particular arena.

These four opening propositions derive directly from the definitions and theoretical sources discussed above. The first suggests that individuals will display a sufficiently coherent frame of reference for it to be recognised as such by an analyst (Antaki, 1988). The second recognises that a frame will reflect multiple influences. Furthermore, an apparently coherent frame of reference, when viewed from one perspective, may reveal inconsistencies when viewed from another. The third proposition recognises that every player in a situation brings his/her own distinct perspective (Kelly, 1963; Eiser, 1986). The fourth and final proposition argues that the social nature of professional communication (Sabatier, 1987; Torgerson, 1980) means that most if not all the individuals involved will express beliefs that are shared, at least in general terms, with others (Miller, 1985). It allows me to predict a higher or more general level of reality (Goffman, 1974) expressed as a 'common' frame of reference.

5.   Propositions concerning micro scale factors that influence 'landscape' usage

The second set of propositions introduce 'landscape' into the analysis, and focus upon the factors influencing usage at the microscale.

Proposition Five : 'Landscape' has plural meanings.

Proposition Six : The players in an apparently complex resource policy issue will express diverse 'landscape' usage.

<u>Proposition Seven</u> : The particular meanings of 'landscape' used by an individual will reflect his/her frame of reference.

<u>Proposition Eight</u> : Common frames of reference will display similar patterns of 'landscape' usage.

Proposition Five is now largely self evident, but is a necessary precondition to the subsequent propositions. Proposition Six is based on the premise that apparently complex issues are typically analysed from a range of different perspectives (Bowonder, 1987), and are therefore likely to display a range of interpretations of any particular concept, such as 'landscape'. Proposition Seven follows the 'functional' arguments of discourse analysis (Potter and Wetherell, 1987; Gilbert and Mulkay, 1981) that link the meaning of language to the particular concerns of the individuals using it. Proposition Eight combines these preceding propositions and suggests that people with a common perspective upon an issue are likely to share common interpretations of 'landscape'.

6. <u>Propositions concerning macro scale factors that influence 'landscape' usage</u>

My final set of propositions draws on the findings of the existing studies of 'landscape' meaning, which emphasise broad scale, or macro-level influences.

<u>Proposition Nine</u> : 'Landscape' meaning will be related to the discipline and/or professional background of the user.

<u>Proposition Ten</u> : The range of meanings of 'landscape' used within a complex resource policy issue will express the plural meanings in wider documented usage.

<u>Proposition Eleven</u> : The principal meanings of 'landscape' used in an issue will express the dominant world view or ideology that prevails amongst the players involved.

Proposition Nine expresses the arguments put forward by Hartshorne (1939), Turner (1982/83) and Relph (1981), concerning the links between the meaning of 'landscape' and academic

disciplines. Proposition Ten acknowledges the etymological studies that have been undertaken overseas, that emphasise the role of authoritative sources such as dictionaries and other written sources in recording and prescribing accepted meanings. Proposition Eleven draws upon the arguments that 'landscape' exhibits a consistent ideological meaning (Cosgrove, 1985).

These propositions provide a theoretical basis for my initial data collection and analysis. The propositions presented here are the starting point for investigations into a complex and multifaceted situation. They are provisional in nature, and are reviewed and revised following the initial case study analysis.

CHAPTER FOUR: **CASE STUDY - TREES AND PLANTATIONS IN THE**
     CANTERBURY HIGH COUNTRY

A.   INTRODUCTION

In Section A, Introduction, I set out my reasons for choosing the topic of trees and plantations in the Canterbury high country, and describe my sources. Section B, Geographical Context, describes the location of the case study area, and its main biophysical and social features. Section C, Attitudinal Context, summarises the main ideas and viewpoints evident in the literature on the topic. Section D, Institutional Context, describes the statutory and institutional elements of particular relevance to the study.

1.   Choice of topic

My research strategy required a case study which dealt with a resource policy issue of contemporary interest. It had to involve a range of different groups, professions and disciplines, and be of sufficient importance to them for the individuals concerned to be willing to discuss the topic in some depth, and thus reveal to me their 'frames of reference'. Most importantly, the topic had to be one that provided opportunity for respondents to use a range of interpretations of 'landscape', without my prompting them. Finally, I needed to be able to gain reasonable access to the people involved, and to documentary sources. The management of trees and plantations in the New Zealand high country is a topic that satisfied all my requirements.

2.   Geographical focus

My choice of Canterbury as a geographical focus was opportunist. It was stimulated by my involvement in a seminar on Trees in the High Country organised jointly by the Ministry of Works and Development and the Canterbury United Council, at which a diverse range of interests was represented (Gregory, 1988). The seminar highlighted for me the rich history of planning and research into land use in the Canterbury high country, much of it connected in some way to questions about the appropriate role, management and use of trees.

The pilot interviews that I subsequently undertook with participants at this seminar provided me with the next lead. My respondents frequently mentioned the Craigieburn Basin. This is the location of well established research stations at Cass, and Craigieburn Forest, and has been the focus of several recent land resource use issues involving trees (for example, a proposal for planting at Cora Lynn Station). Craigieburn thus constitutes a particularly well documented location of contemporary interest, and I adopted it as the geographical focus of my study.

My initial stage of research therefore investigated 'landscape' usage in the resource policy debate concerning trees and plantations in the eastern high country, as exemplified by the Craigieburn basin. This choice of location meant that my respondents were particularly concerned with the issue of the role and management of exotic trees and plantations in a predominantly grassland environment. However beliefs, feelings and opinions concerning native forests were also expressed.

3.   Range of sources

My selection of interview subjects, although focused upon members of interest groups and organisations actively involved in the Craigieburn area, extended to include individuals based elsewhere in Canterbury, and also in Wellington, who were particularly influential in these organisations and groups. My subsequent documentary investigations also extended beyond the immediate focus of the study, as I followed up leads and ideas that emerged from my interviews. As Pitt (1972) noted, qualitative historical research relies heavily upon the judgement and insight of the researcher in selecting promising themes and sources from the mass of material available. In this case, my initial analysis of the interviews and contemporary documents suggested that certain professional and disciplinary groups had played a central role in the evolution of the meaning of 'landscape'. In my re-analysis (Chapters Nine to Eleven) I therefore extended my documentary search for 'landscape' usage to a number of professional and scientific journals and publications, some of which took me away from the initial focus of trees and plantations in the Canterbury high country. This topic is therefore best seen as an anchor point for my investigation into 'landscape' use and meaning, not as a limitation.

B.   GEOGRAPHICAL CONTEXT

1.   Location

High country is a term used to describe the mountainlands and high elevation forests and grasslands of New Zealand. Much of the high country lies in the South Island, where it comprises the Southern Alps and their associated ranges and intermontane basins. The Canterbury high country occupies the central part of the island, and the Craigieburn basin lies within it, on the eastern side of the main divide, some 120km inland from Christchurch (Figure Eleven).

Figure 11: **Geographical location of case study**
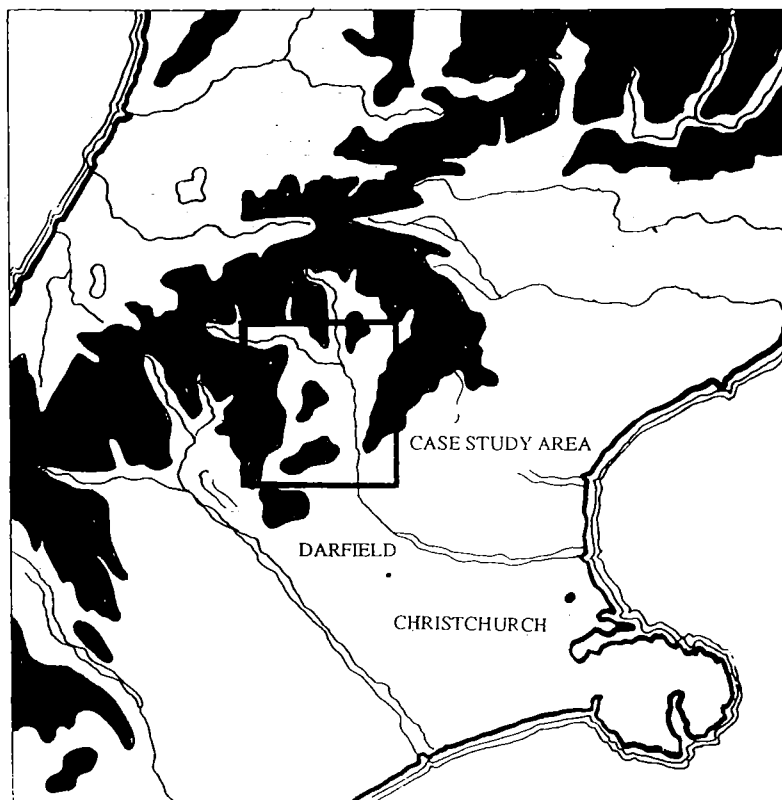
2.   The biophysical setting of the Craigieburn Basin

Craigieburn[1] is an intermontane basin, lying to the south and west of the Waimakariri River, into which it drains. It is bounded by the Craigieburn and Torlesse Ranges, that rise to around 1800

1/   I use the term Craigieburn to describe the area highlighted in Fig. 11. Parts of the area have also been described as the Trelissick Basin, Castle Hill Basin, Broken River and Cass Basin. Craigieburn is also the name of the western ranges and I use it to refer to the area as a whole.

metres, and by lower hills. Prior to human occupation, palaeological evidence suggests that the area was formerly extensively forested, but that this gave way gradually to scrub and open grassland, under the combined pressures of climatic change and natural fires (Molloy, 1963/64). This transformation of high country to grassland was greatly accelerated firstly by the hunting practices of early polynesian settlers, and latterly by European pastoralists (O'Connor, 1986a). Beech forests remain on the middle slopes of the Craigieburn Range. The rest of the basin is now in various types of tussock and oversown grassland, scrub and limited areas of cropping. There are exotic tree plantings associated with current and former homesteads, as shelter belts on the basin floor, around lake margins and in association with the former Craigieburn Forest Research Station. Overall, the vegetation and character of Craigieburn is broadly representative of that found over much of the eastern high country.

3. The social characteristics of the Craigieburn Basin

There are few permanent residents in the area. It contains several homesteads and farm cottages, a resort village at Castle Hill[2] , a highway depot at Cass, a few isolated baches, and several lodges and bunkhouses. However, the majority of the residential buildings are used for recreational accommodation, mainly by Christchurch organisations and residents.

Current land tenure includes pastoral leasehold land, university endowment land, freehold land, crown land designated for conservation, and both botanical and scenic reserves. The area is crossed by a traditional Maori route to the West Coast, and by a modern state highway and railway. Four skifields operate in the Craigieburn Ranges. At the time of my interviews, Craigieburn was within Malvern County. This was the local planning authority, based at Darfield, on the Canterbury plains. It was a constituent member of the Canterbury United Council, the regional planning authority, based in Christchurch. Other statutory bodies with major interests in land use in the area were the North Canterbury Catchment Board, and North Canterbury Parks and Reserves Board, both based in Christchurch. There were, therefore, a variety of land use interests in the area, indicative of the interests found throughout the high country.[3]

2/ Castle Hill is still at an early stage of development. There are currently around 50 holiday homes built or under construction.

3/ These teritorial and special purpose authorities have subsequently been disestablished and reconstituted into new local and regional government structures.

C.   ATTITUDINAL CONTEXT

1.   Literature review

My review of literature on the topic revealed a range of ecological, economic and cultural dimensions to the issue that are likely to inform current beliefs and opinions.

First, and most fundamentally, despite the widespread transformation of forest to open scrubland and grassland east of the divide, there is a biological potential for its reversion to forest. This is primarily due to the inherent biophysical characteristics of the area and the accumulated seed bank of exotic trees (Hayward and O'Connor, 1981; O'Connor, 1986b), with their potential for spread as wildings (Hunter and Douglas, 1984). There is increasing debate over the feasibility and likelihood of predicting and controlling such spread. Even without new plantings, the future role and management of trees in the eastern high country requires active consideration (O'Connor, 1986b).

Second, there is an established tradition of scientific research into the use of trees for erosion control and revegetation in the high country (Ledgard and Baker, 1988). The sense of urgency formerly associated with such research (Holloway, 1969) has been reduced by reappraisals of the relationship between 'natural' and 'man made' erosion (Hayward, 1979; Whitehouse, 1984). Nonetheless, many scientists retain a commitment to mountain land revegetation in its broadest sense (O'Connor, 1980).

Third, there has been growing interest during the past decade in the potential economic and biological productivity of trees in the high country. As a result, forestry interests have advocated tree planting for economic return, (Ledgard and Belton, 1985), whilst pastoral scientists have promoted the potential fertility gains from agroforestry (O'Connor, 1986b).

Fourth, the opportunities and potentials for tree planting and tree spread are perceived by many pastoralists, conservationists and recreationalists as a threat to existing environmental values and land use practices. Invasion of tussock grasslands by exotic trees is believed to reduce stock carrying capacity (Murray, 1986), to degrade conservation values (McSweeney and Molloy, 1984), and to reduce the visual and cultural values of the high country (Ashdown and Lucas,

1987). These fears have led to vociferous opposition to proposals for new plantings. In 1983 O'Connor predicted that landusers would need to choose between forests and improved pastures. He went on, "How that choice is made in situations where it is imperative and how that choice is averted elsewhere in the interests of conservation of New Zealand nature are the principle landscape planning issues of the tussock grasslands and mountain lands for the next twenty years" (1983:231).

This incipient conflict of interests in the high country (O'Connor, 1970) has been brought into sharper focus by a series of administrative and statutory reforms (discussed in Section D), and by changes in the political power and influence of the different groups involved, including the tangata whenua.

2.   Current issues

Several recent land use issues in the study area revealed this range of opinion. Proposals for a resort village at Castle Hill have been debated extensively over the past two decades. They were instrumental in stimulating several planning and research reports that examined the potential land use conflicts in the area.[4] Recently, proposals for tree planting associated with the village have been the subject of planning applications. Land use policy for the area has also been critically examined in public hearings as part of the District Scheme Review. My analysis of submissions indicates that the range of ideas expressed in the academic and professional literature was reiterated by the different interest groups involved in the planning hearings.[5] Existing planning policies, and their relationship to Crown policy for the management of leasehold land, were tested in a recent application for tree planting at Cora Lynn, also within the Craigieburn Basin. Finally, recent concerns about the effects of rabbits and hieracium spread elsewhere in the high country have highlighted the need for re-evaluation of traditional pastoral land use practice.

My investigation into contemporary attitudes therefore takes place against a background of diverse and frequently conflicting interpretations of needs and opportunities for trees and plantations in the high country. These in turn reflect different social and institutional interests. In

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4/   Notably Hayward and Boffa (1972).

5/   These included submissions from the Department of Conservation, North Canterbury Parks and Reserves Board, Canterbury United Council, New Zealand Forest Owners' Association and Federation Mountain Clubs. The public hearings took place in 1988, but were preceded by several reports and discussion documents.

the next and final section of the chapter, I briefly review the main features of the institutional context for the study.

D.   INSTITUTIONAL CONTEXT

There are four important institutional aspects to the case study - the continuity of the basic patterns of land tenure and zoning; the role of special interest groups; the active involvement of major research organisations; and the recent radical reform of local, regional and central government agencies. Each has had an important influence upon the attitudes expressed by the various individuals involved.

1.   Patterns of tenure and zoning

Questions of tenure and land use designation have remained central to high country issues since European settlement. There has been significant evolution in the form of tenure over Crown land (for example, in the 1948 Land Act), but the overall pattern of use is most notable for its continuing emphasis upon pastoralism (O'Connor, 1986a). The Land Settlement Board, which was the Crown agency that had overall responsibility for the administration of unalienated Crown land,[6] appears to have consistently favoured existing pastoral interests in its policy (Blake, 1983). Alternative forms of land use, such as forestry, received little encouragement.[7] This conservatism has been reinforced in recent years by statutory planning zoning, in which forestry has typically been separated from the predominant agricultural uses, and subject to specific controls (Fowler and Meister, 1983).

The significance of this institutional bias towards pastoralism is that despite the existence of favourable tax subsidies and encouragement grants up to 1984, there have been only very modest amounts of tree planting on leasehold land in the study area. New plantings have been largely

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6/   The Land Settlement Board established under the 1948 Land Act, had responsibilities that included pastoral lease land, but excluded Crown land designated as National Parks and Reserves. It carried out its functions through the Department of Lands and Survey (see Section 4 following).

7/   The 1948 Land Act provided for modest shelter and woodlot plantings on leased land, for farm use only, but did not allow commercial afforestation, until the 1977 Amendment. A permit was still required.

limited to modest shelter plantings, especially close to homesteads, to small parcels of freehold land on valley flats, and to trial plots at the Craigieburn Forest Research Station.

2. Special interest groups

Special interest groups form an important source of ideas, opinions and values (Cleveland, 1972). I have categorised them into three groups:

a) Conservation and recreation

There are several conservation and recreational organisations with a continuing interest in the issue of trees and plantations in the high country. The Royal Forest and Bird Protection Society (RFBPS) has grown since its inception in the 1930s to become a major conservation advocate. The RFBPS promotes both the protection of individual species, and more general nature conservation. Other smaller organisations involved in the issue of trees and plantations include the Maruia Society and various botanical societies (for example, Canterbury Botanical Society).

The main recreational groups involved in public debates at the time of my interviews were the Federated Mountain Clubs (FMC) (that is, trampers and climbers), Acclimatisation Societies (that is, anglers and hunters),[8] and the Deerstalkers' Association. There are a number of ski clubs associated with particular ski fields in the study area. Development of tourism and commercial recreation means that commercial organisations are also taking an increased interest in high country issues.

Backed by a largely urban membership, conservation and recreation organisations have considerable resources available for advocacy. With increasing emphasis in recent legislation upon the promotion of opportunities for participation in land use decisions,[9] they are becoming vocal advocates for particular concerns.

8/ Now reconstituted as Fish and Game Councils.

9/ For example, 1977 Town and Country Planning Act; 1977 Reserves Act; 1991 Resource Management Act.

b)   Professional groups

The second type of special interest group relevant to the case study is the professional association. They are seldom directly represented in public debates but may be particularly influential in the formation of opinions and values of their members. One such group that turns out to be of particular relevance to this study is the New Zealand Institute of Landscape Architects (NZILA). Formed in 1973, the NZILA has been, through its members, a strong advocate for 'landscape' concerns.[10] Similar professional organisations exist for the planners, foresters and engineers who are involved in the formation of resource policy.[11] In addition there are a number of scientific professional societies, for example the New Zealand Ecological Society, that have a particularly important role in dissemination of information among scientists, and thus influence beliefs and opinions.

c)   Land occupiers

Finally, there are several organisations representing the views of different groups of landowners, occupiers or interests. The Ngai Tahu Trust Board represents the tangata whenua, Ngai Tahu, in managing their assets. The High Country Division of Federated Farmers represents farming interests, both freehold and leasehold. The New Zealand Forest Owners' Association promotes the interests of forest owners. Each is active in the public arena regarding high country issues.

3.   Research organisations

The Craigieburn area has been used extensively for scientific field work. University endowment land and easy access have encouraged the widespread use of the area for academic research. Leonard Cockayne published extensive field notes from work undertaken at the Cass Field

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10/   The stated philosophy of the NZILA is: " The landscape reflects the cumulative effects of physical and cultural processes. The NZILA aims to foster and develop an understanding of these processes and to ensure that this knowledge is applied in such a manner as to conserve or enhance the quality of all natural resources and human values".(1982)

11/   New Zealand Planning Institute (NZPI), New Zealand Institute of Foresters (NZIF), Institute of Professional Engineers New Zealand (IPENZ).

Station[12] (for example, Cockayne, 1915). There have subsequently been major geological, geomorphological, and botanical contributions. (For reviews see Hayward, 1967; Burrows, 1977). Fears of flooding downstream in Christchurch have underpinned an extensive record of research into hydrology and slope stability (Blakeley and Mosley, 1987). A major research centre has been operating in the study area at Craigieburn Forest. The Craigieburn field station was first established as part of the Protection Forestry Branch of the New Zealand Forest Service (Holloway, 1969). For some 30 years it has been the focus of a programme of research into mountainland processes, animal control, and revegetation (Ledgard and Baker, 1988).

The implications of this research tradition are threefold. First, the area is unusually well documented, in terms of the scientific understanding of trees and their ecological relationships. Second, the research institutions have provided major focal points for the evolution and emergence of beliefs and opinions about the role of trees in the high country. Third, many of the individual scientists, consultants and advocates now involved in the issue received part of their formative training and experience in those institutions. Their current attitudes frequently reflect these origins.

4.   Public sector organisational reform

The New Zealand public sector was radically transformed during the 1980s. In this section I outline a number of the most important changes, that are fundamental to my understanding of contemporary beliefs and opinions concerning resource policy on trees and plantations in the high country.

a)   Central government

I undertook the case study interviews in 1988 and 1989. During the preceding five years, government fiscal policy had changed from a long established commitment to intervention in the economics of land use, to a market led policy.[13] Established patterns of high country land management came under renewed scrutiny, as the economic

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12/   Established by Canterbury College (now the University of Canterbury).

13/   Thus, for example, agricultural subsidies, which exceeded one billion dollars per annum in 1983-4 (New Zealand Year Book) were rapidly phased out, eliminating the existing incentives for both land development and tree planting, and removing the price support system for agricultural produce.

environment changed. The role of central government and its various ministries, departments and agencies have been redefined (Boston, 1990), and central government organisations restructured. In 1986, the multipurpose land management organisations previously responsible for Crown land in the high country, the Department of Lands and Survey and the New Zealand Forest Service, were dis-established and replaced by new agencies. The most significant feature of the new structure is the separation of functions. The Department of Conservation was given responsibility for management of Crown land for conservation. The Land Corporation manages Crown land whose primary role is agricultural production, and manages the pastoral leases in the high country. The Forestry Corporation manages production forests, whilst a new Ministry of Forestry provides forest policy, advocacy and regulation. The Ministry for the Environment was created to fulfill the role of policy coordination.

Thus many established roles and working relationships were changed or broken. The transition period was characterised by uncertainty and conflicting interpretations of new responsibilities and prospects. Since the change, new organisational relationships have been forged, frequently on a case-by-case basis. However, there were also marked continuities in personnel - many of the individuals interviewed in the case study had been previously involved in high country issues within the former organisations, but held new roles.

The significance of this record of change and continuity is twofold. My interviews were undertaken at a time when there was still uncertainty, and for some, unease, about the likely outcome of the changes. The speed, nature and radical aims of the reform challenged many established ideas and expectations, whilst the new goals were not shared by all. However, opinions and attitudes formed over a number of years, in former roles, still carried forward to some degree.

b)   Local and regional government
A second major change in public administration was taking place at the same time as my interviews. Local government reform during 1989 resulted in an amalgamation of statutory authorities, and a redistribution of roles. The main change of significance to this study is at the regional level. The North Canterbury Catchment Board, formerly

responsible for soil and water management,[14] was amalgamated with the Regional Planning Authority,[15] which has also been reconstituted. Both functions were vested in the Canterbury Regional Council, an elected rating authority. These changes came into effect soon after my interviews were completed, and so individuals were aware of the impending change but not necessarily clear as to its detailed implications.

c)   Resource Management Law Reform

The third and final major element of reform affecting the case study was still before Parliament at the time of writing, but has been preceded by several years of extensive public consultation. Resource Management Law Reform aims to amalgamate a wide range of environmental management statutes into a single statute (Ministry for the Environment, 1988b). One of the issues that has received particular prominence during the public debate has been the role of private property rights in environmental management.[16] It is particularly relevant to the management of trees and plantations in the high country in two respects. First, in the determination of the mechanisms and responsibities for controlling wilding tree spread. Second, in the determination of legitimate rights to influence decisions to plant trees, and of their associated responsibilities. These issues were mentioned by respondents in many of my interview transcripts.

It is clear from the preceding sections that my case study investigation took place during a period of extensive, and in New Zealand, largely unprecedented organisational change. I believe this worked to my advantage in several ways. For individuals, the changes meant that everyone involved in the management of trees and plantations had been forced to re-examine their own roles and attitudes, which in turn provided a plausible, topical and for some a controversial focus for an in-depth interview. This helped me in my underlying task of investigating 'landscape' usage without signalling my particular interest. It also

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14/   Under the 1967 Water and Soil Conservation Act.

15/   Responsible for Regional Planning under The Town and Country Planning Act 1977.

16/   See, for example, Economics meets Environment: Proceedings of a series of seminars, Environmental Council 1987.

meant that beliefs and opinions on land management issues in general were well developed.

At a broader level, the overall process of reform has highlighted the diverse nature of the interests involved. A significant factor during the reform was a concern, by some, that sectoral interests had 'captured' state agencies. The separation of functions was intended to make such interests 'transparent' (Deane, 1986). One effect of this was to increase the political mobilisation of interest groups (for example, conservation groups), and to force them to articulate their aims. This helped me by bringing opinions more into the open, thus providing a more distinct backdrop against which to analyse 'landscape' usage.

In summary, the role and management of trees and plantations in the high country is a resource policy issue that has an established history of research, practice and belief. It has also been the subject of changing ideas and perceptions (O'Connor, 1981). It is highly tangible, giving ample opportunity for expression of 'landscape' concepts, and involves diverse and often vocal sectoral interests. In the next chapter I present the findings of my interviews with a range of players involved in the issue.

CHAPTER FIVE: ANALYSIS OF CONTEMPORARY FRAMES OF REFERENCE

A. INTRODUCTION

In this chapter I present my analysis of contemporary frames of reference concerning trees and plantations in the high country. It is based upon fifty eight in-depth interviews with key players involved in the issue. The purpose of the chapter is to provide a contemporary context for my investigation of contemporary 'landscape' usage. As I explained in Chapter Three I have adopted the concept of frame of reference as the way of describing this context. This chapter has two main sections. In Section B, respondent profile and methods of analysis, I outline the characteristics of my respondents and briefly describe the methods I used in undertaking and analysing the interviews. In Section C, common frames of reference, I present the results of my analysis, in the form of seven common frames of reference. Each is illustrated with extracts from my interview transcripts, and summarised in a final table. I discuss details of my interview methods in Appendix II.

B. RESPONDENT PROFILE AND METHODS OF ANALYSIS

1. Selection of respondents

I undertook the interviews in two stages, with an initial pilot study of fifteen respondents, followed by the main interview programme. I selected the first group on the basis of an analysis of the roles and backgrounds of the speakers in the 1988 seminar on Trees in the High Country (Gregory, 1988). I approached representatives of each interest group as key informants. I then narrowed the geographic focus of my study (as discussed in Chapter Four), and selected a further forty-three key informants from the different interest groups and organisations involved in the Craigieburn area.[1] Some were chosen because of their formal role at different levels in a

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1/ The final number was pragmatic. There were a number of individuals that I had contacted (for example, several runholders), but for whom circumstances prevented an interview being completed. Overall, however, I felt that I was approaching theoretical saturation (Bertaux, 1981) - the point at which additional interviews were adding little to my conceptual understanding.

statutory organisation; some by virtue of property ownership, use or management; some for their advocacy roles; and the remainder in the light of issues and recommendations emerging from the already completed interviews. (See Appendix II for a discussion of sampling methods).

2.   Respondent profile

The majority of respondents were male, European and between 30 and 50 years old. I made no attempt to select a 'representative' sample by either culture or gender. The numerical dominance of middle aged, European males reflected the distribution of positions of responsibility at the time of the interviews. (Tables Two and Three).

Table 2 : **Gender and culture of respondents**

Male	54	European	54
Female	4	Maori	4

Table 3 : **Age of respondents**

Up to 30	1
30 - 39	17
40 - 49	27
50 - 59	10
60 and over	3
	58

I have classified these respondents by role, shown in Table Four:

Table 4 : **Roles of respondents**

Land managers	7
Public administrators/policy planners	16
Consultants	9
Scientists	8
Politicians (local and central)	6
Advocates (for the tangata whenua and for conservation and recreation interests)	12
	58

This classification indicates the characteristic roles of respondents. All are 'elite' players with an active interest in the issue of trees and plantations. I did not seek any 'popular' opinions.

3.   Interview procedures

I adopted a 'funnel' technique for the interviews (Oppenheim, 1966), that progressively narrowed the focus of our discussions. Initial contact was by letter, introducing my interest in trees and plantations in the high country, followed by a phone call. I explained that I was undertaking research into concepts and attitudes used in resource policy, but made no mention of 'landscape'. At the start of the interview, I introduced a series of general issues into the discussion (see Table Five) but still made no references to 'landscape'. If it was mentioned by respondents I treated it as a normal part of our discussion. At a midpoint in the interview I referred explicitly to 'landscape' as a concept of particular interest to me, and asked a number of related questions. Finally, I encouraged respondents to return to any aspects of the overall topic that they felt had not been adequately covered. I openly recorded the whole interview by prior arrangement.

Table 5 : **Interview themes**

Phase 1

1. Summary of personal background of respondent, and of their involvement with the high country.

2. Respondents' perception of the main issues associated with trees and plantations in the high country.

3. Respondents' attitudes about the rights, responsibilities, practices and resources for management of trees and plantations in the high country.

4. Respondents' attitudes about the processes of decision making.

5. Respondents' ideas about the nature of the information needed for management.

Phase 2

6. Respondents' understanding of the 'landscape' aspects of the issue, and attitudes towards rights, responsibilities etc. concerning 'landscape'.

Phase 3

7. Respondents' ideas about the future of the high country.

8. What values are important in influencing respondents' attitudes?

9. Any individuals, articles, events of particular significance in influencing attitudes?

10. Any key opinion leaders I should talk to about the issue?

11. Any points we have missed that are important to the respondent?

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4.   Analysis procedures

My approach to the analysis of the interviews was interpretive (see Appendix I for a general discussion of 'interpretive' approaches to research). There were three stages. In the first I analysed the individual frame of reference of each respondent. I started by replaying the tapes of the interviews and paraphrased the entire interview on large sheets of paper. This provided me with a general overview of the interview. I then transcribed in full the passages and sections that appeared to express the main ideas, concepts and relationships used by respondents to express their attitudes about trees and plantations. Finally, I developed a summary diagram (Figure Twelve). The approach draws particularly on Jones (1985b) and Antaki (1988).

Figure 12: **Summary diagram of a personal frame of reference**

HIGH   TREE
COUNTRY   SPREAD
IMAGE   ↓
                                            MANAGEMENT
                                            ISSUE
                                              ↓
        VALUE   +   IDEOLOGICAL
        CONFLICT   CONFLICT
        CONCERNING   CONCERNING
        OUTCOMES   USER RIGHTS

                    NEED FOR   BOUNDARY
                    CLEAR RULES   ←   PROBLEMS
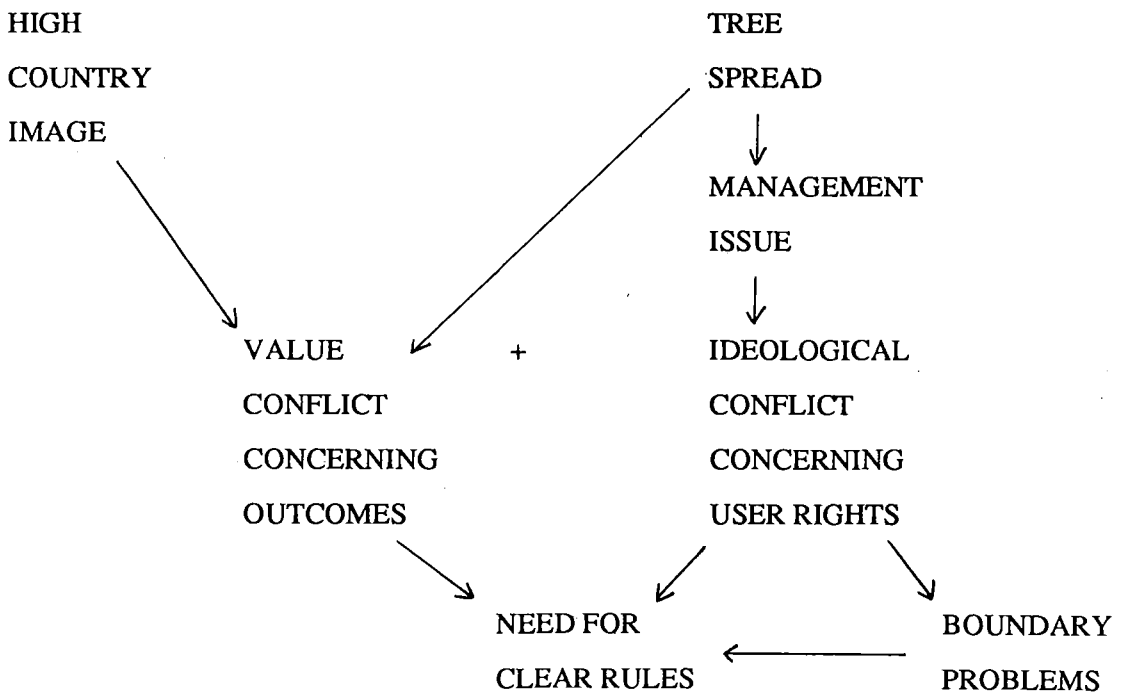
In the second stage I grouped these responses by transferring the summary diagrams to cards, and then sorting and re-sorting the individual frames of reference to identify the cards that showed common patterns of ideas and concepts. I have described these patterns as common frames of reference (see Chapter Three). In the third stage I returned to the transcripts and coded each one

in terms of a number of basic parameters (for example, age). I also summarised the attitudes expressed on certain questions (such as how the issue was defined).[2]

Finally, I used these parameters and summary attitudes to analyse the cards in each common frame of reference, in order to identify the distinctive features of that common frame. The next section presents my findings.

C.   COMMON FRAMES OF REFERENCE

I have identified seven distinctive common frames of reference in my interviews. They are listed in Table Six, below :

Table 6 : **Classification of responses**

Common frame of reference	No. of respondents in this category	
1. Multiple use management	17	(29%)
2. Conservative management	8	(14%)
3. Consensus by administration	4	(7%)
4. Conservation by control	9	(15%)
5. Individual improvement	9	(15%)
6. Balance of local interests	5	(9%)
7. System design	6	(10%)
	58	

2/   The basic parameters I used were : age, discipline or training, level of formal education, functional role, cultural origin, and degree of familiarity with the high country. The attitudes I summarised were : characterisation of the overall issue, stated preferred outcome, preferred role of government, and perspective on environmental management (after Constantini and Hanf, 1972 and O'Riordan, 1981).

Each of these common frames is described below, using extracts from the interview transcripts to illustrate the main characteristics of each frame. I also include a summary profile of the individuals in each category, and my outline interpretation of the motivations and sources of the attitudes expressed. The validity of my categorisation is critically examined in Appendix IV.

1. Multiple use management

This is the largest and most complex category. There were two distinctive features of the seventeen responses that led me to describe them as having a common frame of reference. First, all respondents expressed a strong belief in the need for active government leadership in the management of trees in the high country. Second, they also all expressed the view that there was a major role for trees and plantations in the high country as part of a multiple use regime.

Their belief in the need for leadership arose out of a perceived lack of clear direction in current practice:

*   *There isn't a forum or an organisation that is charged with the responsibility for sorting out these kinds of issues.*

*   *Territorial government has failed badly in this area.*

They also believed in the need for some level of government intervention in land use management that involves trees :

*   *I think forests should be looked upon as an important national resource - that inevitably means there is a role for Government.*

*   *I think there does have to be some overall degree of regional overview.*

There was a general belief in the opportunities for, and benefits from trees and forestry in the high country.

* *There is a golden opportunity for forest development in selected parts of the high country. There is enormous productive potential with the right kind of species.*

* *It will be seen as more economic, sensible and environmentally sensitive to plant trees.*

Trees were seen as a natural and even essential part of the high country environment:

* *We need a balancing up act, getting timber back on those naturally forested slopes.*

Trees were seen as part of a long term goal of sustainable development.

* *Trees are a vital element in sustaining long term production.*

* *Sustainability is at the core of all Maori resource use values.*

* *I'm saying we've got to plant more trees for our survival.*

Many of the respondents explicitly linked sustainability to concepts of integration and multiple use:

* *By integrating trees into land use, shelter in plantations or suitable blocks where that was appropriate... in a way that was potentially much more sustainable than the current pastoral lands... everything says to me, that has got to be a better way of using land...*

* *There is tremendous scope for long term investment in forestry as an integral part of high country land use.*

Their concept of multiple use included conservation, and there was a reaction against the idea of separating conservation from development.

* *[I support] the concept of multipurpose management, of wise land use, of sustainable development, of conservation in the sense of sustainable use and management of resources.*

* *Development with a capital D... is dirty with a capital D, and on the other had we have conservation which is clean with a capital C... and there is nothing in the middle. It doesn't work.*

* *Yes, I am an improver, but I wouldn't like to think that I'm not very strong on conservation.*

* *This all or nothing approach - I think it's disastrous.*

Overall, though, the predominant view was that improvement in economic and biological productivity was the major goal for the high country, and that trees had a major role to play in this. Respondents were confident that wildings could be managed. Those with this common frame of reference were characterised, with only two exceptions, by tertiary qualifications and overseas experience. However, I have also identified three distinctive sub-groups - natural scientists and forestry consultants, environmental resource planners, and those with a Maori perspective. Each had slightly different reasons for adopting their outlook.[3]

3/ The natural scientists' and forestry consultants' commitment to tree planting appears to stem in part from the original revegetation mission of the Protection Forestry Branch, in which most had been involved earlier in their careers. They were also informed by overseas experience and broader environmental concerns. As ideas about the nature and extent of erosion have changed in recent years, and as government reorganisation and cost recovery has also required more explicit justifications for research, they have redefined their research mission. These respondents have retained a basic commitment to planting in the mountains, but have had to develop new perspectives on the potential of trees. They therefore linked tree planting and productivity to a broader context of global environmental management. The recent switch of government emphasis away from revegetation and high country issues was interpreted as a lack of leadership, because it allowed the opponents to tree planting to win by default.

The approach of the seven scientists and forestry consultants overlapped significantly with a second sub-group of seven environmental resource planners. These respondents emphasised the more general goals of sustainability and optimum land use. They believed that trees offer biological and economic potential, and thus make up part of a possible multiple use programme. The recent reorganisation of governmental agencies appeared to them to threaten opportunities for coordination by abolishing the former multiple use land management departments that provided funds and support for integrated planning projects. Thus the issue of trees provoked concern amongst the resource planners about the future of land management in general, and their own roles in particular.

2.   Conservative management

These eight respondents displayed a common frame of reference that shared with the 'multiple use management' frame a belief in the need for active management of trees in the high country.

* *I'm disappointed there is no overall strategy, or policies, or plan even.*

* *I do feel strongly that (trees) should be there by intention, not by accident.*

However, they placed a greater emphasis upon a conservative approach to change, with only a modest overall role for trees in the foreseeable future. This was expressed as a desire for a 'balanced' outcome:

* *I seek balance...*

* *It means having to try and balance up short term perspectives with long term perspectives.*

However, it became clear that their concept of 'balance' was more conservative than the views of the multiple use managers:

* *I am suspicious of extreme views.*

* *I think I would be quite happy to see small pockets of trees and plantations if they were blended into the landscape... and I would certainly like to be sure there were going to be areas of native tussock, the tall tussock protected for all time.*

Continued from previous page
> The third sub-group of three individuals expressed a Maori perspective. They regarded trees and forests as having a traditional role of 'clothing' the land, and maintaining water quality. For them, tree planting was seen as a way to renew the former forest cover. Notably, exotic trees were seen as a quite legitimate way to do this. They sought and anticipated an increased role in high country management. The Government's apparent withdrawal from active promotion of planting by the abolition of subsidies and break up of the Forest Service was seen as a 'betrayal' of Crown stewardship. They believed that an increased Maori role in high country management could play an important part in re-establishing responsible management.

They believed that there is a public interest in the high country and that this means some intervention is both essential and justified:

* *A lot of New Zealand is under the responsibility of [government] land organisations - they are the custodians for the people of New Zealand.*

* *The responsibility ultimately lies with County Councils or managers of Crown land.*

All the respondents with this common frame displayed a measure of ambivalence on a number of issues:

* *I have a whole lot of mixed thoughts and feelings.*

* *In many respects I'm a purist... I don't like exotics... but in other respects I see the high country as being very modified... just because an exotic tree is more visible it's not terribly different from exotic grasses.*

* *If you have a continuum, I can oscillate.*

The eight respondents in the 'conservative management' category had diverse roles in advocacy, science, consulting and politics. It gathered in a number of individuals who have strong personal attachment to the existing 'naturalness' of the high country. All except one had tertiary qualifications in an environmental subject, which also made them aware of the potential for tree planting. They were therefore willing to accept the establishment of exotics in some settings, but expressed a concern that wilding spread could affect conservation values by invading tussock grasslands. As a result they placed particular emphasis upon the need for good and careful management of any tree planting.

3.   Consensus by administration

For the four respondents in this category, the central issue regarding trees and plantations in the high country was the need to follow correct procedures, and to make the reasons for decisions explicit:

* *I wrote a report - I said to myself everything in this is going to be backed up; all statements were referred and justified.*

* *There's a paper, document, the reasons for everyone to see - that's important.*

* *... a due process thing.*

They expressed a presumption for some measure of intervention:

* *If you want a forest you design a forest, you don't let it happen.*

* *(Trees are) all right... as long as it's controlled, deliberate, not accidental - deliberate decisions.*

They had a strong regard for legal rights - both individual property rights and the rights of the Crown:

* *You've got to look at people's contractual rights, I think trees have a place in the high country, but they've got to be planted responsibly, to respect the rights of adjoining land owners.*

Their preferred outcome was a consensus in which all views are heard and balanced:

* *I like to hear all sides of the story, in the presence of everyone... to get to the root of the matter.*

*   *I respect the rights of conservation groups to feel upset if their values are threatened -*
        they must be taken into account.

The individuals who shared this common frame of reference all worked for central government, and considered their position to be impartial, unlike others:

*   *I'm always nervous about local authorities getting in there... unless you get objective*
        people, they usually have an axe to grind.

These respondents all formerly worked for the Department of Lands and Survey and were trained in public administration. For them, trees and plantations in the high country was a messy problem, with a long history, that needed resolution. However, they defined it primarily as a social problem, that arose from the conflicting values and goals of different interest groups.

4.   Conservation by control

The nine individuals sharing this common frame of reference defined the issue of trees and plantations in the high country as a need to conserve the indigenous ecology and identity of New Zealand. They expressed strong views on the need for central government intervention to achieve this conservation goal. Ironically, access to the high country was also characterised as a symbol of individual freedom. They expressed a concern to retain the existing character of the high country:

*   *What effectively pines do is introduce a forest landscape to an otherwise open savannah*
        or grassland landscape. [It's] probably an issue because of the landscape elements
        New Zealanders feel are important.

Exotic trees were seen as a threat to this 'natural' character:

*   *My basic objection is that I don't find exotic timber plantations attractive, visually,*
        because they're unnatural.

*   *I've nothing against exotics, but they don't belong in the particular environment. They are foreigners here, like deer and possum.*

*   *It's unnatural, that's the issue.*

These respondents clearly distinguished between managed plantations, and wilding trees. Their opposition to the former arose from a lack of confidence in the ability of landowners to manage and control the spread of exotic trees from plantations, once they are established:

*   *I see fundamental problems in ecological terms with the uncontrolled and possibly uncontrollable spread of exotics over everything up to 5000ft.*

*   *Wherever you put plantations in the high country you will eventually have a wilding problem. People say it's a matter of management - that's a load of codswallop.*

*   *The objection is not to exotics per se, not to plantations per se, but it is to the fact that they can't be controlled once planted.*

Most of the individuals had strong feelings about the active promotion of tree planting in the high country. For example:

*   *What you've got is a self-serving group of forestry scientists... twisting the arms of high country farmers promising all sorts of riches in order to get them to plant pine trees.*

*   *It's being promoted by self serving public servants to justify their existence.*

The outcome they preferred was to retain as much unmodified land as possible:

*   *The purest landscape is the unmodified landscape.*

*   *I wouldn't say that it (New Zealand) hasn't been modified, but... there's a strong case for keeping a substantial land base in an unmodified situation.*

Several individuals expressed views that revealed a strong sense of responsibility for nature:

* *I come here (as) the speaker for the (native) trees - I guess a lot of environmentalists think the same.*

* *One is continually humbled by the adaptions one discovers amongst New Zealand indigenous plants and animals... This humility comes through... almost a reverence for the marvels of nature... I suppose it's a philosophy of Gaia.*

They also had strong views on the public interest in the high country:

* *There should be a right of public objection... particularly on land of public value like the high country.*

For several, the right of access to the high country symbolised the freedom of the individual:

* *I'd like to think that access to some areas is New Zealanders' as of right. Mainly because of the nonsense that goes on when it's not.*

* *The high country is the last stand... the last stand of nature, of the natural environment. Where they can stretch their legs, where they can wander about without being bawled out.*

These respondents tended to distrust the motives and actions of individual owners, and of local authorities:

* *High country management shouldn't be left to individuals because it is too fragile and too vulnerable.*

* *Local government is too close to the scene...*

* *Malvern tends to rubber stamp - the county that never says no.*

They expressed a preference for some degree of central government control:

*   *Central government... is less close to the piggybank, more objective.*

This common frame of reference appeared to represent two sets of interests. It included advocates from recreational and conservation groups who seek to maintain the 'familiar' character of the high country. It also included advocates for biological conservation, whose scientific perspective was frequently overlaid by a strong personal attachment to tussock grasslands. Exotic trees within tussockland became an issue for several reasons: there was growing realisation of the potential for wilding spread; there was an increased understanding of the conservation and cultural values of tussocklands; and it was a very symbolic conservation cause.

5.   Individual improvement

These nine respondents defined the issue of trees and plantations in the high country in terms of the opportunities they presented for improvement of existing land use practice. They were strongly individualistic, and resented attempts to control their perceived freedom of action. Trees are regarded as beneficial:

*   *Trees on that sort of country can't do anything but good.*

*   *It seems to me that where you want to live, or where you want to have human habitation, there is a very good reason to have shelter and amenity from trees. People like to have trees around them and feel that a place is barren if there are no trees.*

*   *Trees are the best asset of everything... shelter, draw the rain, investment.*

On freehold land, they believed that it is the individual landholder's right to choose to plant trees, and their responsibility to ensure that the outcome is beneficial...

*   *(On) freehold basically you do what you want to do, but I wouldn't like to see trees spread off freehold land onto somebody else's place.*

*   *I must say that in our area if it was all freehold after we thought we had taken a responsible attitude to it all and we had employed landscape architects and we had listened to people's comments, I really feel that we as landowners should be free to get on with it.*

However, this group did not express any desire for extensive afforestation, or envisage any significant role for planting on leasehold land.[4] Nonetheless, as on freehold land:

*   *If you planted them, it should be your responsibility.*

The public and local authorities may have a role but were not expected to exert control over the final decision:

*   *There has obviously got to be a mechanism for a few checks and balances.*

*   *Quite happy to have comment, but if they didn't like what I was planting I wouldn't be very happy about it.*

*   *I think that the County have just got to be hell of a good listeners - I don't think they should meddle too much.*

Indeed, for most of these respondents, the advantages of trees were considered so obvious that it was a surprise to them that there was an 'issue' at all:

*   *I went back for this meeting because I couldn't believe there was an issue.*

The nine respondents were all either landholders or their technical consultants. All were familiar with the high country. Their attitudes reflect the fact that trees and plantations have long been an integral, but minor part of pastoralism in the high country. They offer benefits in terms of shelter, and also serve to domesticate the areas around homesteads. The relative significance of trees for the individual relates to the stage of development of the station (Murray, 1986). Trees and

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4/   See Murray (1986) for a more extended discussion of similar attitudes.

plantations constituted an issue for land managers when <u>either</u> someone wanted to influence their freedom of choice, <u>or</u> wilding spread threatened grazing or created a fire risk. Only two of this set of respondents had some form of tertiary qualification; they were both consultants.

6.   Balance of local interests

Like the 'conservative managers', these five respondents defined the issue of trees and plantations in the high country in terms of a desire for a 'balanced' outcome:

*   *Whatever the subject, we'll always have two extremes - the statutory function is to hope for a considered middle road.*

*   *It's a balance, a balance... the areas big enough to achieve everybody's aims.*

They believed that everyone has a right to contribute an opinion:

*   *I'm prepared to listen to everybody's argument.*

But there was a strong feeling that the final decision should lie with <u>local</u> people:

*   *You can take it back to the basis of people saying, "we pay the rates, surely we should have the major input into what is decided in our area.*

*   *I asked him - are you telling me that the local people do not have the ability to make decisions on what should happen in their local area, and he said, straight up, to the committee, "no, they don't"... that's just unreal, to make a statement like that in front of people who have lived and loved the land - this is where the whole system falls down.*

*   *It's your lay people against your technical people.*

These individuals were ready to accept gradual change, and were generally sympathetic towards modest plantings:

*   *As a local person you tend to live through change, and because of that become a little more adaptable.*

*   *These people live there and they're doing it for a reason - you learn to live with it.*

*   *It needs to be done conservatively but positively.*

They were all based locally and were familiar with the high country. Two of the five had undergraduate qualifications. As locally elected representatives, or their advisors, they were sympathetic to the landholders and managers, but conscious of their responsibility to accommodate other interests. For them, trees and plantations represented an issue that exemplified the tensions between local interests and outsiders - both regional and national government, and urban lobby groups.

7.   System design

For these six respondents, the main issue concerning trees and plantations in the high country was the need to develop a suitable system of decision making:

*   *What we need to do is to design an evaluation system that allows us to weigh it up.*

The main incentive appeared to be the challenge of problem solving:

*   *(I) do regard planning issues, spatial issues, geographical issues as an area of intellectual interest.*

*   *Applying a rigorous process of problem analysis, evaluation, recommendation....*

Where they became actively involved in an issue itself, these respondents viewed the process as essentially one of conflict resolution:

*   *I'm more interested in seeing both sides of the equation - there are winners and losers all the way.*

*   *Agreement, persuasion, education...*

There were two further distinctive features in this common frame. First, there was a strong belief that the definition of property rights is fundamental to the design of a satisfactory system:

*   *It's important to identify the ownership of resources.*

*   *There are two ways to look at it - public and private rights.*

They believed that property ownership can be beneficial to conservation and can play a greater role in environmental management:

*   *Landowner commitment to conservation grows in accordance to their property rights.*

*   *Place responsibility nearer the people who know it, feel it, and get benefit from it... I'm quite enamoured by that.*

Second, and somewhat ironically, these respondents also had strong views on the appropriate types of outcome:

*   *If I went into the field and found that the way it appeared on the ground was different to what had been envisaged... I would go back and question where things went wrong and try to ensure that the wrong solution didn't happen again.*

They also had views upon who should influence the outcome:

*   *The problem is of course, the extent to which public authorities and bureaucrats should interfere with the ability of landowners to plant the type of trees they want to.*

*   *You're touching right on a nerve end about how we allow values in our society to be*
       represented in processes... it's real middle class capture stuff... a few articulate people
       with enough money to capture the process and put views over strongly.

The six respondents all had tertiary qualifications, and were involved in managerial or political roles. Only two indicated any significant personal attachment to the high country itself. These respondents were the architects of the recent public sector reorganisation. For them, trees and plantations in the high country were a minor issue, but presented an opportunity, in discussion, to explore and work through broader issues of the environmental management of lands in which there is a public interest.

8.   Summary

The following table summarises the main features of the seven common frames of reference I identified (Table Seven). It shows the characteristic ways in which the individuals that I classified into each common frame talked about the issue of trees and plantations in the high country. The criteria (issue definition, role of government) are those discussed earlier.

I have used O'Riordan's (1981) classification of attitudes into those which have a technical orientation, and those with an ecological orientation. Clearly, this characterisation is of a 'broad brush' nature, and disguises many individual variations.

I also analysed the common frames in terms of my respondents' personal characteristics (age, discipline, level of formal education, functional role, institutional base, cultural origin and degree of familiarity with the high country). The only clear patterns that emerged are shown in Table Eight.

5.	Individual improvement	Opportunity for improvement	Moderate tree planting for shelter and economic production	Consultative only	Technocentric
6.	Balance of local interests	Need for decisions that express a balance of local interests	Acceptance of modest change brought about by local decisions	Local government as a mediator	Predominantly techno-centric
7.	System design	Opportunity and need for reform	Conflict resolution and greater use of property rights	System design and maintenance only	Predominantly techno-centric

*　　Based upon O'Riordan (1981).

Table 8: **Respondents' characteristics by common frame**

Common frame of Reference	Typical age	Level of formal education	Role	Institutional base	Cultural origin	Familiarity with high country
1. Multiple use management	40's	Mainly postgraduate	Scientist Consultant Policy planner Advocate	Research institutes Regional government Central government Property claim	European/ Maori	Mixed
2. Conservative management	30's	Mainly postgraduate	Advocate Scientist Consultant	Regional government	European	Mixed
3. Consensus by administration	40's	Diverse	Public administrator	LandCorp (formerly Lands and Survey)	European	Mixed
4. Conservation by control	40's	Diverse	Advocate	Urban lobby group	European	Familiar
5. Individual improvement	40's	Non-tertiary	Land manager	Property rights	European	Familiar
6. Balance of local interests	40's	Non-tertiary/ undergraduate	Diverse	Local government Local interest groups	European	Familiar
7. System design	Late 30's	Postgraduate	Politician Policy planner	Central government	European	Unfamiliar

This chapter has presented my analysis of the frames of reference of the players in my case study. They have been presented as seven common frames of reference, each with a distinctive combination of attitudes about land management issues involving trees and plantations. In the next chapter I move on to analyse 'landscape' usage in the case study.

CHAPTER SIX: ANALYSES OF 'LANDSCAPE' USAGE IN THE CASE STUDY
INTERVIEWS

A.   INTRODUCTION

This Chapter presents the results of the four analyses of 'landscape' usage that I carried out on my interview transcripts. They each deal with different aspects of meaning and use. The detailed procedures of the interviews and my analyses are discussed in Appendix II.

I started with a 'Plain Language' analysis. This applied the classification of 'landscape' meaning that I had developed from my literature review[1] to each of the interviews. Two problems emerged. First, a significant number of players appeared to adopt plurality of meaning within the interview. I resolved this by introducing a 'plural use' category. Second, the meaning of specific examples of 'landscape' use was occasionally unclear. I addressed this by adopting a provisional categorisation, and then cross checking my classification with subsequent phases of analysis, such as my analysis of metaphorical structure.[2]

My second analysis identified the metaphors used to describe 'landscape'. Lakoff and Johnson (1980:56) claimed that "most of our normal conceptual system is metaphorically structured"; that is, most concepts are partially understood in terms of other concepts. Many of these metaphors are physical (for example, 'feeling down', or 'on the up and up'). Others are more complex (such as an argument being expressed as war - for example, 'gaining ground'). They allow us to understand different types of experience, and to develop new categories of experience. An analysis of the metaphors of 'landscape' therefore provides insight into the way the word is being used to conceptualise real world issues. Analysis of metaphor can also be useful when the intended plain language meaning of 'landscape' is not clear. For example, it can differentiate

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1/   Presented in Chapter Two.

2/   This 'problem' of classification does, of course, express one of the underlying factors that stimulated my initial interest in the topic.

between 'landscape' as a land surface and 'landscape' as a picture. I therefore analysed all the phrases that used 'landscape', to identify their implicit metaphorical structure.[3]

For my third analysis, I investigated the symbolic meaning of 'landscape' - for example, the way it is frequently used to signify naturalness. The method I used was based on a semiotic approach called Loose Belief Analysis (Manning, 1988). In this I looked for meanings and concepts that were consistently associated with 'landscape' each time it was used by a respondent (for example, natural features, indigenous etc.). I then reclassified them into groups which shared a common theme (for example, naturalness). This provided me with a deeper understanding of the meaning of 'landscape' for each respondent.

Fourth, I examined the function of 'landscape' in conversation. The purpose of this was to identify variations in language use within a particular individual's account.[4] I used a method developed in discourse analysis (Potter and Wetherell, 1987; Gilbert and Mulkay, 1981). First, I identified the role that landscape played in the respondents' explanations: whether it was an 'active' part of their frame of reference, or whether it was 'passive', that is, needed to be prompted. Second, I looked in more detail at variation within individual accounts. This was labour intensive and I did not have the resources to analyse fully all fifty-eight interviews in this way. I therefore selected an example from each of the 'common frames', fully transcribed it, and looked for differences in 'landscape' usage in different parts of the account. I then tried to identify the functions and consequences of any differences - why should a player use 'landscape' in one way in this sentence, and in a different way two paragraphs further on? Potter and Wetherell described this as an iterative process of checking and recoding in order to separate out distinctive repertoires of usage - that is, different ways of using 'landscape'. The transcript I selected from each common frame was the one that approximated closest to the overall characteristics of that frame. I then referred to the remaining partial transcripts (the majority of the interviews) in search of evidence for or against the patterns of variation I had identified in the fully transcribed interview.

3/ The categories I used were derived from my earlier classification of 'landscape' meaning. For most plain language meanings, I could identify corresponding metaphors (for example, 'landscape' as land was typically expressed as a surface metaphor). I checked and recoded all the categories following the analysis to ensure that my interpretation was consistent.

4/ The three preceding analyses, by using general classifications, focused on differences between accounts.

The results of my four 'landscape' analyses are presented as summary tables and illustrated by quotations from the transcripts. As with the presentation of the common 'frames of reference', the quotations I have selected are intended to serve as illustrations of different types of usage.

B.   PLAIN LANGUAGE ANALYSIS

I identified five meanings of 'landscape' in widespread use, with a number of minor usages.

1.   Dominant meanings

The meanings most frequently used were 'landscape' as appearance of land, 'landscape' as physical setting, 'landscape' as surface of land, 'landscape' as environment, and 'landscape' as planned or improved land (see Table Nine):

Table 9 : **Plain language meanings of 'landscape'**

	No. of respondents who used this meaning	% of total (n = 58)
Appearance of land	52	90%
Physical setting	35	60%
Surface/landform	31	53%
Environment	25	43%
Planned or improved land	15	27%

'Landscape' as the appearance of land was clearly the most common usage - referred to by fifty two of the fifty eight respondents. Some were quite explicit when questioned on 'landscape' issues:

*   *Landscape? I'm referring probably to what is seen... to the way it looks.*

*   *Landscape is how it hits the eye.*

More typically, the meaning of 'landscape' as appearance was implicit.

*   *Forestry can be very significant in terms of landscape effect, and as you'll recall from the seminar, my concern is far more with the aesthetic effect where the milling and harvesting took place.*

'Landscape' was also widely used to refer to the type of physical setting, the character of an area:

*   *If you're talking about the upper Waimak-Craigieburn area it's an open space landscape... to me that's the characteristic landscape of the area...*

*   *East of that is a dry landscape of tall tussock, west of it is a beech forest landscape...*

*   *[Landscape is] people's conception of the whole area - part of the setting, really.*

It was also extensively used to refer to the surface of the land - often as a metonym for landform.

*   *Landforms, landscape are important across the nation. (We) can have a landscape issue if we think as a society that we want to have a museum of landscape forms.*

*   *What comprises the landscape, or landform as it exists now?*

A significant number used 'landscape' to refer to environment:

*   *Man has imposed himself on the environment, and it's a matter in what manner he's done that - whether it's in sympathy with the landscape, or has he said, I'm the boss and the landscape will conform the way I want it.*

*   *My understanding of landscape is that you... look in very broad terms about landscape issues, not your aesthetics, are looking at the environmental whole, which includes landform, geographical features, natural ecosystems that are on the land.*

Finally, 'landscape' was commonly equated with planned improvement, often in the form of 'landscaping' (and occasionally 'landscaper'). Fifteen respondents suggested variations on the following:

*   *I'll go along with landscaping, if it can be aesthetically beautiful, fine...*

*   *Landscaping is a way of rehealing the world, because all the bush has been removed.*

2.   Other meanings

There were a number of other less common usages. Nine respondents used 'landscape' to imply an area of land:

*   *...because they've got a landscape which is reasonably productive on a broad scale they can just keep picking away at it...*

*   *...within these landscapes, particularly if you're talking of the Waimak, there are large chunks of country that are capable of being very productive...*

Eight of those who used 'landscape' as environment also linked it with the idea of a system:

*   *The land use has to fit the land systems, which makes up the landscape ultimately.*

*   *You've got to look at things in terms of the landscape - the valleys are just as much a part of the mountain system.*

Although a significant number of respondents used a pictorial metaphor for 'landscape' (Section C, following), only five of them referred to 'landscape' explicitly as a picture. For example:

*   *The artist very often sees things - Doris Lusk was a painter - she may not consciously do it - but you see a lot of things coming out in her painting - some of them show a surprising ability to show the distinctiveness of New Zealand landscapes.*

Five others referred to the image of the 'landscape':

*   *It's a landscape issue because planting of trees, their location and distribution, can affect the image of the landscape.*

It was not uncommon for respondents using 'landscape' as the appearance of land to also refer to 'landscape' as being an individual's perception of land - something that was entirely in the mind. Twelve gave variations on the following:

*   *I think landscape is a perceptual thing, something that you live within yourself, through many circumstances.*

*   *I suppose it's attached to this eye of the beholder - this individual assessment and acceptance, and just differs with every person - because it's not based on anything factual.*

This position was frequently associated with an emphasis upon the individuality and subjectivity of 'landscape' judgements (see Section D for a further discussion). Eight respondents extended 'landscape' to imply the overall experience of the environment:

*   *There are different aspects of landscape - the detailed part of experience of being in a forest - to the broader thing, the Mackenzie Country with its wide expanse and tussock cover.*

Very few respondents explicitly recognised the idea of 'landscape' as a symbol. One who did, put it like this:

*   *Landscape involves place, place involves name, history, heritage, use, association... and that.... is mightily important.*

Sixteen respondents make explicit reference to landscape architecture.   Most of these also referred to 'landscape' as an activity.[5]

*   *Landscape is a sort of distinctly creative activity.*

*   *(I have) a strong landscape and civic design interest.*

Five respondents, all people who had been exposed to a range of usages of 'landscape' (for example, planners) explicitly qualified their understanding of 'landscape' by referring to it as a concept, or an idea:

*   *Landscape is a difficult concept - I find it difficult to deal with.*

*   *I'm not sure I really understood that - not very clearly, it's rather an amorphous concept.*

3.   Plurality in meaning

I also found many examples in the transcripts of plural usage by individuals. In total, thirty two respondents (55%) used widely divergent meanings (in the sense that they use 'landscape' to describe for example, both appearance of land and a system). Several people acknowledged this plurality explicitly:

*   *[There is] a narrow and a wide version. Narrow is just the visual impact, the wide one is the ecosystem linkages.*

        [Self: So landscape for you is the physical environment?][6]

5/   Chapters Nine to Eleven include discussion on the relationships between 'landscape' usage and the professional activity of landscape architecture.

6/   This question was a request for clarification following an extended discussion on the respondent's belief that New Zealanders tended to adopt a small scale urban concept of 'landscape', whereas the respondent thought of it as regional character and landform.

*   *On a large scale - it's a scale thing as much as anything. In the Anglo Saxon, my perception is it tends to be mixed up with detail <u>within</u> the landscape. To me it's a broader thing.*

Some were able to trace the development of their plural understanding. One respondent, questioned on whether he had always had his current understanding of landscape as 'quality of environment', or whether it had changed since he started his present job, replied:

*   *[My understanding] would have been narrower then in the sense that I would have seen landscape in more physical terms...*

He assigned the shift to the influence of the 'landscape' profession:

*   *It's the profession that's done this.*

Another respondent was able to trace her expanded usage of 'landscape' back to a contact with landscape architecture during her university education:

*   *[I] met people who were into landscape architecture - made me aware of such a discipline. Certainly that's where the idea of landscape being more than the visual, of being the whole environment - I think that's where it came from.*

I examine this connection between 'landscape' and landscape architecture in Chapters Eight and Ten. Most people, however, did not appear to be aware of their plural usage or of the sources of their understanding. I will explore this evidence of 'unconscious' shifts in usage in more detail in Part E.

In summary, my analysis of plain language meaning of 'landscape' in oral use revealed several dominant meanings (appearance, setting, land surface, environment and improved land), a wide range of less common meanings, and widespread plurality in usage.

C.　ANALYSIS OF METAPHOR

I identified a total of twenty-nine different metaphors for 'landscape'. Most were relatively straightforward physical metaphors (as predicted by Lakoff and Johnson, 1980) and these were the most widely used (Table Ten):

Table 10 : **Common metaphors for landscape**

Metaphor	No. of respondents that used this metaphor	% of total (n = 58)
Picture	22	38%
Panorama	20	34%
Surface	18	31%
Pattern	16	28%
Container	14	24%
Object	11	19%

'Picture' and 'panorama' were the most commonly used metaphors:

*	*So if we want to do broader planting, someone's going to have to paint the picture - let's leave that wide area there, let's have a contrast there.*

*	*England... was developed... like a structured picture.*

*	*Probably when you're talking about landscape you're talking about a panoramic view.*

Area metaphors were also widely used, for example 'landscape' as a surface:

*	*Trees don't offend me on a landscape...*

*   *...the shape of the landscape...*

It was also described as a pattern or patchwork:

*   *In a sense the landscape there is a simple one... the pattern of tussock, bare country like shingle, snow and ice country...*

*   *... a patchwork of ideas, that in the end are not too bad as a national perspective... that comes back to the landscape ecology concept as the way to go.*

The three-dimensional aspect of 'landscape' was frequently expressed through a container metaphor:

*   *It's the way trees are placed in that landscape.*

*   *...within these landscapes...*

A physical presence was expressed by reference to landscape as object:

*   *I've been talking about landscape as a physical thing.*

*   *... that piece of landscape...*

In addition to these common metaphors, there were less widely used, but more colourful examples. Several of these were anthropomorphic, using body, face or human actions as metaphors for 'landscape':

*   *If you love the landscape, it responds.*

*   *Landscaping is a way of rehealing the wound.*

*   *(I) wouldn't like it if trees clothed the whole landscape.*

Others used everyday objects - for example, text, ruler, parcel or knot:

*   *Hard to devoid [sic] landscape. They're all tied up. I can't separate landscape architecture from geology or ecology.*

I found evidence of plural usage of metaphors. Twenty-seven of the fifty-eight respondents used plural or notably mixed metaphors. The remaining thirty-one used either a single metaphor, or closely linked metaphors such as picture and panorama, or surface and pattern.

D.   ANALYSIS OF SYMBOLIC MEANING

I identified five main groups of symbolic association of 'landscape' - naturalness; improvement, beauty and the picturesque; identity, familiarity and emotion; professional activity and issue definition; and functional integration (Table Eleven):

Table 11 : **Symbolic associations**

Association	No. of respondents who made this association	% of total (n = 58)
Naturalness	30	52%
Improvement, picturesque beauty	25	43%
Identity, familiarity, emotion	22	38%
Professional activity, issue definition	22	38%
Integration	8	14%

1.   Naturalness

The most common theme I found was the association of 'landscape' with a concern for the 'naturalness', or otherwise, of the high country. This was usually expressed as a concern for the effect exotic trees and plantations might have upon this 'naturalness'. There were several aspects. The first was a connection of 'landscape' with natural, unmodified conditions:

*   *... large chunks of the high country have all sorts of other values - both in terms of ecosystems, biota and just a natural.... our landscape, that's important.*

Similarly, when I introduced a question about the 'landscape' issue of trees and plantations, a number of people talked about naturalness or indigenous character:

[Self: What is the landscape issue?][7]

*   *The need to protect for others that type of example of the indigenous character of New Zealand.*

*   *Well, there are issues for example, when one is talking about the Mackenzie Basin. One would not want to see that tussock which is indigenous and quite interesting, I think - I wouldn't want to see pine trees planted all over the Mackenzie Country.*

A similar response was stimulated when I asked about 'landscape values':

*   *It's retaining - aesthetically pleasing and fairly natural.*

And the concept of 'landscape' itself:

[Self: Can you define landscape?]
*   *That's a curly one... might be better to focus on 'naturalness'...*

For many respondents the 'naturalness' of 'landscape' was highlighted by its location away from the city:

*   *We lived in the country, then moved into town - quiet streets and mature trees, lovely spot - but I couldn't see the landscape there...*

Landscape architecture was also linked to nature and native vegetation:

*   *We've gone into a phase in New Zealand where native is beautiful, introduced is not so beautiful - landscape architects are the classic champions of this.*

A second element of the association of naturalness with 'landscape' was the use of 'landscape type' to indicate degrees of environmental modification. This association was frequently unprompted:

7/   Note: I have indicated where the response used to illustrate a theme was prompted by including my preceding question in brackets (see Table Five, Interview Themes).

* *New Zealand has very distinctive natural landscape types, and there doesn't seem to be any scope for reconciliation between natural New Zealand landscape and introduced plantings of any kind. So the place of exotic trees in terms of landscape is the cultural landscape context, not the wilderness landscape...*

It was also expressed when prompted:

[Self: What is the landscape issue?]

* *I've referred to the wide open uncluttered landscape of the high country, which has very few unnatural breaks in it, like built form or cubes of trees, that look like human interference, though looking at the landscape you know very well it is highly interfered with, but it doesn't appear at a glance like that, it appears quite a natural setting, so it's the accommodation of change and that, to me, is a landscape issue.*

This question of natural appearance was referred to on several occasions. For example, this unprompted response:

* *I do feel strongly about this, and it's the way trees are placed in that landscape - I think it is essentially natural in its character - it might not be ecologically natural, but visually it's natural and people value that...*

And this prompted response:

[Self: What is the landscape issue?]

* *There's an interesting argument as to what is the natural landscape of the high country, which Di Lucas has explained at length - because there are little pockets of beech forest left in the high country which suggests the landscape is a cultural one, as opposed to natural...*

2.   Improvement, beauty and the picturesque

I found that many of the respondents (twenty-five) associated 'landscape' with visual improvement, beauty and character, and the aesthetics of the picturesque. Ten placed emphasis upon 'landscape' as a symbol of improvement. All of these were 'passive' users who needed prompting to talk about 'landscape':

>   *[Self: What is the landscape issue?]*
> *   *It's got to be changed - it improves it.*

Five of these, plus seven others (twelve in total) interpreted improvement in terms of the aesthetics of the picturesque, with an emphasis upon pictorial qualities, the 'blending in' of buildings and geometric forms, and using exotic trees as visual highlights.

>   *[Self: What is the landscape issue?]*
> *   *Yes, yes, yes, I think we ought to have a lot more regard to the aesthetics of forests.... If you go to Austria you see they have planted their production forests on the sides of hills - to conform to the contour of the land so that flat land on the bottom - cattle and sheep and the contours are beautifully contoured so the shape of the forest is natural looking and on top there is a plateau. I think we should get away from the squares and also there are good reasons for even the production forests, on the outskirts, for planting attractive exotic trees that go brown, yellow, red, in the autumn, whatever.*

Eight others used 'landscape' to signify a general concern for beauty and character:

> *   *I know I'm conscious coming through the Lewis, of the light, of the steps in the landscape, river terraces, the colour and the light. A whole character in that shape.*

>   *[Self: What is the landscape issue?]*
> *   *... to avoid ugliness - there's a good word that people don't often use - subtopian - sheer ugliness - the industrial sector of a town. [There are] some landscapes where trees would fit in beautifully, others where trees would destroy something that's beautiful - and a nice tussock landscape is something that's very beautiful.*

3.   Identity, familiarity and emotion

The third group of symbolic associations that I identified linked 'landscape' with concerns about identity, familiarity and emotion. Nine respondents emphasised landscape as a part of national, cultural or personal identity.

*   *They're saying - there is a mystical aspect to the landscape, and that's where you belong. You belong to the landscape if you relate to it. This is part of growing up in New Zealand.*

        [Self: What is the landscape issue?]
*   *It's basically the emotional response, the sense of place, the sense of belonging, the thing that gives them a good feeling.*

Familiarity was also clearly involved here. Six respondents (including the quotation immediately above) linked 'landscape' with familiar places or environments. This could be personal:

*   *The landscapes I feel strongly about are the landscapes I know.*

        [Self: So what is the landscape issue - what you see?][8]
*   *No, it's probably what I miss, or what I want to see - it's a preconceived attitude towards it - I go up there to see what I want to see.*

Others referred to 'landscape' in terms of someone else's familiarity:

*   *I'd be interested in approaching it through the eyes of the people who live up there - how do they value trees, how do they fit in to the aspirations for the landscape.*

8/   This question of clarification follows a reference by the respondent to an apparently 'pictorial' concept of 'landscape'.

Both identity and familiarity involve emotion. Ten respondents associated 'landscape' closely with emotion and subjectivity. For several, this was a positive association:

* *The things that move me most are the things that people like Di Lucas have been saying - the spiritual and aesthetic questions about how people relate to their landscape at an emotional level.*

[Self: Why do you use the word landscape?]
* *When I use the word landscape rather than scenery, what I'm trying to do is use a word which embraces something which isn't just sentimentalism, but is a powerful legitimate spiritual feeling about land...*

However, most of the respondents who referred explicitly to the emotional aspect of 'landscape' saw the association as a drawback or criticism:

* *Landscape is a subjective thing.*

* *Because it's based on emotion... they can get pretty hot headed.*

* *Because there's not facts, you can argue in any direction... it's just based on emotion and visual concepts.*

In total, twenty-two respondents used 'landscape' in a symbolic association with identity, familiarity or emotion.

4.   Professional activity and issue definition

Eight respondents (half of those who mentioned landscape architecture at some point) made strong associations between 'landscape' and a professional activity. For example:

* *Landscape design is just a communal activity, and as a landscape architect all you have on your side is experience, and a training, or the tools, to be able to visualise on people's behalf...*

* *As long as the landscape issues are addressed in totality, it's all tied back to a philosophy of what we're doing... maybe it's the profession that has the wider view than anything else.*

For a small group, the emphasis was upon 'landscape' as scientific understanding:

* *If you're going to understand soil science as part of landscape, you need a broad interest in all sorts of things.*

I introduced into the conversation a question about 'the landscape issue' associated with trees, so it is inevitable that there should be some link between 'landscape' and 'issue'. However eleven of the respondents expanded upon the notion of 'landscape' as an 'issue' per se:

* *Landscape is probably the most important issue we campaign and get public support on...*

For some it was linked to particular group interests:

* *Our landscaping people have certainly expressed concern about the effects on the landscape.*

Others were less willing to accept the role of interest groups:

* *Landscape issues are something we've created through an educational process - creating landscapers, or designers or whatever...*

I return to this topic in Chapter Eleven.

5.   Integration

The fifth significant theme of symbolic association I found was the connection of 'landscape' with the notion of fitting development into the environment. This was illustrated by unprompted comments such as:

* *There are those who say pine trees don't fit into the high country landscape - it's a landscape thing.*

* *It's got to be quite big and broad, and fit in with that broad landscape.*

It was also expressed in prompted responses such as this:

> *[Self: What is the landscape issue?]*
* *... I think it should include the whole health of the ecology - all the interrelated changes consequent on the plantation - ensuring the whole environment is integrated...*

> *[Self: What do you mean by landscaping?]*
* *The effect that planting is going to have on the present landscape - whether it integrates or not with the present cover of the land.*

The implied link of 'landscape' with a search for order was occasionally commented upon:

* *Right from childhood I have been conscious of an interest in order, a sense of order....as a child, ordering my own room, having it how it was. A natural progression to landscape architecture, trying to help fit in developments, helping them work well.*

* *To fit things into a landscape you've got to have a concept, and a plan, and certain rules so the components don't clash.*

In summary I identified five widely used sets of symbolic associations of 'landscape'. Most individuals also used 'landscape' in a way that revealed unique personal associations, but I did not find any other significant shared themes.

E.   FUNCTIONAL ANALYSIS

My analysis of the function of 'landscape' within conversation was in two stages. First, I identified whether 'landscape' was used actively, without prompting, or whether it was only used passively, that is, after I had prompted. Second, I looked for evidence of distinctive 'repertoires' of use (Potter and Wetherell, 1987).

1.   Active/passive use

My respondents' use of 'landscape' ranged from totally passive (that is, not spoken at all, even when prompted), to very active (that is, extensive, unprompted use) (Table Twelve):

Table 12 : **Active/passive usage of landscape**

Use	Role	No. of respondents
Active use	Major role	5
	Supporting role	18
	Minor role	<u>17</u>
		40
Passive use	When prompted	12
	Unused	<u>6</u>
		18

Forty respondents introduced 'landscape' unprompted into their discussion of trees in the high country. I describe these as 'active' users. Occasionally (five respondents) 'landscape' was used extensively to respond to the question "what is the issue of trees and plantations in the Canterbury high country", with numerous references throughout the discussion. More typically, in around half the 'active' respondents (eighteen) it was introduced as an important supporting concept within the main part of an argument:

* *The sorts of issues that come up are - first and foremost I suppose aesthetic ones - there's something rather unattractive about these big open landscapes.*

* *The issue? Firstly, the removal of trees, past, present and future. The high country is essentially a treeless landscape, or virtually a treeless landscape. The common perception is that this is a matter of natural decree...*

In the remainder of 'active' users (seventeen) 'landscape' occurred as a minor part of the discussion, often many minutes after the start of the interview.[9] The balance of respondents (eighteen) only used 'landscape' following my prompt. I describe these as 'passive' users. Most (twelve) referred directly to 'landscape' in their reply:

* *In some people's minds it's all to do with the landscaping bit - the submissions to the draft applications indicate different aspects of concern...*

However, a small group (six) replied without ever using 'landscape' - it was clearly not a part of their vocabulary at all:

[Self: What is the landscape issue?]
* *Don't know what they're talking about - only talking about a visual impact - I reckon the more trees, the better the country looks, myself* (followed by an extended discussion on the visual effects of trees, with no 'landscape' reference).

2.   Interpretive repertoires

My second analysis of function looked for evidence that individuals consistently used 'landscape' in more than one way. I found two interesting features. Some users shifted meanings at a mid point in the interview. Others described 'landscape' as a word used by other people. However, I

9/   For example, the following reference was the only use of 'landscape' until the respondent was prompted at the midpoint of the interview: * *[You] don't have to think with the mentality of a sheepfarmer to know there are sorts of income that can come out of a forest, not necessarily indigenous trees. We've got to have all types of trees now because the landscape's barren...*

found little convincing evidence to suggest that two or more distinct repertoires of meaning were used in parallel throughout an interview.

a)   Shifts in use

I noted earlier that more than half the respondents (thirty-two) expressed plurality in the meaning of 'landscape' in their replies. I analysed these usages to see whether the meaning used was related to the stage in the interview. In particular I asked myself the question, did the prompting that I used to indicate my specific interest in 'landscape' lead to any change in its use by the respondent? For around half of the respondents who revealed plurality in meaning (seventeen), there was no significant change. However, for seven 'plural' users, my interest appeared to lead to some change in the emphasis of use. One shift was from a 'physical' use of 'landscape' to a greater emphasis upon the visual aspects of 'landscape' - 'landscape' as appearance or perception. For example, this respondent started by using 'landscape' to refer to land form:

*   *I don't really hold to the theory that heavy stocking causes erosion - probably can cause bad erosion in isolated corners, where sheep can congregate but basically I think climate is a big factor, and man, as far as ruining our landscape - so-called erosion...*

After my prompting he placed greater emphasis upon the shape and appearance of tree planting:

        [Self: What is the landscape issue?]

*   *I suppose - blocks of trees planted out in the middle of nowhere, maybe...*

A second shift I noted was the reverse of this. This respondent was initially concerned solely with 'landscape' as appearance:

*   *When I first went to the Waimak Basin I thought it really boring, not an interesting landscape at all, and as I came to be familiar I began to appreciate the nuances, the colour, change with the seasons...*

After prompting, she placed greater emphasis upon the physical environment:

* *Initially I think it should include the whole breadth of the ecology.*

Seven active users of a single meaning did <u>not</u> shift when prompted. Overall, I found a high degree of consistency in use, suggesting to me that my introduction of 'landscape' as a concept that I was particularly interested in was not a major influence upon the patterns of use among those who were 'active' users. For the small group described above, introduction of the term prompted a partial shift or extension of meaning.

b)   <u>Assigned use</u>

I noted that some respondents appeared to distinguish between their personal use of 'landscape', and its use by others. Five respondents revealed a contrast between their 'personal' use and their perception of 'official' use. For example, a local government administrator repeatedly commented upon 'public' concerns in connection with the physical 'landscape':

* *The submissions... indicate different aspects of concern - scientific, ecological and other elements...*

* *... the effect that planting is going to have on the present landscape - whether it integrates with the present cover of the land.*

Later, however, when discussing his own feelings, he spoke of 'landscape' in pictorial terms:

* *... like a painting on the wall... a broad panorama.... a continuing changing landscape...*

Four others treated 'landscape' entirely as an 'assigned' term - it was someone else's concept. For example, one respondent always linked 'landscape' with the landscape architecture profession:

> * *... as long as you're not making gross changes - landscape architects don't do that anyway - they retain the intrinsic values that there are in landscapes...*

> * *I don't think county councils ever employ landscape architects...*

Another introduced 'landscape' for the first and only time as a concept used by others, to which he felt no personal attachment:

> * *One of the big things at the moment is the spread of wildings and seedlings... now is it a problem... I've gone through that country for the last 20-25 years and I don't believe it's detracting, and this is what <u>we're told</u>, that it's <u>detracting from the landscape</u>* [his emphasis].

Finally, one respondent noted the cultural origins of 'landscape' plurality, distinguishing between 'landscape' in Anglo Saxon, and 'landschaft' in Central European languages.

These quotations have illustrated the range of meanings and use of 'landscape' that I found in my interviews. In the next chapter I search for patterns in usage in relationship to the contextual frames of reference of the users.

CHAPTER SEVEN: PATTERNS OF 'LANDSCAPE' USAGE

A.   INTRODUCTION

In this chapter I present my analysis of the overall patterns of 'landscape' usage, in relation to the common frames of reference identified in Chapter Five. It therefore relates 'landscape' meaning and use to the context of oral usage. I also present a summary analysis of 'landscape' usage in contemporary documentary records of the case study. In the final part of the Chapter I draw together the findings of my initial analyses of the case study.

B.   ANALYSIS OF PATTERNS OF ORAL USAGE

1.   Plain language

I found some suggestions of a link between the plain language meanings of 'landscape' that people used, and the common frame of reference they shared about the issue of trees and plantations in the country. Landscape as 'appearance' was used extensively by all respondents, but it was the clearly dominant meaning in the common frame I have designated 'individual improvement'. 'Physical' meanings, such as landscape as landform, were also used widely, but were particularly typical of respondents who shared the 'multiple use management', 'conservation by control', and 'system design' frames. The usage of extensive meanings such as 'landscape' as setting, or environment, appeared to be more typical of the 'conservation by control', 'conservative management' and 'consensus by administration' frames. Finally, 'landscape' as planned land, or improvement, was used by those who adopt the 'individual improvers' frame, and the 'multiple use management' frame.

Overall, however, these associations were not strong. The most notable feature of plain language usage was the diversity of meanings in most of the common frames. Table Thirteen shows these patterns:

— Table 13 :   **Plain language meaning and common frames of reference**

Common frame	Principal plain language meanings	No. of respondents who used the meaning
Multiple use management (n=17)	Appearance	14
	Landform	10
	Setting	11
	Concept	8
	Environment	6
	Improvement	6
Conservative management (n=18)	Appearance	5
	Setting	4
	Environment	4
Consensus by administration (n=4)	Appearance	4
	Environment	4
	Setting	3
Conservation by control (n=9)	Appearance	8
	Setting	8
	Environment	8
	Landform	8
Individual improvement (n=9)	Appearance	8
	Improvement	4
	Landform	4
Balance of local interests (n=5)	Appearance	5
	Landform	3
System designers (n=6)	Landform	4
	Appearance	3

Note: when the total occurrence of different principal meanings within each common frame exceeds the number of respondents in that frame it indicates that there was plural usage of principal meanings.

A stronger differentiation between the common frames of reference emerged when the use of plural and single meanings was analysed. I found that the thirty-two plural users were concentrated in the 'multiple use management', 'conservative management' and 'conservation by control' frames, whereas single use is most typical of those who shared the 'individual improvement' and 'balance of local interests' frames (Table Fourteen).

Table 14 :   **Plural use and common frames of reference**

	Common frame	Numbers of respondents revealing plural usage	Single usage
1.	Multiple use management (n=17)	12	5
2.	Conservative management (n=8)	7	1
3.	Consensus by administration (n=4)	1	3
4.	Conservation by control (n=9)	6	3
5.	Individual improvement (n=9)	2	7
6.	Balance of local interests (n=5)	1	4
7.	System designers (n=6)	3	3
		32	26

I also examined the linkage between plain language meaning and the individual characteristics of respondents. There were no clear patterns linking 'landscape' meaning with age or role. The strongest association was between educational level and usage. The following table (Table Fifteen) shows an association between postgraduate qualifications and plural usage, and non-tertiary training with single usage.

Table 15 : **'Landscape' usage and education**

	Plural	Single	Totals
Postgraduate	22 (37%)	7 (13%)	29 (50%)
Undergraduate	5 (9%)	6 (10%)	11 (19%)
Non-tertiary	5 (9%)	13 (22%)	18 (31%)
	32 (55%)	26 (45%)	58 (100%)

I also noted two links between usage and discipline. The landscape architects I interviewed all referred to 'landscape' as an activity, as did several planners. Earth scientists tended to use physical and conceptual meanings - 'landscape' as a system, or landform.

Finally, I identified an association between attitudes to the role of government in land management and the pattern of plural and single usage. Plural users were largely interventionist in outlook, whilst the majority of single users were non-interventionist (Table Sixteen):

Table 16 : **'Landscape' usage and attitude towards the role of government**

	Plural	Single	Totals
Interventionist	25 (43%)	11 (19%)	36 (62%)
Non-interventionist	7 (12%)	15 (26%)	22 (38%)
	32 (55%)	26 (45%)	58 (100%)

However, this pattern also reflects the concentration of postgraduate qualifications in the 'interventionist' groups, and thus cautions against the adoption of simple casual explanations. Instead, it reinforces the importance of understanding the overall context of usage. I return to this issue in Chapter Eight.

2.   The metaphorical structure of 'landscape'

I found that visual metaphors (such as picture and panorama) were characteristic of the 'individual improvement', 'balance of local interests', and 'consensus by administration' frames of reference. Areal metaphors (such as pattern) were more characteristic of the 'multiple use management' frame. Mixed metaphors occurred in all groups, but were uncommon in the three frames that I characterised as non-interventionist, and that included most of the passive users (that is, individual improvement, balance of local interests, system design). However, like the analyses of plain language meaning, I found much variation, and specific usage appeared to be closely tied to the particular circumstances of the individuals concerned (Table Seventeen):

Table 17 :   **Metaphorical structure of 'landscape' and common frames of reference**

Common Frame	Dominant Metaphors	Comment
Multiple use management (n=17)	pattern	wide variation
Conservative management (n=8)	-	mixed, wide variation
Consensus by administration (n=4)	picture	simple and consistent
Conservation by control (n=9)	picture or panorama	mixed; wide variation
Individual improvement (n=9)	picture or panorama	simple and consistent
Balance of local interest (n=5)	panorama	simple and consistent
System design (n=6)	surface	largely consistent

3.   Symbolic associations

My analysis identified clear patterns linking symbolic meanings of 'landscape' with common frames of reference. 'Naturalness' was strongly linked with the 'multiple use management', 'conservative management' and 'conservation by control' frames; the 'picturesque' was expressed in both 'individual improvement' and the 'consensus by administration' frames; 'identity' was frequently inferred in the 'conservative management' and 'conservation by control' frames; 'improvement' was typical of the 'individual improvement' frame; and an association of 'landscape' with issue definition was frequently expressed in the 'consensus by administration' and 'system design' frames, but is totally absent from the 'conservation by control' frame. 'Integration' was emphasised by the 'multiple use management' frame. These associations are summarised in Table Eighteen:

Table 18 :   **Symbolic associations of 'landscape'and common frames of reference**

Common frame of reference	Symbolic associations	No. of respondents
Multiple use management (n=17)	Naturalness	8
	Integration	6
Conservative management (n=8)	Naturalness	8
	Identity	3
Consensus by administration (n=4)	Issue	3
Conservation by control (n=9)	Naturalness	6
	Identity	4
Individual improvement (n=9)	Improvement	5
	Picturesque	4
Balance of local interest (n=5)	(diverse associations)	
System design (n=6)	Issue	3

I found no clear patterns linking symbolic association with factors such as education or discipline.

4.   Functional use

I found that active use of 'landscape' was concentrated in four common frames of reference: 'multiple use management', 'conservative management', 'conservation by control' and 'consensus by administration'. Passive use was characteristic of the 'individual improvement' frame (see Table Nineteen). However, I found no clear pattern linking the <u>extent</u> of active use (that is, dominant, supportive or minor) to frames of reference.

Table 19:   **Functional use of 'landscape' and common frames of reference**

Common Frame	Active	Passive
Multiple use management (n=17)	15	2
Conservative management (n=8)	8	0
Consensus by administration (n=4)	3	1
Conservation by control (n=9)	7	2
Individual improvement (n=9)	2	7
Balance of local interests (n=5)	2	3
System design (n=6)	3	3
(Total n=58)	40	18

As with plurality of usage, the only clear link I found between functional use and individual characteristics was the level of a respondent's education. The following table (Table Twenty) shows the strong correlation of postgraduate education with active use of 'landscape':

Table 20:	Functional use and education		
		Active	Passive
Postgraduate		24 (41%)	5 (9%)
Undergraduate		7 (12%)	4 (7%)
Non-tertiary		10 (17%)	8 (14%)
		41 (70%)	17 (30%)

The 'assigned' use and shifts in use did not appear to relate either to common frames of reference or to individual parameters such as age or education.

5.   Summary

My four 'landscape' analyses of the Case Study interviews have identified:

*   Plural meanings of 'landscape' within the case study and, for over half the respondents, plurality in meaning within individual usage.

*   Plural metaphors of 'landscape,' with approximately half the respondents using mixed metaphors.

*   Five distinctive sets of symbolic associations of 'landscape'.

*   Wide variation in functional use, with a majority of respondents using 'landscape' as an active part of their response, to different degrees, but a significant minority making only passive use of 'landscape' and needing to be prompted.

*   Only limited links between usage and standard individual characteristics. Level of education appears to be a major personal influence on use, whilst discipline and attitude to the role of government may also be significant factors.

Only limited links between plain language meanings or metaphorical meaning and the common frame of reference. However, I found much stronger links between symbolic associations and the common frame of reference, and between functional use and common frame of reference. When the different analyses are combined, an overall pattern begins to emerge. This is shown in Table Twenty One and discussed in my next chapter, Chapter Eight.

Table 21 :   **Summary: Patterns of 'landscape' usage and common frames of reference**

Common frame of reference	Dominant meanings	Dominant metaphors	Dominant associations	Characteristic range of usage	Characteristic mode of usage
Multiple use management	Appearance Setting (Environment) (Improvement)	Pattern	Naturalness Integration	Plural	Active
Conservative management	Appearance Setting Environment	x	Naturalness Identity	Plural	Active
Consensus by administration	Appearance Environment Setting	Pictorial	Issue	x	Active
Conservation by control	Appearance Setting Environment Landform	x	Naturalness Identity	Plural	Active
Individual improvement	Appearance (Improvement) (Landform)	Pictorial	Improvement Picturesque	Single	Passive
Balance of local interests	Appearance	Panorama	x	Single	x
System design	Landform Appearance	Areal	Issue	x	x

(Note: X indicates no strong pattern of usage in this category.)

C.   ANALYSIS OF CONTEMPORARY DOCUMENTARY SOURCES

In addition to my interview transcripts, I also reviewed five sets of contemporary documents for patterns of 'landscape' usage. They were all documents that had direct bearing on the resource policy issue of trees and plantations in the high country. They comprised local planning material,[1] regional planning publications,[2] submissions to the Cora Lynn hearings,[3] the MWD seminar proceedings (Gregory, 1988), and recent research publications upon the issue of trees and plantations in the high country.[4] My method of documentary analysis was to classify the meanings of 'landscape' whenever they occurred in texts, using the overall typology of meaning developed in Chapter Two. I also searched for distinctive symbolic associations, and distinctive functional patterns of use.

My analysis revealed five features of 'landscape' usage. First, there was significant plurality and ambiguity of meaning; second, with a few exceptions, authors made only minor use of 'landscape', if at all; third, individual authors typically adopted similar meanings to those they used when I interviewed them, although the overall level of usage was lower; fourth, the range of usage fell within the range I identified in the interviews; finally, specific meaning was closely linked to the role of the authors.

1.   Plurality and ambiguity

Table Twenty Two shows the principal usages of 'landscape' in each set of documents and in recent research publications upon the issue of trees and plantations in the high country.

1/   Malvern County Council (1973) Proposed District Scheme; Malvern County Council (1979) Approved District Scheme; Davie Lovell-Smith and Partners (1984) Malvern High Country Research and Policies; Malvern County Council (1988) District Scheme Review; Malvern County Council: Records of Submissions to the 1988 District Scheme Review (unpublished).

2/   Canterbury United Council (1983) Which Way Canterbury?; Canterbury United Council (1987) Regional Planning Scheme: Section 3, Regional Development Strategy: Draft Section 3.0; Canterbury United Council (1988) Draft Recreational and Tourism Strategy.

3/   Malvern County Council: Record of Submissions regarding a planning application for afforestation on Cora Lynn Station, (1987) (unpublished).

4/   See Bibliography.

Table 22 :   **Principal usage of 'landscape' in contemporary documents**

Source	Usage
Local planning material	Plural - 'landscaping', 'natural landscape', biophysical setting, appearance of land, identity
Regional planning publications	Plural - land surface, biophysical setting, appearance of land, environment
Cora Lynn hearings	Perceptual - picture, scenery, biophysical setting, visual improvement
MWD seminar	Plural - appearance, scenery, land surface, biophysical setting, professional activity
Research publications	Plural - appearance, biophysical setting, land surface

In some of these publications (for example, Tilling, 1982) several meanings were used interchangeably and without qualification, creating ambiguity. In others, individual usage is consistent, but multiple authorship created plurality in meaning.

2.   Level of usage

Typically, 'landscape' was only mentioned infrequently in the documents. A few authors used it as

a central concept. They were all either landscape architects, planners or closely associated with landscape architects.[5]

3.   Consistency of usage

Most of the documents I reviewed were written by players that I also interviewed. This allowed me to cross-check oral and documentary usage by individuals. In most cases, both meanings and level of use were strikingly consistent. The exceptions were several speakers at the MWD seminar, from particular sectoral interests (for example, recreationists, runholders, forest owners), who made active use of 'landscape' in private discussion, but who did not use the concept in their publicly presented papers.

4.   Range of usage

The range of meanings in the contemporary documents is narrower than the range of meanings I identified in the initial literature review, and in the interviews, but within my established categories. There were two distinctive features. Written, public usage appeared to be more conservative than private oral usage - that is, 'standard' phrases appeared frequently - and only common metaphors were used.[6] Few of the more abstract or academic interpretations evident in the scholarly literature (Chapter Two) were used.

5.   Role dependency

There were some clear links between role and usage. In the District Scheme Submissions, for

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5/   For example, Lesley Shand (NCPRB), in her submission to the 1988 District Scheme review, used phrases that reflected closely the published work of a personal associate, Diane Lucas, a prominent landscape architect.

6/   For example, phrases such as 'typical mountain landscape', 'New Zealand landscape', 'landscape character and identity', 'preservation of natural landscape', were common.

example, the majority of references to 'landscape' were linked with conservation advocacy.[7] In the Cora Lynn hearings, usage was linked to either conservation or recreation advocates, or to consultants responding to their concerns.[8] This was also reflected in the meanings used. The MWD seminar proceedings (Gregory, 1988) show 'perceptual' usage from sectoral development interests, and 'areal' usage from earth scientists and planners.

D. CONCLUSION TO INITIAL CASE STUDY ANALYSES

This chapter concludes my initial case study analyses. The four chapters have each focused on different aspects of the case study, but taken together provide a cumulative picture. Several of the separate conclusions are therefore worthy of reiteration.

First, the resource policy issue of the role and management of trees and plantations in the Canterbury high country involves a diverse range of interests and disciplines. Whilst the biological options for management are considered by some scientists to be relatively straightforward (Ledgard, 1988), the issue is characterised by a complex cultural history, changing institutional frameworks, and diverse socio-political values (O'Connor, 1977). It is clearly a 'messy' problem (Mitroff and Blankenship, 1973) for which contextual analysis has been essential.

Second, my concept of 'frame of reference' has enabled me to identify seven distinctive sets of beliefs, feelings and intentions concerning the issue.[9] These 'common frames of reference' can be clearly characterised. Some were closely linked to particular roles or backgrounds of my respondents, for example, the 'system designers', 'individual improvers' and the 'consensus through administration' frames. Other frames drew together individuals from diverse backgrounds, whose conceptualisations of the issue converged (for example, the 'conservative management'

7/   For example, L. Shand, North Canterbury Parks and Reserves Board; C. Findlay, Department of Conservation; E.H. Bennett, landscape architect.

8/   For example, objections from C. Burrows (University of Canterbury), D. Hensen (FMC), D. Alexander (DOC); and responses from D. Bryce (consultant to Malvern County), and M. Belton (consultant to the runholder).

9/   See Chapter Five, Part C.

frame). Each provided a contextual frame through which the players involved made sense of the situation (Rein, 1983).[10] These in turn have provided me with a basis for exploring the context dependency of 'landscape' meaning and use.

Third, my analysis of 'landscape' usage in the interviews has identified plurality in the meaning of 'landscape' and revealed some clear patterns linking 'landscape' symbolism and the functional use of 'landscape' in conversation to the common frames of reference of the players involved.

Fourth, the meanings that individuals assign to 'landscape' appeared to be largely similar in both talk and writing. However, usage in published documents and public presentations tended to be more conservative than that revealed in the confidential interviews, with a narrower range of meanings and less active use of the word.

In the next chapter, I review the theoretical propositions that I used to initiate the case study, in the light of these empirical findings.

10/   See Chapter Five, Tables 6 and 7.

CHAPTER EIGHT: REVIEW OF WORKING PROPOSITIONS

A.   INTRODUCTION

In this chapter I re-examine the theoretical base of my thesis, in the light of the case study findings. First, I briefly review the working propositions. I then ask four linked questions. One, have my concepts of individual and common frames of reference provided a valid description of the context of 'landscape' usage in the case study? Two, does my emphasis upon context satisfactorily explain the patterns of 'landscape' meaning and use that I found? Three, are there any aspects of usage that contextuality as I have defined it fails to address, or deals with inadequately? Four, how might my approach be modified to make up for any such shortfalls? The chapter concludes by putting forward a revised analytical perspective, from which I then undertake further interpretation of my case study material.

B.   SUMMARY REVIEW OF WORKING PROPOSITIONS

I have systematically reviewed the eleven working propositions that I used to express my theoretical position, critically examining each proposition against the evidence of my case study. The full examination is contained in Appendix IV. In this section I present a brief summary.

1.   Frames of reference

All my four propositions concerning the concept of frames of reference were supported by the case study evidence. First, I have been able to identify personal frames of reference for all the players I interviewed (Proposition One). The frames I derived are not comprehensive accounts of an individual's attitudes, but summarise the beliefs, feelings and opinions concerning the issue of trees and plantations in the high country that each player revealed to me during the interview. Second, I found indications of the way that these frames of reference expressed both personal

experiences and broader influences such as disciplinary norms, organisational roles and institutional thought styles (Proposition Two). Third, my analysis of the case study interviews revealed a range of different frames of reference (Proposition Three). The range of attitudes expressed was too broad for me to identify a single overriding perspective common to all players. Instead, I found considerable variation in attitudes concerning trees and plantations in the high country, that included different ways of defining the issue, and different preferences about outcome. Finally, I have been able to identify seven clearly defined 'common' frames of reference (Proposition Four). The status of this initial set of working propositions is summarised in Table Twenty Three.

Table 23:　　Summary of status of working propositions on frames of reference

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Proposition	Outcome of review
1. The openly expressed beliefs, feelings and intentions of an individual player involved in a resource policy arena can be summarised as a personal 'frame of reference'.	Supported, with the qualification that a frame of reference is only one aspect of a complex reality. It is not all-inclusive.
2. An individual's 'frame of reference' will draw upon other 'frames' of reality, such as disciplinary norms, or world views. It may therefore reveal elements of conflict and ambiguity.	Supported.
3. The players involved in an apparently complex arena will express a range of different 'frames of reference'.	Strongly supported. No evidence to the contrary.
4. There will be a limited number of 'common frames of reference' that encompass most, if not all, of the established players in a particular arena.	Supported. Evidence also suggests additional insights into the role and nature of 'common' frames.

2.　　'Landscape' and frames of reference

My next four propositions linked 'landscape' usage to the common frames of reference. Two gained strong support from the case study, and two partial support. I believe the evidence is clear that 'landscape' has plural meanings, and that those are expressed in the case study. There are

also some links between usage and common frame of reference. In particular, the symbolic associations of 'landscape' are clearly related to common frames of reference. On the other hand, the linkage with the conceptual meaning of 'landscape' is less well defined. These conclusions are summarised in Table Twenty four.

Table 24:   **Summary of status of working propositions linking 'landscape' to frames of reference**

	Proposition	Outcome of review
5.	'Landscape' has plural meanings.	Strongly supported.
6.	The players in an apparently complex resource policy issue will express diverse 'landscape' usage.	Strongly supported.
7.	The particular meanings of 'landscape' used by an individual will reflect his/her frame of reference.	Partial support. Frame of reference appears to influence the role 'landscape' plays for an individual and the specific meanings it has for them, but does not control its underlying conceptual meaning.
8.	Common frames of reference will display similar patterns of 'landscape' usage.	Partial support. Frames of reference appear to enable but do not determine usage.

Thus whilst the propositions linking 'landscape' usage to frames of reference are upheld in general terms, they must be qualified. As originally presented the propositions were too deterministic and unequivocal, assigning greater causal influence to the frames of reference than the evidence can sustain. Instead, the case study material suggests a more conditional and contingent role for frames of reference in 'landscape' usage. The common frames of reference I identified show some general patterns of 'landscape' usage, but do not appear to control or determine all aspects of usage.

3.   'Landscape' and broader social factors

My findings on the final three propositions, linking landscape to broader scale social factors, were the least conclusive. There was conflicting evidence concerning the relationship of 'landscape' meaning to the discipline of the user. There were generally weak relationships in oral usage but some evidence of disciplinary influence in documentary sources. I found evidence to support the proposition that the range of meanings in the case study reflected plural meanings in wider documentary use, but concluded that this must be qualified by the fact that my sources were not representative of the whole of society. Finally, the nature of the information I gained from my interviews on broader world views or ideology meant that I was unable to systematically test the proposition linking 'landscape' usage to 'world view'.[1]   Nevertheless, there was some evidence of such a linkage, although it is complex. These conclusions are summarised in Table Twenty five.

1/   I adopted an 'open' structure for my interviews, in order to encourage 'natural' usage of the term 'landscape'. This meant that I could not obtain the dimensional or structured responses on attitudes that I would need for a systematic analysis of world view (see Appendix II).

Table 25:   Summary of status of working propositions linking 'landscape' to broader social factors

9.	'Landscape' meaning will be related to the discipline and/or professional background of the users.	There are patterns of disciplinary influence in documentary usage, but generally not a strong relationship in oral usage.
10.	The range of meanings of 'landscape' used within a complex resource policy issue will express the plural meanings in wider documented usage.	Supported, but qualified by the socially unrepresentative nature of my documentary sources.
11.	The principal meanings of 'landscape' used in an issue will express the dominant world view or ideology that prevails amongst the players involved.	Could not be properly evaluated. Some evidence in support, but needs further research to test fully.

There is a further social aspect that emerged as being of particular significance as my initial analysis proceeded, and that implicitly underpinned many of the questions that I address in my second stage of analysis. I refer to the way that specific and localised social interests may be expressed in 'landscape' usage. My initial propositions included acknowledgement of the potential role of broad social ideology. However it became increasingly apparent that usage was also influenced in some way by the particular interests of individuals and small groups.

In summary, my case study showed distinctive individual and common frames of reference that expressed beliefs, feelings and opinions concerning the topic of trees and plantations in the high country, some patterns of 'landscape' usage related to those frames, and some less conclusive evidence linking 'landscape' usage to broader social factors. In the next section I discuss the implications of these findings.

C.   DISCUSSION

1.   Validity: have my concepts of individual and common frames of reference provided a valid description of the context of 'landscape' usage in the case study?

In Appendix IV I assess the credibility of my findings concerning frames of reference. I evaluate their coherence and plausibility in the specific New Zealand context, compare them with theoretical models of attitudes in New Zealand, and compare them with empirical studies overseas. I conclude that the empirical evidence supports my concept of frames of reference, but that my findings do not correspond directly to the theoretical models about New Zealand attitudes that have been put forward.[2] I do not believe that this lack of congruence constitutes a significant challenge to either the concept or the content of the frames I have identified. Instead, it raises several interesting theoretical issues.

My study suggests that players appear to adopt a frame of reference that reconciles the different influences upon them in as coherent a way as possible, and that they follow different broad strategies to do this. Some structure their approach around abstract principles such as 'multiple use', or 'sustainability'. Eckersley (1989) identified this type of approach as characteristic of a 'New Class' of highly educated professionals who typically work in the public service. Other respondents focused more upon the mechanisms or outcomes that they wish to promote (for example, conservation by control). The existence of 'common' frames indicates that the fifty-eight players I interviewed tend to adopt one of a limited number of strategies. Some of these strategies express broad social factors, such as education. Others are more specific, reflecting particular roles, or institutional background. This suggests to me that the broader attitudinal models used to describe social and environmental attitudes must be qualified when applied to particular situations. Sometimes broader ideology appears to influence response, but at other times it becomes subsumed within more specific and contingent factors. The inconsistencies and conflicts I found indicate that the resolution of these different influences is seldom 'clean'. The complex social world in which the players live contains conflict and ambiguity, and this is

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2/ Zepke, 1981; Hayward, 1988; Eckersley, 1989.

reflected in the individual frames of reference, and in the common frames concerning a particular issue.[3] Appendix IV notes that several overseas studies have reached similar conclusions.

I believe this interpretation matches closely the situation predicted in my theoretical discussion of the 'frame' metaphor, as expressed by both Goffman (1974) and Rein (1983). Social reality is multi-layered, with different factors and patterns emphasised at different levels. The frames of reference I have identified operate at a local scale in the particular situation I was investigating, but contain within them elements of the broader social realities described in the attitudinal models of Zepke (1981), Eckersley (1989) and others. The specific structure and content of a frame of reference matches Rein's model of a dynamic interaction between fact, value, belief and action. In turn, this suggests that frames of reference act as mediators between the different influences on an individual.

In summary, I believe the concept of frame of reference has fulfilled its primary function of providing a valid initial context for my investigation of 'landscape' usage. In doing so it has also provided a glimpse of the rich, complex and at times ambiguous social reality of this selection of professional elite players.

2.   **Explanatory power : does my emphasis upon context satisfactorily explain the patterns of 'landscape' meaning and use that I found?**

There are several aspects to this question. My overall study arose because of the apparent plurality of 'landscape', and my adoption of the premise that making sense of the word depends upon the context in which it is used (Relph, 1981). I have conclusively demonstrated plurality in meaning and use. I have also shown that there are distinctive patterns of usage within a specific case study, and that these are related in some way to the perspective of the players involved. However, the relationships are not sufficiently well articulated to demonstrate a single, clear and unambiguous causal relationship between frame of reference and 'landscape' meaning or use. Whilst context (as expressed by frame of reference) appears to strongly influence the symbolic associations with which 'landscape' is used (for example, naturalness), and to influence the way

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3/   I discuss the issue of conflict in Appendix IV.

'landscape' is used in a functional sense, it appears to have less influence over the plain language meanings or metaphorical structure an individual assigns to 'landscape'.

Evidence concerning the relationship between a player's role and discipline and 'landscape' usage is also somewhat ambiguous. For a limited number of players (for example, landscape architects) *oral* 'landscape' usage appeared to be closely tied to their professional formation. Generally, however, there was not a strong relationship between an individuals' disciplinary background or role and their oral use of 'landscape'. Nonetheless, the contemporary *documentary* evidence suggests that particular plain language meanings have frequently been associated with a small group of influential individuals, and interest groups. Comments in the interviews reinforced this impression.

My analysis based on interviews has therefore identified a number of patterns of 'landscape' usage but does not fully explain the reasons for these patterns. Whilst the microscale contextual approach has revealed that 'landscape' usage is more diverse and dynamic than the previous macroscale analyses of etymology and ideology have suggested, it does not replace them as a source of explanation and understanding. Instead, it provides a complementary view. This becomes clearer when I ask the next question:

3.   **Problems: are there any aspects of 'landscape' usage that a consideration of the microscale context deals with inadequately?**

There are two dimensions to this question. The first relates explicitly to the propositions I started with - that is, are there any elements of the original propositions that I have been unable to reach a conclusion about, or that my approach using frames of reference has proven to be inadequate to explain? The second dimension is whether there are any findings concerning 'landscape' usage that emerged during my analysis that had not been predicted in the original propositions.

a)   <u>Problems with the propositions</u>
            There are four areas where the propositions have not been upheld, or appear to be
            inadequate. First, the lack of a simple direct linkage between plain language meaning of
            'landscape' and frames of reference shows that microscale contextuality does not offer
            an explanation for conceptual plurality in 'landscape' meaning. Second, although I was

able to demonstrate that frames of reference express factors such as broader environmental attitudes, and that aspects of 'landscape' usage are related to these frames, I was unable to make a definitive link between a broader world view of the players and specific 'landscape' usage. There were some hints, for example in the apparent relationship between level of usage and attitude towards the role of government. However, I could not test these potential links comprehensively. Third, my emphasis upon a search for patterns in relation to the frames of reference I had identified tended to downplay the consistency in usage across frames - for example, the widespread use of plain language meanings that emphasised vision ('landscape' as a view of land), and the frequent underlying themes of 'naturalness' of 'landscape'. Finally, and most significantly, both my interviews and documentary sources were limited to a relatively small elite and focused on a short period in time. The 'context' I have investigated therefore relates to only a small part of society, and is a narrow time slice in history.

b) Omissions from the propositions

First, there was one major aspect of 'landscape' usage revealed in the analysis that the original propositions failed to fully anticipate; that is, the political nature of usage. By political I mean the way that 'landscape' meaning and use appears to have been influenced by the specific needs and interests of the different individuals and social groups involved in my case study (Farr, 1989). Although one of my propositions (Eleven) anticipated a link between ideology and usage, I had expressed this as a macroscale factor. My analysis of the interviews has shown a close association between the everyday meaning and use of 'landscape', and the activities of particular individuals, and groups such as the conservation advocates. Microscale context clearly has a significant political component, which should be addressed.

Second, by choosing to focus upon contemporary oral and documentary usage, my initial propositions underplayed the historical factors influencing use. The ideal of 'naturalness', for example, clearly has a historical dimension, an understanding of which is essential to analysis of its contempory role. Furthermore, the narrow time slice makes it impossible to comment upon the possible processes by which the contemporary patterns may have evolved.

In summary, my microscale 'contextual' analysis based on interviews has revealed distinct patterns and major plurality in everyday 'landscape' usage, but they cannot be fully explained in terms of the contemporary frames of reference of the players involved. My partial analysis of broader social factors indicates that there are also important educational, social and political processes influencing patterns of usage. In addition, the consistency in meaning that I found, emphasising visual and areal dimensions of 'landscape', indicates an underlying structure or structures of everyday usage. This reflects the main conclusions of earlier macroscale academic analyses of 'landscape'.

4.   Modifications : how might my theoretical interpretation of the case study be modified to make up for these shortfalls and opportunities?

My main conclusion from this review is that my microscale contextual approach to analysis (as expressed by the concept of frame of reference) must be complemented by other forms of analysis, and be redefined in a more extensive framework. In my initial review of the theoretical sources for contextual analysis I acknowledged the wide range of applications of the 'frame' metaphor. Furthermore the microscale focus of my concept of frames of reference did not imply a rejection of broader scale concepts of 'frame'. Rather, it reflected the initial thrust of my empirical study. My overall research strategy anticipated a review of direction at this point, and I therefore propose to broaden my analysis, to respond to the opportunities and shortfalls identified above.

My strategy also acknowledged the possibility of multiple perspectives. In the initial case study analysis I adopted a single perspective upon context (that is, the concept of frames of reference), but I undertook four different analyses of 'landscape' usage - plain language meaning, metaphorical structure, symbolic association, and functional use. This approach revealed a richness and diversity in the patterns of 'landscape' meaning and use that would have been lost had only a single analysis been undertaken. It lead me to suggest that certain dimensions of meaning (for example, symbolic association) are more contextually dependent than others (for example, plain language meaning). I propose to apply this multiple approach to a further analysis of my case study, following Mitroff and Blankenship (1973) and Drysek (1982, 1987), in the belief that contrasting perspectives will lead to enhanced understanding.

5.   Revised approach

My review of the initial propositions has identified three particular aspects of 'landscape' usage warranting further examination. First, the patterns of use and development of the conceptual meaning of 'landscape' that underpin the current plurality; second, the question of an underlying ideology or myth of 'landscape'; and third, the political nature of 'landscape' meaning and use, and the influence this has upon plural usage, and upon the functional usage of 'landscape' in professional communication.

All of these demand an historical dimension to the 'landscape' analysis. I have therefore undertaken a detailed review of 'landscape' usage in historical documentary sources that are related to the contemporary case study. This is presented as Appendix V. I use this as an additional data source for my further analysis of the case study.

In the next three chapters I present three discrete re-examinations of the case study, offering three different perspectives. The first focuses upon the conceptual meaning of landscape, as expressed in plain language and metaphor, and explores the proposition that the current plurality in 'landscape' meaning is a result of the way that different individuals, professions and disciplines have used the word in different ways to help conceptualise and understand the 'real' world. It initially assumes that 'landscape' usage has reflected a rational and consistent search for improved understanding in an 'open' society (Drysek, 1982) but finishes with a counter argument in support of a greater recognition of unconscious variation in language. In the second analysis I examine the 'myths' (Barthes, 1988) of 'landscape' within the case study, drawing particularly upon my earlier examination of symbolic associations of 'landscape'. This adopts a more ideological perspective, starting from the premise that language (and therefore 'landscape' usage) inevitably reflects and expresses underlying and frequently unspoken assumptions that are widely shared. Finally, I adopt an overtly political perspective, and explore the proposition that current patterns of 'landscape' usage result from the way that different individuals, groups and professions use 'landscape' to promote their own needs and interests (Farr, 1989). The three analyses all draw upon the same contemporary and historical sources, but I present them separately (following Allison, 1969), as different interpretations of the documentary and interview material. They each adopt a broader concept of 'context' than my initial analyses, and

link the contemporary patterns of use I have identified to broader historical material. In the final chapter I explore the potential interrelationships between the different stages and elements of my interpretive approach.

CHAPTER NINE: 'LANDSCAPE' AS A CONCEPTUAL FRAME

A. INTRODUCTION

My first reanalysis of 'landscape' usage in the case study examines consistency and variation in the conceptual structure of 'landscape' meaning and use. I extend the frame metaphor proposed by Rein (1983), that I used in developing the concept of frame of reference, to explore the premise that 'landscape' itself provides a conceptual frame upon reality. This frame is used by individuals, groups and institutions in order to make sense of physical and social phenomena (for this case study, the issue of trees and plantations in the high country).

Rein explained his position like this: "The nature of reality is such that every attempt to grasp it requires that we impose some constraints for simplification" (1983:94). He went on, "The metaphor of perspective... captures my use of the term frame... a frame provides us with a vision in a world of doubt" (1983:99). His own use of metaphor is particularly appropriate to the concept of 'landscape', which has been frequently described as 'a way of seeing' (Cosgrove, 1984; Relph, 1981). 'Landscape' thus provides a conceptual frame, (or more accurately, frames) (Pound, 1983), through which real world phenomena such as trees and plantations are seen and interpreted.

This approach extends my analysis of 'landscape' usage in Chapter Six, that drew upon Lakoff and Johnson (1980). They argued that "our ordinary conceptual system, in terms of which we think and act, is fundamentally metaphorical in nature" (1980:3). Metaphor is a matter of 'imaginative understanding', that helps us understand one kind of experience by relating it to other, more familiar experiences (Ricoer, 1976; Schon, 1979). In the first part of this extended analysis I attempt to interpret the patterns of 'landscape' meaning and use revealed in my case study by reference to the way that the conceptual meaning of 'landscape' is expressed through its metaphorical structure. I examine this conceptual structure of meaning of landscape in relation to the types of philosophical, scientific and professional questions being addressed by the users.

I undertake this search for an explanation based upon conceptual meanings, in two stages. First, I interpret in conceptual terms the historic evolution of the meaning of 'landscape' within

documentary records. I draw upon several sources to do this - my initial literary review of the recent academic and professional use of 'landscape' (Chapter Two), my interpretation of the basic etymology of 'landscape' (Appendix III), and a documentary analysis of New Zealand usage in my case study (Appendix V). In doing so I adopt a 'rational' view of language, in the sense that I assume that the words people use are chosen consciously and in the interests of clear and open communication (Drysek, 1987).[1]

I have identified two contrasting features of 'landscape' usage. In some periods and contexts the metaphorical structure of 'landscape' remains generally stable, and is applied as a consistent conceptual frame to different situations. At other times, the underlying metaphorical structure appears to change to meet new conceptual needs and challenges. The overall result is a gradual widening of available meanings. This has led to the current plurality.

In the second stage of this further analysis I attempt to reinterpret the contemporary patterns of plural 'landscape' usage revealed in my case study. I do this by searching for evidence that the plural conceptual meanings of 'landscape' that have evolved in the past have been used to provide different conceptual frames for understanding the contemporary issue of trees and plantations in the Canterbury high country.

However, whilst I found that my conceptual analysis provided some valuable insight into the patterns of usage revealed in my interviews, there were also widespread variations for which the conceptual analysis offered little explanation. In the final part of the chapter I present a counter argument, in which I suggest that the assumptions of 'rational' language use upon which my conceptual analysis is based may not be wholly valid. Instead, a contingent interpretation of 'landscape' usage is also required to complement the 'rational' explanation.

1/   This contrasts with the overtly 'political' view of language that I adopt in my third analysis. I make
this distinction in order to maximise on the range of interpretations of my material (Drysek, 1987).

B.   THE CONCEPTUAL MEANINGS OF 'LANDSCAPE' : HISTORICAL FRAMES

1.   Origins[2]

There is some dispute over the etymological origins of 'landscape'. Several authors have identified antecedent words in mediaeval Europe, referring in different ways to an organised pattern of land uses and their associated social responsibilities (Troll, 1971; Tesdorpf, 1982; Stilgoe, 1982; Jackson, 1984). Others have argued that 'landscape' emerged during the early Renaissance as a technical term in painting (Cosgrove, 1985). The conceptual differences between the two periods are striking. Mediaeval usage appeared to imply an interactive and existential concept - the roots of 'scape' refer to a collective way of life. In contrast, Renaissance usage was characterised by a sense of detachment and control. Relph (1981) suggested that this new conceptual structure reflected an overall shift in European thought at that time, stimulated by Cartesian philosophy.

It is possible that these two usages of 'landscape', as spatial organisation of land use, and as a painting of land, continued in parallel, at least for a period (Relph, 1981). However, the earlier forms, like the term 'landscip', soon dropped out of use in English, according to the written records, although they continued in related words in German.[3]

During the two hundred years following its introduction as a painter's term in the seventeenth century, the meaning of 'landscape' in English high society broadened and deepened (Turner, 1979). It came to include not only a painting, but also a general view, the appearance of nature, and an estate developed to represent ideal forms of nature. The transfer of 'landscape' to different aspects of the arts was facilitated by the close intellectual and social links between them. It was

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2/   See Appendices III and IV for detailed notes.

3/   No explanation has been offered as to why the two languages diverged. I believe the causes may be related to differences in the way society evolved in England and Germany. The decline of collective rural land holdings in Britain, due to enclosure, could have made the popular use of the mediaeval meaning of 'landskip' redundant, at the same time that high society became increasingly centralised, and the new intellectual term 'landscape' became fashionable. In contrast, Germany retained its traditional rural structures of land holding, and maintained regional forms of government for much longer and thus may have maintained the earlier meanings of 'landschaft' in regular use.

reinforced by technological developments in surveying, that provided the practical means to measure and represent nature (Cosgrove, 1985). However, the underlying conceptual structure of landscape remained consistent, expressing a composed, rational and idealised perspective view (Cosgrove, 1984).

There appear to have been two contrasting developments in German usage. First, the German term 'landschaft', evolved in meaning from the organisation of rural land to mean a territory, or an area of land (Tesdorpf, 1982). Second, pictorial meanings were introduced from Dutch and English (Cosgrove, 1985). Thus two distinct kinds of meaning developed in parallel - 'landschaft' as both picture and area (Troll, 1971). As contemporary German language dictionaries show, the earlier use of the word, as a community of people of a particular 'land' or region, has also remained in use (see Appendix III).

Relph has argued that in English usage during the late eighteenth and nineteenth centuries the conception of 'landscape' as a rational, detached and ideal view was challenged by the Romantic movement. He cites Ruskin as expressing the Romantics' search for spiritual and emotional meaning in life through his use of 'landscape', calling it "the ruling passion of my life" (Relph, 1981:38). For most users, however, this Romanticism was expressed as a sentimental overlay to the existing pictorial concept of 'landscape', as it came to be popularly associated with scenery and tourism. On the other hand, the technical dimensions of 'landscape' as detached representation were developed further in the natural sciences. Smith (1969), for example, described how the desire for comparative analysis of the different types of landform and vegetation encountered in Pacific exploration stimulated a demand for accurate observation of nature. 'Landscape' came to signify the biophysical forms and appearance of nature, in addition to its pictorial qualities.

The conceptual usage of 'landscape' had therefore passed through several phases by the mid nineteenth century. Initially, it expressed an interactive social relationship between humans and their land. During the Renaissance a radical shift occurred and the earlier 'landskip', or 'landship', decayed. What is virtually a new word appeared, 'landscape', describing a detached representation and view of land. Usage of this concept expanded steadily into new areas of application. During the early to mid nineteenth century there was an attempt by some intellectuals to widen the conceptual basis of 'landscape' to include a spiritual dimension, but

popular usage maintained and expanded its pictorial qualities. In German usage, the pre-Renaissance meanings of 'community and land' evolved into a concept of 'landscape' as area. This subsequently paralleled and interwove with pictorial concepts, as well as with the original meanings.

2.   The relationship of area, appearance and organisation

a)   Overseas developments

The conceptual relationship between area, appearance and organisation in the meanings of 'landscape' has subsequently emerged as both a continuing theme and a source of tension in academic and professional usage. The evolution of 'landscape' and its cognate terms in physical geography provides a good illustration. Geography developed as a university discipline in Germany during the nineteenth century and its scholars adopted the concept of 'landschaft' to describe distinctive, areal relationships in nature, and between humans and nature (James, 1981). Early usage focused upon description and classification of ideal types, for example 'landschaftraum'. However, as geographical understanding developed, so 'landscape' was repeatedly redefined in new ways that incorporated the changing focus of study (James, 1981; Hartshorne, 1939). In physical geography and the related earth sciences, 'landscape' came to be used extensively to refer to the appearance of surface forms and their distinctive patterns.

Usage of 'landscape' as surface pattern continued in the post World War II period, stimulated by technical developments in aerial photography and mapping. This provided a powerful tool for qualitative regional analysis. However, such surface metaphors are limited in the extent and accuracy by which they can describe complex structures and processes. One response was to replace the 'landscape' approach to land assessment with a parametric approach to analysis (Mabbutt, 1968). An alternative was to redefine 'landscape' in more systematic terms. Thus the concepts of systems ecology and general systems theory were incorporated into 'landscape' terminology (Chorley, 1962). 'Landscape' became redefined as a dynamic system of matter and energy (Isachenko, 1968, cited in James, 1981). By 1984 Naveh and Lieberman were using 'landscape' in an extensive and holistic way to describe the systematic interaction of

human and natural processes, thus completing a cycle of conceptual development that started with Humboldt's concept of 'landschaft' typification almost 200 years earlier.

Human geographers also used 'landscape' conceptually to refer to a surface, but tended to focus upon the idea of 'landscape' as a visible record of cultural activity - "our naively given sector of reality" - to be interpreted by the professional geographer (Sauer, 1963:321). They initially used metaphors such as 'stamp' and 'imprint' to describe the patterns of human action on the land, and like the physical geographers, made extensive use of the new technology of aerial photography.

The concept of 'landscape' as a physical record of cultural processes continued in both English and German geography in the post World War Two period. In England it is perhaps best epitomised by the work of Hoskins (1955), whilst in Germany the concept of 'landscape indicators' was particularly influential in the 1960s (James, 1981).

However, this idea of an 'objective' record of human action has attracted repeated criticisms. Hartshorne, in 1939, concluded that the combination of German areal and English pictorial traditions created a confused terminology and ambiguous conceptual base for geography. He argued, unsuccessfully, for a limited visual meaning of 'landscape'. More recently, social geographers have questioned the social and cultural assumptions that underpinned the concept of 'landscape'. They have challenged first, the assumptions about an 'objective' field of study, and the quasi-scientific methods used to investigate it (Gregory, 1978); and second, the ideological basis of 'landscape' (Cosgrove, 1984).

One reaction was to redefine 'landscape' in more existential terms - "the visual context of human experience" (Relph, 1981:62) - in an attempt to regain a sense of connection between the human and material world. An alternative response was to argue that the visual inheritance of 'landscape' effectively condemned it forever to repeating 18th century ideology: "When we take over landscape into geography, and particularly into public policy, we inevitably import in large measure the realist, visual values with which it has been loaded; its connections with a way of seeing, its distancing of subject

and object and its conservatism in presenting an image of natural and social harmony" (Cosgrove, 1984:58).

b)   New Zealand

In New Zealand, 'landscape' has fulfilled similar conceptual roles in the biophysical sciences to those used overseas. Several early scientists wrote of the 'physiognomy' of the 'landscape' when describing vegetation (Monro, 1868; Cockayne, 1899). The geomorphologist Cotton drew upon and developed American terminology in earth science. He extended Davis' concept of 'landscape' as an abstract surface of landforms, to that of a 'generalised land surface' (1941). Cotton attempted to accommodate the dynamics of change with a film metaphor: "the flowing landscapes of geologic time may be likened to a kinescope panorama" (Cotton, 1942b: frontispiece, quoting Barrell). Cotton's usage of landscape extended significantly in his later work, but the conceptual structure of 'landscape' as a generalised land surface remained largely consistent.

The most significant development in the post World War Two period has been the emergence of a distinctive New Zealand interpretation of 'landscape' as system. Swaffield and O'Connor (1986) provided an overview of the evolution of the concept of land systems in New Zealand, in which the term 'landscape' has been actively used. It has fulfilled several roles. At the local scale Burns and Tonkin (1982) incorporated a systematic concept of 'landscape' in terms of soil-landscape systems. Mosley (1978) articulated Chorley and Schumm's concepts of 'physical landscape systems' in hydrology. O'Connor (1984) subsequently paralleled Naveh and Lieberman's (1984) holistic approach in his conception of 'Mountain Landscape Systems'.

O'Connor proposed conceiving the 'landscape' of the eastern South Island high country in the following terms: "the real test of the worth of science would come in the application to such a landscape in becoming of a unified theory of understanding and interpretation, such as the concept of geographic thresholds of Schumm (1979), and to how such a theory stands up to any attempts to knock it down with facts. In such a way would we know where we were in landscape processes in time and space" (1984:60). The conceptual nature of 'landscape' has clearly evolved from a simple surface, or the

outward appearance of vegetation, through a more abstract notion of physical systems, linking material, space and time, to an holistic concept that incorporates both the evolution of regional biophysical systems, and human relations with and within such systems.

The concept of 'landscape' as a distinctive surface pattern was also adapted in a somewhat different way by a number of other commentators. I have noted that early colonial usage in natural science expressed 'landscape' as appearance and typification. The English-trained geographer, Cumberland, introduced usage of 'landscape' as the distinctive character of a region in his writings on soil conservation and geography (1940, 1941, 1944a, 1944b, 1946, 1949). This reflected the similar usage of 'landscape' as appearance and type of territory that was widely used in regional geography in both Europe and America. Wedde (1987) has pointed out that 'landscape' has also been used in art and literature to typify the character of land and people as part of a search for, and expression of, national identity. These parallel usages converged during the past two decades or so, as the term 'New Zealand landscape' has come to be used extensively in conservation science and advocacy.

This usage has three important conceptual dimensions. First, a continuity of emphasis upon typification - "land can also be grouped according to category of landscape, such as mountains, hills, plains and wetlands or drylands..." (Molloy, 1980:29). Second, the expression of a goal of integration - "the closest synthesis of the criteria used to define the (ecological) regions is landscape. It brings together topography, climate, geology and human usage" (Simpson, 1982:11). Third, an explicit emotional and perceptual content was acknowledged and considered to be a legitimate part of the concept - "whether in town or country, our landscapes should be distinctly and recognisably New Zealand in character, and hence a cause for pride" (Molloy, 1980:9). "The landscape is a slate for the culture, a touchstone for identity..." (Park and Simpson, 1987:5).

This combination of 'landscape' attributes has been a deliberate conceptual development: "of necessity therefore, landscape includes both natural and cultural components - this is a reality that must not only be accepted and understood, but used..." (Park and Simpson, 1987:4).

Since the mid nineteenth century, therefore, 'landscape' usage within the natural sciences and geography has evolved conceptually and has been extended into new applications. Its areal and visual dimensions have been frequently expressed as 'landscape pattern', but there has also been a further step in which 'landscape' has been redefined in terms of both mechanical and organic metaphors of system. The emotional and existential dimensions of landscape have also been extended, whilst critical commentators have explicitly examined these conceptual and ideological structures.

3.   **Professional usage**

a)   <u>Overseas trends</u>

The profession of landscape architecture has provided a second major focus for the development of conceptual meanings of 'landscape'. During the early part of the nineteenth century the design approach used for the development of rural estates in Britain was transferred to the growing cities. Initially 'landscape gardening' (Downing, 1859) applied 'landscape' ideals to private land. However, the growth of the public parks movement meant that the technical and picturesque aspects of 'landscape' also developed an explicit 'humanist' dimension, making the supposed moral and health benefits of 'landscape' available to a wider urban population (Relph, 1981). In North America this initiated the profession of landscape architecture, whose activities have subsequently widened the application of 'landscape' ideals to other aspects of urban development, and to regional planning (Fein, 1972). The planning emphasis in particular has meant that 'landscape' in North American professional usage has largely been equated with a three-dimensional physical resource - thus paralleling conceptual usage in the earth sciences. Similarly, increasing awareness of ecosystem concepts (McHarg, 1969) has lead to the incorporation of systems terminology from the biophysical sciences into 'landscape' usage by the design professions (for example, Lyle, 1987).

I noted earlier Mabbutt's analysis of the 'landscape' approach in land assessment, and its limitations compared to the emerging 'parametric' approach. One intriguing development associated with the landscape architectural profession in North America

was the subsequent translation of 'landscape' terminology to this parametric approach. Fabos (1985) thus adopted the term 'total landscape' to describe the combination of all the various environmental and social parameters affecting a region. However, whilst the parametric approach has proved to be particularly well suited to the use of computer-based information storage and retrieval systems, it has not provided a robust conceptual base for land evaluation, and has in its turn been largely superseded by a genetic interpretation of land systems.

This contrasts with the British tradition, that until recently emphasised the eighteenth and nineteenth century traditions of picturesque improvement.[4] In Germany, landscape architecture also adopted an areal concept of 'landschaft' and has been particularly influenced by the emerging discipline of 'landschaft ecologie' (Troll, 1971). Despite these national differences in emphasis, however, the concept of 'landscape' within landscape architecture worldwide retains elements of the pictorial, areal and humanist traditions that characterise its origins. These continue to create tensions in its search for a theoretical base (Howett, 1987).

b)   New Zealand developments

Evolution of the conceptual nature of 'landscape' usage in the design professions in New Zealand has broadly paralleled overseas trends, and been influenced by them, although the timings and sequences differ. During the nineteenth century, the English term 'landscape gardening' was introduced with the early settlers (Challenger, 1983), referring to the layout of parks and gardens. This usage of 'landscape' as a combination of area, appearance and the picturesque ideal has continued in the domestic tradition to the present day. 'Landscape architecture' first appeared in the early twentieth century, describing the design aspects of this tradition.[5] It was also linked, as in North America and Europe, to the City Beautiful Movement. This usage of 'landscape' remained largely urban, or related to enclosed and improved parkland.

4/ One factor that differentiated 'landscape' usage in the UK from the USA may have been differences in the educational systems - in North America landscape architecture was first taught as a separate subject in university at the turn of the century, whereas in the UK it remained a largely craft apprentice based activity until the 1950s and 1960s. The earliest university teaching (at Liverpool University) was subsumed within 'civic design'.

5/ Notably associated with the Christchurch nurseryman A.W. Buxton (Tipples, 1989).

A second professional interpretation of 'landscape' emerged in the post World War II period. Several individual landscape architects who had trained in North America started to advocate improved methods of planning and design for new construction (Oldham, 1966). They used 'landscape' to describe the physical form and layout of 'a site'.[6] The two conceptual strands of picturesque improvement and of technical site planning were linked in university teaching at Lincoln and Auckland (Densem, 1990). They were also expressed in Salmon's advocacy for the use of 'landscape architects' to fit development into the countryside, as part of his contribution to the renewed debate on 'scenic preservation' (1960). By the end of the decade geographical concepts of 'landscape' as regional and environmental character had been added, and the embryonic landscape architecture profession was using 'landscape' to express a complex and inclusive concept of environment (Challenger, 1969). This included area, form and appearance at a range of scales, in both urban and rural situations (Gay, 1977; Beard, 1977).[7]

Subsequent developments in usage by the landscape architecture profession in New Zealand can be interpreted as reflecting a series of conceptual refinements of this underlying notion of 'landscape' as environment. Three conceptual problems emerged. First, as I noted in both overseas usage and usage in the natural sciences, the concept of 'landscape' as area, form and appearance deals inadequately with questions of process. Challenger (1970) used a biological analogy to address this issue ('landscape' as a 'living organism'), but most practitioners adapted Ian McHarg's overlay method of data recording, and failed to address explicitly the dynamics of 'landscape'.

A second problem arose with the complexity of 'landscape' conceived regionally and systematically. Jackman's (1986) concept of 'total landscape' followed Fabos' lead in redefining 'landscape' as an all-inclusive concept, that incorporated parametric analysis. However, he went further, defining this 'total landscape' as an abstract system of information processing and storage. 'Landscape' was no longer the 'real world' (this

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6/ Expressing the modernist ideals being taught in the American landscape architecture schools at this time.

7/ M. O'Connor (1982) argued that this use of 'landscape' as a metonym for environment has subsequently underpinned the thinking of the landscape architecture profession in New Zealand.

was described as 'total environment') but was the sum of human understanding of this world.

Finally, the increasing critical challenges to 'landscape' ideals highlighted the inherent tensions between the physical, perceptual and social dimensions in an inclusive concept of 'landscape'. Rackham and Darby (1981) and Bennett (1984) addressed the problem by separating 'visual landscape' from the underlying 'physical landscape'. Cole (1977) and subsequently Anstey, Nicholls and Thompson (1982), Jackman (1986), and Lucas (1987), responded by introducing the notion of 'values' into 'landscape'. Thus the physical 'landscape' was argued to hold 'landscape' values.[8] This professional concept of a multivalent 'landscape' thus parallels and mirrors the concept that had evolved within conservation science and advocacy, noted above.

In summary, I believe the historical record of 'landscape' usage can be interpreted as a story of conceptual development and evolution. 'Landscape' was used when it was conceptually congruent with the overall context of its use, but became problematic when it was not. As new scientific or professional concerns have arisen, so the conceptual content of 'landscape' has been modified to meet the perceived needs, or new conceptual dimensions were borrowed from other disciplines. Some of the most active modifiers of 'landscape' have been those with a professional interest in it - landscape architects - and I return to this theme in Chapter Eleven. In the next section, I attempt to interpret the contemporary patterns of usage I have found in my interviews from this 'conceptual' perspective.

C.   THE CONCEPTUAL MEANINGS OF LANDSCAPE: CONTEMPORARY FRAMES

1.   Frames of reference and conceptual 'landscape' usage in the case study

My interview analysis revealed some patterns of usage linking particular plain language and metaphorical meaning of 'landscape' to particular users. Although 'landscape' was used to mean

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8/   'Values' draws on several sources - the sociological and ethical concept of value (Zepke, 1981), a technical concept of scientific valuation (Molloy, 1980), and economic valuation (Meister, 1977). Jackman (1986) accommodated these different interpretations as three 'value systems' - ethical, ecological and economic.

the appearance of land in all the common frames of reference, usage in three frames (consensus by administration, individual improvement and balance of local interests) emphasised pictorial or panoramic metaphors. In contrast, the notion of pattern, and other physical and areal metaphors, was used extensively by those who adopted the 'multiple use management' frame. Usage in the two 'conservationist' frames was diverse, but included physical metaphors such as pattern.

Areal and physical metaphors were typically associated with active use of 'landscape', whereas perceptual metaphors (such as a painting) were linked to passive use. These conceptual and functional associations (summarised in Table Twenty Six, below) can be interpreted as an expression of the way that 'landscape' played different conceptual roles for the different respondents.

Table 26 :	Conceptual and functional associations of 'landscape' with common frames	
Common frame of reference	Dominant metaphors	Characteristic mode of usage
Multiple use management	Pattern	Active
Conservative management	x	Active
Consensus by administration	Pictorial	Active
Conservation by control	x	Active
Individual improvement	Pictorial	Passive
Balance of local interests	Panorama	x
System design	Areal	x

(Note: X indicates no strong pattern of usage in this category.)

For a few respondents (five), who adopted the 'multiple use management' frame of reference, 'landscape' fulfilled a central conceptual role. Its meanings were complex, combining area, form and appearance, and it was used in an integrative way:

...as long as the landscape issues are addressed in totality. It's tied back to the philosophy of what we're doing...

For these respondents (who were either landscape architects or planners) 'landscape' signified an inclusive environment, with a distinctive biophysical character. It provided an integrating frame within which the issue of trees and plantations could be addressed. This in turn led to a presumption towards an integrative response to the issue. This usage reflects the documentary evidence on the dominant use of 'landscape' by the landscape architecture profession as a whole.

Most of the other respondents who used the 'multiple use management' frame also made active use of 'landscape'. They made particular use of surface metaphors (for example, pattern). However, I identified two distinctive variations in the conceptual role 'landscape' played.

First, although it did not occupy the same central role as it did for the landscape architects, 'landscape' still   ⌐ important integrative concept for several natural scientists and land use planners. Th   ₅cape' to articulate concerns about the need to 'fit' new planting into existing land uses aₙₖ ⌐ᵢophysical land systems. This is entirely congruent with their overall conceptualisation of the issue as being a need for active management, and expressed the conceptual use of 'landscape' that had evolved in natural science.

Second, a number of other 'active' users (particularly forestry consultants) used 'pattern' in a more visual sense - they used 'landscape' to express their understanding that one of the important aspects of the issue was the effect of trees and plantations on the overall character of the high country. They emphasised the opportunities arising from trees and plantations but recognised that any opposition to planting based upon visual concerns made 'landscape' an important issue to consider.

In contrast, the respondents who made the least use of 'landscape', and expressed it in its simplest, pictorial, terms, tended to use it, if at all, within frames that emphasised the rights of individuals or local communities to make decisions about trees and plantations. Those who expressed the 'individual improvement' and 'balance of local interests' frames conceptualised the overall issue as one of individual opportunity for improvement through tree planting. They used the well-established popular 'pictorial' conceptions of 'landscape' to describe the views and motives of those opposing planting. They characterised them as personal and subjective in a way that is consistent with the idea of 'landscape' as a perceptual concept.

The users of the 'system design' frame used an areal concept of 'landscape' as part of a vision of a need for a systematic overview. Those described as 'consensus by administration' tended to use a perceptual concept to express their recognition that conflicting interest groups held different values.

From this analytical perspective, therefore, different common frames of reference tended to reveal different conceptual uses of 'landscape'. These uses contributed in different ways to the respondents' overall perspective on the issue. The players with active, interventionist concerns used complex, multifaceted, areal and interactive concepts of 'landscape' to define the issue of trees and plantations in terms of the overall patterns of land use in the high country. In contrast, those who sought to defend the individual rights of landholders against outside influences used a simple perceptual concept of 'landscape' to characterise the opinions and motives of those who wished to control their activities. Each conceptual usage has clear historical origins, and was used in a way that was congruent with the overall frame of reference of the user.

However, there are significant problems in this explanation of plural meanings. First, I have been unable to identify any consistent distinctive conceptual uses of 'landscape' within the 'conservative management' and 'conservation by control' frames of reference. Second, in identifying broad patterns of usage, I have inevitably downplayed the way that even within frames with distinctive conceptual uses, there are also other meanings being used, that are not congruent with the principal usages. Third, my concentration upon a search for consistency in usage within common frames has disguised the extensive plurality of use within individuals' usage, that I identified in Chapter Six. In the next, and final, part of the Chapter, I present a counter-argument to account for these variations in conceptual usage.

D.   CONTINGENT FRAMES - A COUNTER ARGUMENT

I noted in Chapter Three that Potter and Wetherell (1987) have argued against the idea that language use is consistent. Instead, they have suggested that people adapt the meaning and use of words to suit their immediate needs and circumstances. "Because people go through life faced with an ever changing kaleidoscope of situations, they will need to draw upon many different repertoires to suit the need at hand. From this theoretical perspective what is predicted is exactly variability rather than consensus" (1987:156).

1.   Variations within documentary sources

My interpretation of the conceptual evolution of 'landscape' in documentary usage was undertaken at a very broad level. I have based my case for continuity in conceptual meanings upon a selection of authors who were frequently dealing explicitly with 'landscape' as an academic concept. A detailed examination of the recent documentary sources in my case study (Appendix V) reveals that there was also considerable variation. Table Twenty Seven (reproduced from Appendix V) shows the overall diversity of meanings evident in the documentary usage.

Table 27: Conceptual meanings of 'landscape' in the historical record of my case study

Period	Major continuities of meaning	New meanings	Comment on usage
European Settlement 1777-1900	* panorama * picture * improved land * gardening	* appearance of natural vegetation	* low levels of usage overall
Twentieth Century NZ 1900-1960	* picture * appearance of natural vegetation * scenery * improved land	* landform * soil patterns * regional setting * natural beauty * urban improvement	* no references in scenic preservation debates * strongly sectoral uses in natural sciences, geography, art and garden design
Concern for the Countryside 1960-1970	* picture * scenery and natural beauty * appearance of land * improved land * landform * regional setting * urban improvement	* rural landscape architecture * scenic resource	* landscape, landscape architecture, and scenic preservation explicitly linked * emerging plurality of use
Professional extension 1970-1985	* picture * scenery * appearance of land * improved land * landform * regional setting * urban improvement	* biophysical patterns and systems * landscape 'values' * environment * 'total' landscape * experience and identity	* overall usage still low * increased ambiguity in usage * major professional promotion * use in conservation policy
Administrative reform 1985-1988	* experience and identity * 'landscape' values * appearance of land * improved land * biophysical patterns and systems * environment	* landscape as 'inscape' * ideology * symbol	* bicultural opportunities * materialist critique * removal from resource management * use in local planning * conceptual synthesis

Comparison of different writings by the same author also reveals variation. Challenger, for example, wrote of 'landscape' as both a living organism (1969) and as a visual scene (1970). O'Connor referred to 'landscape' as the surface of land (1979), as vegetation and cosmetics (1980) and as a system (1982).

There is even variation within single texts. Cooper (1987) presented an argument that 'landscape' is a cultural phenomenon, yet also referred within the same article to the "actual landscape itself" (1987:5), appearing to imply a biophysical reality. Park and Simpson (1987) whilst explicitly proposing a particular conceptual use of 'landscape', nonetheless included diverse and conceptually incompatible metaphors in their advocacy, ranging from a picture, and mirror, to an object.

Sometimes the reasons for such variation are obvious. Hayward and Boffa referred to 'landscape' as 'broad, visual response' within a technical sub-regional planning document (1972), whereas Boffa interpreted 'landscape' as the appearance of a garden, in an article that aimed to encourage the redesign of homestead gardens (Boffa, 1972). These were different emphases for different audiences. In other situations of plurality (for example, Park and Simpson, 1987), the reasons are not clear. These suggest that variation in conceptual usage may frequently be unconscious or even unintended.

2.   Variation in oral use

My interpretation of the consistency in the relationship between oral expression of conceptual meanings and common frames of reference, whilst plausible, is also open to alternative interpretation. Over half of my respondents expressed plural metaphors of 'landscape' within their individual frames of reference. There was therefore greater conceptual variation and inconsistency at the individual level than the aggregate patterns in the common frames reveal. One personal factor that appeared to be linked to plural usage was level of education. This suggests that conceptual variation may also be influenced by the language skills and resources of the individuals concerned. Respondents who had been educated to tertiary level appeared to be more likely to display greater variation and creativity in 'landscape' use. In addition, as Silverman pointed out (1985), there is a great temptation to assign interview transcripts greater status than they perhaps deserve. The exploratory and frequently dislocated nature of informal conversation appears more structured when coded and analysed than it is in the minds or experience of the participants. Much variation in conceptual 'landscape' usage may in fact reflect genuine uncertainty and inconsistency in the thoughts and speech of those involved.

Furthermore I could not find any consistent conceptual usage of 'landscape' in either of the two 'conservation' frames, yet these frames were characteristic of some of the most active users of 'landscape'. However, there were strong symbolic associations of 'landscape' in both common frames, and in the next chapter I present an interpretation of these associations as 'landscape myths'. For these users, the ideological and political roles of 'landscape' may have been more important than, and displaced, any consistent conceptual role. In other words, the use of 'landscape' as a conceptual frame for understanding real world phenomena is only one of several possible ordering frames.

3.   Conclusion

The evidence for a consistent pattern of conceptual usage of 'landscape' is therefore stronger in documentary sources than in oral usage, but even there is incomplete and to some degree contradictory. An alternative interpretation of the plurality in 'landscape' usage could be that written usage appeared to be more consistent first, because people writing about 'landscape' have typically been those who have consciously reviewed and selected its meaning; second, because written usage was more conservative, and less exploratory; and third, because my retrospective analysis has tended to highlight continuity, and downplay the extensive variations that occur throughout the record.

On the other hand, oral usage was open to wide variation due to the way that speech is strongly adapted to specific circumstances and needs (Gilbert and Mulkay, 1981). Examples of explicit conceptual usage were predominantly provided by individuals who already had an intellectual commitment of some sort to the notion of 'landscape', and who actively and deliberately used it in their speech. These tended to be environmental planners and scientists within the 'multiple use management' frame, or public sector officials with experience of dealing with 'landscape' advocates. In contrast, 'normal' oral usage was typically unconscious and frequently ambiguous. Apparent patterns of conceptual use emerged either where a formal disciplinary training coincided with a common frame of reference, or where a lack of any particular disciplinary influence meant that popular usage predominated. In the case of the two 'conservation' frames, the role of 'landscape' as 'myth' displaced any underlying conceptual consistency.

In summary, my interpretation of plurality on the basis of the conceptual nature of 'landscape' usage is fairly robust when applied to an overview of general academic and historical sources, but becomes much less so when related to a detailed analysis of recent literature related to the case study, or to contemporary oral usage. There are some patterns that can be interpreted conceptually, but they could be exaggerated by the imposition of an unduly rational analyst's

frame. There are also alternative explanations. 'Landscape' may indeed provide a conceptual frame, or frames, upon the world, but the evidence that this is a conscious frame is ambivalent, like the word itself.

CHAPTER TEN: 'LANDSCAPE' AS MYTH

A. INTRODUCTION

1. The idea of myth

My second reanalysis of 'landscape' usage in the case study examines the notion of 'landscape' as myth. The frame metaphor that I have used previously is still present in this approach, but assumes a broader meaning and application. It refers to a framework of beliefs and assumptions that are implicit in language and society, frequently unrecognised by the users, rather than an explicit personal or conceptual 'frame' on the world.

The idea of myth has been widely used in cultural studies to describe and analyse human thought structure (Levi Strauss, 1963), history (Foucault, 1980) and cultural practice (Barthes, 1988). Myths are also increasingly recognised as important in defining issues and problems in public policy. De Neufville and Barton (1987) argued that myths (which they defined as stories that draw on tradition and taken-for-granted knowledge) represent ideal types of situation - 'shared images' or 'common metaphors' - that can help communities make sense of events, and provide guidelines for response. Myth used in this way does not necessarily imply false or ill founded belief. "We mean to imply nothing about the literal truth or falsity of a story in describing it as myth, since some myths are well grounded in historical fact, while others are largely invented" (de Neufville and Barton, 1987:182). Furthermore, "one need not believe a myth to be literally true to take its message as true" (1987:185).

Myths have a moral component, and express and evoke ideas and emotions. They can perform important roles both in defining problems, and in generating public support for particular actions. However, as de Neufville and Barton noted, these characteristics can also be seen as drawbacks. They list five potential problems. One, the logic of myths is magical, offering simple solutions that may in practice conceal more than they reveal. Two, although myths may be shared, they can exist in different versions, according to the experience of those involved, Three, myths change slowly, and may produce outdated responses. Four, myths that are used to support communal

action can also disguise inherent tensions and conflicts. Five, because myths can be used to legitimise or approve particular actions, they can become problems in themselves (1987:183-4). De Neufville and Barton offered two examples of policy myths - home ownership, and the idea of private-public partnerships, whilst de Neufville (1983) has examined the use of myth in the formation of land policy.

2.   'Landscape' myths

'Landscape' has also been described as a myth (Wedde, 1987), one that adopts the underlying conceptual structure of its seventeenth and eighteenth century origins. This was described by Relph (1984) as a composed, rational and ideological perspective view. In this interpretation, the concept of 'landscape' as a 'way of seeing' (Cosgrove, 1985) has been a myth brought to New Zealand as 'creaking baggage' by colonial settlers (Cooper, 1987), and imposed upon an alien land and people (Wedde, 1987).

Certainly many of the symbolic associations of 'landscape' that I identified in my analysis of interview transcripts can be traced back to earlier European traditions. I categorised the associations I found into five groups:

* naturalness
* integrity, fitness and order
* activity, issue and understanding
* improvement, beauty and the picturesque
* identity, familiarity and emotion

Ideas of natural order, fitness and visual beauty, revealed and improved by human activity, are central to the seventeenth and eighteenth century English 'landscape' tradition. Emotional dimensions of 'landscape' were explored in the late eighteenth century debate on the beautiful, the sublime and the picturesque, and further developed in the nineteenth century Romantic tradition. Natural order, integrity and identity in 'landscape' formed part of nineteenth century

science. These historical dimensions of 'landscape' have been examined in depth elsewhere (see for example Smith, 1969; Williams, 1973; Turner, 1979; Brownwell, 1978).

In the following two sections I first trace out how these symbolic associations of 'landscape' contribute to the development of 'landscape' myths in the general documentary record of my case study, identifying several periods and examples of use that illustrate its mythical qualities. Second, I suggest how the symbolic associations of 'landscape' revealed in my analysis of the case study interviews can also be interpreted as contributing to the use of 'landscape' as myth, in relation to the issue of trees and plantations in the high country.

B.   HISTORICAL EXPRESSIONS OF 'LANDSCAPE' AS MYTH

All five groups of symbolic association that I identified in the contemporary frames of reference are evident in the historical documentary record of the case study (Appendix V). In each case, the particular meanings and associations of 'landscape' can be seen to exhibit some of the characteristics of myth.

1.   Naturalness

'Naturalness' is a recurring theme. In its earliest usage (for example, Munro, 1868) 'landscape' is used to describe a 'typical' example of the conditions encountered by European explorers, perceived by them to be unmodified 'nature'. It provided a basis for comparison with other more familiar situations, and as Wedde has pointed out, is subsequently expressed in literature and painting to legitimise the occupation of New Zealand by European settlers (1987). This idea of a 'natural' landscape recurs in preservationist and conservationist literature throughout the twentieth century. Salmon (1960), for example, alluded to 'natural landscape' in his polemical attack upon the way highways and hydroelectric projects were undertaken in the 1950s, using it to contrast the 'unspoilt countryside' with the crude 'ravages' of engineers.

Perhaps the most extensive use of 'natural landscape' as myth occurred in the 1970s and 1980s. Following Kelly's (1972) concept of types of 'natural landscapes', the phrase 'natural landscape'

was promoted and used in nature conservation advocacy to influence policy and statute. The thrust of the arguments by conservation scientists was that nature conservation policy should extend beyond the designation of specific features and sites, to include a systematic appraisal and management of representative 'natural landscapes'. Subsequent attempts to put these concepts into practice, for example in the Protected Natural Areas Programme, have highlighted the 'idealised' basis for this myth, as scientists have encountered the dual problems of defining both 'natural' and 'landscape' in a way that is amenable to systematic and unambiguous survey and designation (Park and Simpson, 1987).

2.   Identity, familiarity and emotion

An important parallel association of 'landscape' with 'naturalness' is that of 'landscape' identity, familiarity and emotion. It is one that has also been used in past decades in a 'mythical' fashion. Much of the scenic preservation debate of the 1960s, for example, emphasised the natural New Zealand landscape, drawing upon the recurring nationalist themes in literature and the arts (Mulgan, 1946). Opposition to development projects was couched in terms that portrayed the preservation advocates as defenders of the identity of the country (see for example, Forest and Bird editorials for this period).[1] By implication development proposals sought to degrade this identity. In the mid 1960s, it was recognised by groups such as the engineering profession that there was significant opposition to their actions - "might there be something we have overlooked?" (NZ Engineering: Editorial 1965:119). For a period 'landscape' entered their discourse. However, as I note below, their 'landscape' myth emphasised an approach to national identity that expressed picturesque ideals, rather than a search for indigenous 'nature'. The same word evoked different myths in different audiences, even when discussing the 'same' issue.

Identity, familiarity and emotion have also been fundamental to the 'landscape' myth in nature conservation advocacy in the 1980s. Responding to the problems of defining 'natural landscapes', Park and Simpson individually and jointly have extended their definitions of 'landscape' to include human perceptions and identity. Drawing upon ideas from the landscape architectural profession they have expressed an holistic 'landscape' myth that combines nature and culture (Simpson, 1982; Park, 1987a,b,c; Park and Simpson, 1987). Again, this 'landscape'

1/   Forest and Bird is the magazine of the Royal Forest and Bird Protection Society.

myth corresponds with de Neufville's and Barton's description of policy myth - simplifying, idealising and internalising incipient conflicts. However, as they also point out, the content does not need to be totally scientifically or socially 'true' for the message to have value.

3.   Improvement, beauty and the picturesque

The association of 'landscape' with improvement, beauty and the picturesque provides the strongest evidence for continuity in 'landscape' myth. Shephard (1969) provided a number of examples of the way that 'landscape' implied improved land, and usage in horticulture literature through to the present continually evokes an idea of carefully planned appearance. One consistent aspect of the modern version of this 'landscape' myth is the separation of beauty from function. The 'beautifying' associations, early town planning literature, the engineering journals of the 1960s, and the forestry literature of the 1980s all presented 'landscape' as an applied quality - something added to a 'functional' structure. It followed the 'objectivist' myth of modern society. By this I mean the separation of 'facts' from 'values' (Lakoff and Johnson, 1980). Thus "the engineering features prevail, but of course, we must not neglect.... beautification.... These in their turn should receive attention by the proper person, but the mistake should not be made of letting the architects or landscape artist lay out his plan without regard being paid to the engineering features" (McKenzie, 1919:300). The myth of separation continues to the present in the expression of visual attributes as a parameter of land - one that is recorded, evaluated and managed as a distinct and frequently independent variable.

4.   Integration

The separation of appearance from structure contrasts with the myth of 'integrated' 'landscape'. I found that the associations of integrity, fitness and order from early scientific literature (for example, Monro, 1868) were restated during the 1970s and 1980s by the landscape architecture profession. They have consistently argued for 'integrated landscapes', in which nature and culture, function and appearance, and different social needs are magically[2] resolved through careful design. It is thus also a restatement of classical ideals of fitness and order. The myth of 'integration' is not confined to the landscape architectural profession, and forms a major element

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2/   Using 'magic' in the sense that de Neufville and Barton refer to the 'myth' of deceptively simple solutions.

in the discourse of resource management (Bowonder, 1987; Walther, 1987; Ministry for the Environment, 1988a).

5. Activity, issue and understanding

My fifth category of symbolic associations from the interviews, that of 'landscape' as activity, issue and understanding, links to both the 'objectivist' and 'integrated' ideals. The main expressions in my case study documents came in public statements by landscape architects and their professional institute during the 1970s and 1980s. Here, 'landscape' was used to signify a solution to contemporary needs and problems, through the employment of landscape architectural expertise. Again, it fulfills all the characteristics of policy myth described by de Neufville and Barton - simplicity, legitimisation of a course of action, and the downplaying of conflict. However, as with the 'integration' myth there is also a counter interpretation, that portrays 'landscape' issues as the concerns of a specific interest group. This began to emerge in forestry literature in the 1980s, but is particularly notable in the interview transcripts (below).

6. Evolving and plural myths

In summary, I believe 'landscape' usage in the documentary sources of my study can be interpreted as policy myth, whereby 'landscape' and its particular symbolic associations are evoked and used to clarify complex issues and to legitimise particular courses of action. However, in contrast to a number of authors, I believe that 'landscape' myth is emerging as dynamic and pluralistic, with competing myths presented by different authors in different situations.

For example, although the English pictorial tradition is widely represented, there is also repeated evidence of associations such as 'landscape' type and integrity that derive from the scientific and German 'landschaft' traditions. There appears to be at least one other 'landscape' myth, that overlaps with the English pictorial convention, but brings with it its own distinctive focus on landform, area and condition.

New associations also evolve. Pound (1987) and Wedde (1987) both appeared to imply a static, regressive inheritance, that must be debunked and overturned. I identified a number of

associations (for example, 'landscape' as an activity, an issue and a mode of understanding) that were not part of the earlier convention. This leads me to believe that 'landscape' myths evolve, in response to new circumstances.

Furthermore, the symbolic associations I have identified were used selectively. Both the interviews and the documentary record reveal that different individuals made different associations with 'landscape', depending upon their frame of reference. They therefore created their own, situational myths, that reflect diverse needs and influences.

C. 'LANDSCAPE' MYTH AND THE ISSUE OF TREES AND PLANTATIONS IN THE HIGH COUNTRY

I believe there are two distinctive interpretations of 'landscape' myth occurring in my interviews on the topic of trees and plantations in the high country. In Chapter Six I identified clear patterns linking symbolic 'landscape' associations with particular common frames of reference (Table Twenty Eight).

Table 28:   Symbolic association of 'landscape' and frames of reference

Common frame	Symbolic association
Multiple use management	Naturalness, integration
Conservative management	Naturalness, identity
Consensus by administration	Issue
Conservation by control	Naturalness, identity
Individual improvement	Improvement, picturesque
Balance of local interests	Improvement, picturesque
System design	Issue

I have interpreted these in terms of two types of contemporary 'landscape' myths - the 'natural landscape', and the 'subjective landscape'.

1.   'Natural landscape'

In this myth the term 'landscape' refers to an ideal natural condition. It was used during the nineteenth and early twentieth centuries to describe distinctive patterns of vegetation in the high country and continues today in specialist use by natural scientists, but has been mixed and combined with other meanings. My interviews revealed that one group of advocates for active intervention in high country management (that is, many of those who adopted the multiple use management frame) used 'landscape' to signify a physical object or system that needed management. The diverse individuals who adopted this frame revealed subtle differences in emphasis. Landscape architects and planners who made major use of 'landscape' in their explanation of the issue of trees and plantations focussed upon an inclusive process of decision making; forestry interests highlighted an ideal outcome; and Maori respondents emphasised a sense of responsibility to pursue an ideal economic and productive outcome, expressed as an integrated 'landscape' pattern. Several individuals (particularly from the forestry sector) revealed a slightly different interpretation of the 'landscape' myth. They placed greater emphasis upon 'landscape' as an ideal appearance. This reflects the influence of the picturesque tradition. In all cases, however, 'landscape' was presented in a way that assumed the existence of a 'real' 'landscape' that needed management.

People who expressed the two 'conservation' frames presented a different version of the natural 'landscape' myth, adapted to support their contrasting interpretations of the issue. For them, like those who adopted the 'multiple use management' frame, 'landscape' signified a 'natural' reality. However, for these users the function of 'landscape' was fundamentally different. They drew on the ideals developed in nature conservation advocacy during the 1970s, and presented 'landscape' naturalness as an expression of national identity, and as a reason for opposing tree planting.

The contrast between the 'landscape' myth used by the 'multiple use management' frame, and that used by the 'conservation' frames, illustrates many of the mythical qualities of 'landscape'. Both expressed ideal types of situation, appealing to the concept of 'naturalness', but they interpreted it quite differently. In seeking a simple solution under the overall concept of 'landscape', each emphasised different aspects of the issue and disguised other aspects. For the users of the 'multiple use management' frame, the high country is 'naturally' forested. Their

ideal 'landscape' involved a return to this condition. For the 'conservation' advocates, the (eastern) high country is 'naturally' tussock grassland, which is 'threatened' by exotic forestry. An appeal to 'landscape' signified a commitment to maintenance of the current 'ideal' situation. Both usages simplified the situation, thus disguising the 'messy' realities of the relationship between nature and culture. Both sought communal action to achieve their ends, arguing for particular 'needs' (for example, national identity, global CO_2 emissions, economic growth). Both expressed 'landscape' as a 'real' phenomenon, an 'objective' reality (Lakoff and Johnson, 1980). And both used the same word, 'landscape', with similar meanings, for diametrically opposite goals. The mechanism that allowed this is the generalisation of 'landscape' in a 'mythical' way.

2.   Subjective 'landscape'

Several other distinct symbolic usages of 'landscape' revealed in my interviews illustrate further versions of a 'landscape' myth. For the bureaucrats and politicians who expressed the 'consensus by administration' and 'system design' frames, 'landscape' was used to signify a particular viewpoint. They adopted the subjective side of the 'objectivist' cultural myth (Lakoff and Johnson, 1980) by which 'landscape' was defined as the selective perception of a small interest group. The problem they choose to deal with was not the biophysical impact of trees in the high country, but the conflicting attitudes towards trees in the high country held by different groups. These users clearly assigned a quite different status to 'landscape' from those expressing the 'natural' and 'integrating' associations. Their 'landscape' myth was an extension of that propounded by Wedde - 'landscape' is a cultural invention that is quite distinct from the 'real' world. Thus any 'landscape' concerns expressed by those who were pursuing different goals to them could be treated as subjective opinion.

The 'individual improvement' frame also expressed 'landscape' as part of the subjective side of the 'objectivist' myth. For them, like the bureaucrats, 'landscape' signified selective visual perception of land. They emphasised the ideals of picturesque improvement, but typically assigned 'landscape' views to an 'emotional' urban lobby. This 'myth' enabled them to effectively discount the substance of the concerns.

D.   CONCLUSION

I have identified clear precedents in my historical documentary sources for the symbolic associations of 'landscape' that I derived from the interviews. I have also outlined the way that respondents who expressed different frames of reference used these symbolic associations to create contrasting landscape 'myths'.

However, my interpretation of 'landscape' myth in the case study is more 'open' than the conventional 'landscape' story. I believe 'landscape' can be interpreted as myth, but the nature and meaning of the myth, or rather myths, of 'landscape' are continuously explored and refined (Watson, 1989). They evolve through use. The nature of the 'landscape' myth in my case study corresponds closely to that described by de Neufville and Barton - being idealised, existing in multiple versions, being used to legitimise and gather support for particular actions, and in doing so, disguising conflict. Nonetheless, although I highlight the dynamics of 'landscape' use, as I note above there is also a strong element of continuity, so that the earlier meanings and associations do carry forward, as Wedde and Pound have revealed, but as part of a rich and evolving tradition.

I see 'landscape' myth as a further illustration of Goffman's model of multiple frames of reality. Scholarly sources have identified an overarching 'landscape' convention. I have argued that my general documentary sources suggest a number of important variations on this, for example, those drawing on the Germanic tradition. Within my case study I have identified two distinct myths associated with particular common frames of reference. I have also suggested individual variations on these. 'Landscape' myths occur at many levels of reality, and their content responds to the context, and the analytical perspective brought to it. Finally, in describing the myths I have noted the way that people use 'landscape' myth in different ways to promote their particular concerns. In the next chapter I focus upon this 'political' dimension of 'landscape' usage.

CHAPTER ELEVEN: POLITICAL 'LANDSCAPE'

A.   INTRODUCTION

1.   Political language

Farr (1988) argued that language is intrinsically political. This means that any consideration of conceptual change expressed in language must also be politically informed. My third and final re-analysis of the case study adopts a political interpretation of 'landscape' usage, exploring the way 'landscape' meaning and use appears to have been shaped by particular social interests.

'Political' analysis can be undertaken at several scales, in the same way that the different frame metaphors discussed in Chapter Three operate at different scales. A number of authors, for example, have examined the broad cultural and social relationships between knowledge, power and language (Foucault, 1980; Habermas, 1979; Laitin, 1988). Their macroscale interests have been reflected in several New Zealand based studies of the conservation and energy debates of the late 1970s (Arnoux, 1982; Tester, 1985; Goodrich, Taylor and Bryan, 1987). Examinations of 'landscape' as social ideology also typically emphasise broad class or cultural interests (Cosgrove, 1984; Pound, 1987; Wedde, 1987).

At an intermediate scale particular institutions and communities of interest use language politically. "Each kind of community is a thought world, expressed in its own thought style, penetrating the minds of its members, defining their experience, setting the poles of man's understanding" (Douglas, 1986:91). Professional groups have been frequently criticised for the material self interest expressed in specialised language (Perkins, 1980), and for the way they are believed to 'capture' public debate and policy formation (Illich, 1978). The written discourse of the landscape architecture profession in New Zealand has been analysed in a similar way by M. O'Connor (1982), who argued that their form of language served to promote the role of the profession.

Finally, at the microscale, the functional use of language analysed in discourse analysis[1] may also be interpreted politically. Blisset (1972), for example, used an analysis of how scientists explained a particular research programme to demonstrate the political conflict between competing research teams.

2. Political frames

My final analysis focuses upon the intermediate and microscale political context of 'landscape' usage, interpreting the way that the 'landscape' usage of certain individuals and interest groups relates to their particular roles and preferences in resource policy formation. In other words, what do people want, and how does 'landscape' get used to achieve this? The types of interest may be quite diverse - including financial benefit, the pursuit of individual and group status and power, and ideological commitments (Wilson, 1973). However, in presenting this analysis I do not claim that 'landscape' usage is <u>determined</u> by political considerations. Rather, I present a political interpretation of usage as a counterpoint to the previous conceptual and mythical interpretations.

My interpretation has two steps. First, I interpret the historical documentary record on the basis that the landscape architecture profession and others have used 'landscape' politically. I then draw on this background to interpret from a political perspective the patterns of 'landscape' usage in my interviews concerning trees and plantations in the high country. My basic argument is that different groups, pursuing different goals, in politically incompatible ways, appear to have used the <u>same</u> word, 'landscape', to support their particular positions.

B. DOCUMENTARY EVIDENCE OF POLITICAL USAGE

1. Landscape architecture - the pre-professional phase

The professionalisation of 'landscape' came late to New Zealand. The New Zealand Institute of Landscape Architects was not incorporated until 1973, in contrast to the United States and Great

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1/ See Chapter Three.

Britain, whose equivalent institutions formed in 1899 and 1929 respectively. The NZILA also followed many years behind other environmental design professions in New Zealand. For example, the New Zealand Institute of Architects was created in statute in 1913.

There is some evidence, however, of professional competition for particular roles concerning 'landscape', and of the political use of language to achieve this, in the early part of the century. At the First New Zealand Town Planning Conference and Exhibition (1919), the proceedings record a debate about the relative seniority of different professions. There was no explicit mention of landscape architecture, although one speaker commented, "The range of proceedings had astonished the general public, who were surprised at the variety of points discussed. They had the architect, the engineer, the geologist, the landscape gardener..." (Atkinson, 1919:267).

There was a nurseryman - A.W. Buxton - in the audience of the 1919 conference, whose firm began using the term 'landscape architect' around this time (Tipples, 1989). During the following decades the horticultural and planning journals record debate on the appropriate role for 'landscape architects', who were seen to be competing with landscape gardeners, horticulturalists and parks supervisors (Barnett, 1938:80). The focus of the disagreement was upon who should be responsible for producing 'landscape' plans, as the term 'landscape' started to be used in association with both 'gardener' and 'architect'.

2.   Landscape architecture - the origins of the profession

The main impetus for the formation of a new profession came in the 1960s. 'Landscape' figured prominently in the debate. I noted above that Salmon used 'landscape' to articulate his concerns for scenic preservation. He explicitly linked this usage to the role of landscape architecture "which makes the blending of roadworks into the landscape" (1960:21). He thus used 'landscape' to both gain public support for his campaign and to promote a particular policy response. Several landscape architects who had been trained overseas made similar pleas at conferences during the 1960s ; "How... landscaping can help engineering to fit into the environment" (Oldham, 1966:207).

By the middle of the decade, these advocates had "persuaded (engineers)... of the merits of landscape architecture" (Bogle, 1965:278). In 1967 the politician J.B. Allen acknowledged, "I cannot think of anyone in New Zealand who has greater responsibility for what happens to the landscape than the Minister of Works" (Allen, 1968:2). During this period, therefore, 'landscape' was being used by a number of individuals to promote concerns about the nature and process of development, and to promote particular personal and disciplinary roles in response. It was also used by those they criticised to defend their existing positions, by demonstrating their awareness of these concerns.

Densem (1990) traced the steps by which the emerging usage of 'landscape' was recognised in university teaching at Lincoln and Auckland. The establishment of a professionally orientated qualification in 'Landscape Design' at Lincoln in 1969 initiated the next phase in the political use of 'landscape'. Lincoln graduates left with a strong ideological commitment to 'the landscape' (Gay, 1977). They vigorously promoted in a range of articles in horticultural, planning and related journals both the 'need' for sensitive and integrated 'landscape' design, and the role of 'landscape architects' in providing the necessary skills. 'Landscape' was used as a metonym for environment in the newly formed institute (M. O'Connor, 1982), thus seeking to place landscape architects centrally in the planning and design process (see, for example, the NZILA definition of 'landscape' and its view of the role of landscape architects, in the institute's submission on the 1977 Town and Country Planning Bill (Beard, 1977)).

3.   'Landscape' and the public interest

Professional usage also linked 'landscape' to the public interest. An editorial in the profession's new journal (named, significantly, The Landscape) asked "How long do we keep on pushing on behalf of public landscape, for which the landscape profession has assumed responsibility?" (1977:2). For most landscape architects, this linkage was implicit in 'landscape' usage, although a few began to question the assumptions they were making. However, their questions were couched in normative terms - that is, they still assumed that the ideals promoted by the profession were correct, and any problems arose because of a lack of understanding by others: "To understand the function of the landscape architect..., it is necessary to understand what landscape is. It....is the total external environment" (Gay, 1977:19).

Several developments in 'landscape' usage sought to widen the role and further enhance the credibility of the profession. In 1978 Fabos was brought to New Zealand as a keynote speaker to a Planning Institute conference on 'landscape' and planning. He argued that "the parametric approach will help landscape architects be accepted on a par with engineering and town planning" (Buckland, 1978:6). This belief stimulated the redefinition of 'landscape' as 'total landscape' (Jackman and Treeby, 1984). 'Total landscape', promoted in the DSIR publication 'Our National Landscapes' (Jackman, 1986), sought to define all environmental and resource information within a computer based 'total landscape' inventory. Its adoption would serve to reassert the 'central role' of landscape architects (Jackman, 1980).

Redefinition of 'landscape' in terms of human experience (for example, Anstey, Nicholls and Thompson, 1982) also had an underlying purpose: "My fundamental concern has been to establish landscape as an inherent 'part of' rather than 'apart from' that process (of forestry)..." (Anstey, 1981:125). This shift in emphasis towards 'landscape' as experience was also reflected in NZILA submissions to government on the Environment Bill. Landscape architects thus tacitly recognised that 'landscape' was not politically viable as a metonym for environment, and redefined its meaning in a way that they hoped would be more politically acceptable.

4. 'Landscape' and the market economy

Finally, during the 1980s there were further redefinitions of 'landscape' by the profession in response to the ascendency of market ideology in public policy. This ideology had two tangible impacts on the profession. First, in the restructuring of government organisations that had previously been major employees of landscape architects. Second, in the replacement of the public welfare environmentalist language of the 1970s with a new language of property rights.

Organisational restructuring caused major internal friction: "Clearly there is a case for government to become more cost efficient. However, it is quite inappropriate for government departments to go out into the marketplace and actively seek consultancy work" (Editorial: The Landscape, 31, 1986:24). Passions began to run high: "There are very few who did not take a free ride through the subsidised seventies..." (Jackman, 1986:20). One response was to try to reorientate landscape architecture towards the 'market' (McCahon, 1988). A second response was to use economic concepts in 'landscape' conservation (Taylor, 1987). Both moves attempted

to reposition 'landscape' in a way that retained a role for the profession in a changing political and social environment.

The examples I have presented here were selected to illustrate the way that I believe documentary 'landscape' usage has expressed the political interests of professional landscape architects. The theme has been that first, 'landscape' has been deliberately and closely linked to 'landscape architecture', and second, that the meanings of 'landscape' used by the profession have consistently reinforced their claims to a central role in environmental management. Landscape architects very seldom use 'landscape' meanings that suggest a peripheral or minor role for the profession.

5.   Other disciplines

Documentary 'landscape' usage by other disciplines can also be interpreted politically. I have already noted the conceptual development of 'landscape' within the biological sciences and nature conservation in the post World War II period, as it came to signify a distinctive biophysical and cultural setting. This usage served a political purpose in promoting agendas for both science and land use policy.

Cumberland provided an early example, in his use of 'landscape' within his advocacy for soil conservation (1944a,b). Salmon (1960) used 'landscape' in his advocacy of countryside preservation, and it reappears in the debate concerning a New Zealand land use strategy in the 1980s. In Land Alone Endures, the authors argued that "any land use policy for New Zealand should lay emphasis on the distinctive biological qualities of the New Zealand landscape" (Molloy, 1980:63). They appealed to the sense of national identity evoked by 'the New Zealand landscape' to promote an 'integrated biological survey' (1980:86). The subsequently established Biological Resources Centre drew upon this usage of 'landscape' in the early 1980s, in establishing its survey programmes. The scientists involved again invoked 'landscape' in the mid 1980s when arguing for a specific 'landscape ecological' emphasis in the newly formed Department of Conservation (Park and Simpson, 1987). Thus conceptual change in 'landscape' served a political purpose, in framing a particular approach to science. Language usage in recent conservation literature also reveals a political dimension as the concept of 'landscape values' was

used repeatedly to argue for protection of the status quo in the South Island high country (Barr, 1982; McSweeney, 1983).

The association of distinctive forms of 'landscape' usage with specific policy agendas is striking in the documentary records of submissions to the Malvern County <u>1988 District Scheme Review</u>, which comprised part of my detailed case study. The most extensive usage of 'landscape', as natural setting, was used exclusively for conservation advocacy. "What makes New Zealand different from anywhere else on earth? Will our landscape retain its essential New Zealand character and diversity?" (L. Shand, 1988) - an approach apparently intended to evoke a sense of nationalist commitment to a policy to preserve the status quo. In contrast, submissions from development interests referred to 'landscape plans' in design terms, as the means to ensure that their proposals are acceptable, 'fitting into' the existing environment (echoing Salmon's earlier usage).

These examples illustrate how particular meanings of 'landscape' have frequently been associated with particular interests - for example, agents for policy reform, or professional identity and role.

6.   Political non-use

The documentary evidence of <u>non</u>-use of 'landscape' can also be interpreted politically. In Chapter Nine I noted that 'landscape' usage did not expand continuously. The term entered certain areas of discourse, but also dropped out of use. The engineering profession, for example, started using 'landscape' in the 1960s, but by the end of the 1970s, it had been almost entirely superseded in journal articles by 'environment'[2] 'Landscape' appeared in a number of statutes and in the policy of government agencies (such as the Land Settlement Board) during the 1970s and early 80s, and was mentioned in the early stages of the Labour Government's organisational and law reform. However, by the mid 1980s it had virtually disappeared from the Resource Management Law Reform process, and had been replaced by terms such as amenity, aesthetics and scenery.

2/   I make this observation following an analysis of the content of articles in <u>NZ Engineering</u>, the official journal of the Institute of Professional Engineers New Zealand (IPENZ).

7.   Language games

Laitin (1988) has shown how the control of the language of government has been a consistent tactic of ruling élites throughout human history. My own involvement with NZILA submissions to government during the early 1980s has made me acutely aware of the importance professional groups place upon the inclusion of 'enabling' words in legislation. During the 1970s The Landscape included a series of reports upon professional submissions on the Town and Country Planning Bill, and Reserves Bill. In 1978, after the passing of the Town and Country Planning Act, Vasbenter sought to reassure NZILA members that whilst "the new act may not provide all the opportunities we would desire for the best integration of landscape architecture into the planning process... I believe that by using those opportunities which are provided, we can make a considerable contribution". (1978:16). In a subsequent analysis of landscape architecture in statutory planning, Forsyth highlighted the importance of the terminology in statute in determining the opportunities for landscape architectural practice within local government (Forsyth, 1985).

However, by the 1980s the notion of professional capture (Illich, 1978) had become an important part of the rationale for administrative reform. I believe the omission of 'landscape' from later phases of the Resource Management Law Reform process may reflect, at least in part, a conscious avoidance of terms that were closely associated with established interest groups. My evidence for this comes from the interview transcripts, that I examine below, in which a number of respondents made clear their perception that 'landscape' was closely associated with the interests of landscape architects.

On the other hand, one influential commentator that I interviewed downplayed the idea of conscious exclusion. He suggested that a more significant factor may have been the active promotion of other terms, whose adoption effectively made 'landscape' redundant in the minds of policy makers. During the 1970s I have noted how the engineering profession dropped 'landscape' in favour of 'environment' in its discourse. During the 1980s 'environment' itself was progressively redefined. The Environmental Task Group of the newly established Ministry for the Environment sought to prepare the ground for their own reform proposals by arguing that "the meaning of 'the environment' has been narrowed in practice, and has been distorted by focusing attention on natural resource use, maintenance of public health and preservation of

natural landscape and indigenous ecosystems" (1984:15). The comment is revealing, as it demonstrates that the close association I have already identified between 'landscape' and nature conservation, that had been actively promoted by conservation groups in the 1970s, and that implicitly underpinned much professional usage, was now perceived as a disadvantage. The urban and site planning associations of 'landscape' (that comprised the basis for much traditional professional activity) were unrecognised. It is even more ironic that the emerging definition of environment as 'an integrated system' (MFE, 1984:15) reiterated the earlier metonymic use of 'landscape' by the landscape architecture profession (for example, Challenger, 1970).

In successive discussion documents 'environment' was further redefined until by 1986 it became "all natural and physical resources and the social, economic and cultural conditions affected by changes to these resources" (MFE, 1986:9). Thus ten years after the NZILA had been promoting 'landscape' as environment (Beard, 1977), 'environment' itself is redefined by a different group of professional interests, the resource managers, in terms of resources.[3]

In summary, I believe that the documentary sources for my case study provide a number of indications, both in the use and non-use of 'landscape', that political factors have been a significant influence in determining the evolution of 'landscape' usage.

C.   CONTEMPORARY POLITICAL USAGE OF 'LANDSCAPE'

In this section I first interpret the patterns of 'landscape' usage in my interviews in relation to the political interests expressed in the different common frames of reference I have identified

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3/   The emergence of 'resource management' as a quasi-professional term, and its deep penetration into the language of environmental statues, is a process that appears to have much in common with the evolution of landscape and landscape architects a decade earlier. It warrants a major study and political analysis in its own right, particularly as the proponents have been eminently successful in their redefinition of statutory goals and processes, in contrast to the relative lack of success of the 'landscape' advocates. There are a number of possible reasons for this. First, the concepts and terminology of 'resource management' are more congruent with the technocratic orientation of contemporary society (Milbrath, 1985); second, it shares many conceptual assumptions with market economics, that has also been in the ascendency. Third, like landscape architecture, it has been formalised in an educational programme (the M.Sc. in Resource Management at Canterbury and Lincoln Universities) but its proponents and graduates have been particularly effective in the promotion of the terminology in policy reform. In contrast, the landscape architecture profession appears to have been unable to sustain its case for a central role in environmental management.

concerning trees in the high country. Second, I review the transcripts for evidence of the political use of 'landscape' that I have highlighted in the historical record. Finally, I draw together a number of these strands to examine the role of 'landscape' in policy formation in the high country.

1.   Political frames of reference

The clearest links between 'landscape' usage and common frame of reference that I identified were those that related to the symbolic associations of 'landscape'. I believe these all have political dimensions. 'Landscape' usage in both the 'conservation' frames linked 'landscape' with naturalness and identity. By constantly highlighting the 'natural identity' of high country 'landscape', these respondents were using 'landscape' to support their opposition to 'exotic', 'unnatural' tree planting.

In contrast, the advocates of 'multiple use management', whilst also linking 'landscape' to naturalness, interpreted it quite differently. They emphasised both the biological function of trees in high country environments, and the opportunities for integration of trees into the existing 'natural' 'landscape'. This served to support a policy of both systematic planning and tree planting. The same word, with at least one apparently similar association, was used to support or justify the advocacy of two divergent policy positions.

The 'individual improvement' frame made quite different 'landscape' associations. Its users advocated modest tree planting, but resented outside influence over their actions. They linked 'landscape' to improvement and the picturesque. This supported tree planting by emphasising its possible contribution to both the stock carrying function and the culturally modified appearance of high country stations.

Both the 'consensus by administration' and 'system design' frames identified 'landscape' as an 'issue'. For the first, this was used to justify their own role as consensus builders. For the second, it provided an illustration of the 'need' for system reform. These links are summarised in the following table (Table Twenty Nine).

Table 29: **The political role of 'landscape' associations**

Common frame	Landscape association	Political role
1. Multiple use management	Naturalness, integration, function. (Objective myth)	To promote systematic planning & subsequent tree planting.
2. Conservative management.	Naturalness, identity. (Objective myth)	To oppose significant change to the status quo.
3. Consensus by administration	Issue.	To support a consensus building role.
4. Conservation by control.	Naturalness, identity. (Objective myth)	To oppose change to the status quo.
5. Individual improvement	Picturesque improvement. (Subjective myth)	To reject outside 'interference'.
6. Balance of local interests.	(Diverse associations identified) (Subjective myth)	To reject urban influence.
7. System design	Issue.	To support a case for reform.

2.   Professional politics

A number of my respondents commented upon the influence of the profession of landscape architecture on their personal understanding of 'landscape':

*   *My understanding of landscape is that you - and the profession has done this - look in very broad terms about landscape issues - not your aesthetics, [you] are looking at the environmental whole.*

Several also recognised the educational base of this professional view:

*   *Landscape issues are something we created through the educational process - creating landscapes, or designers, or whatever...*

The three landscape architects I interviewed all implicitly promoted the close linkage between an inclusive concept of 'landscape' and their belief in the central role of landscape architecture as a profession. Reactions to this linkage were diverse. Several conservation advocates spoke in support of the way they perceived landscape architects to be protectors of 'natural' qualities in 'landscape', and thus opponents of exotic afforestation. In contrast, a number of advocates of non-intervention ('individual improvement' and those pursuing a 'balance of local interests') characterised professional usage of 'landscape' as emotional and urban, attempting to 'impose' control upon legitimate land users.

The users of the 'consensus by administration' frame recognised professional 'landscape' advocacy as a legitimate but sectoral interest, whilst one of those with the 'system design' frame cited 'landscape' advocacy as an example of undesirable professional 'capture' of the policy process. The form of usage in each frame tended to reinforce these positions. Those who believed the landscape profession to be broadly sympathetic to their own politics used extensive, interactive and areal concepts of 'landscape', whilst those who opposed them used simple perceptual concepts of 'landscape'.

The levels of use in different frames of reference support this political interpretation. The highest unprompted levels of usage were in the 'interventionist' frames, seeking active control of tree planting and management. The non-interventionist frames revealed largely passive usage. In other words, professional 'landscape' usage was cited and supported where it reinforced the player's own position, and either criticised or ignored where it did not. This is shown in the following table (Table Thirty):

Table 30:   **Overall policy orientation and 'landscape' usage**

Frame	Policy orientation	'Landscape' usage
Multiple use management	Advocates of	Active.
Conservative management	intervention	'Landscape' as appearance,
Consensus by administration		setting and environment.
Conservation by control		
Individual improvement	Advocates of	Largely passive.
Balance of local interests	non-intervention	'Landscape' as appearance
System design		of land.

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3.   'Landscape' in policy formation for the high country

The political roles of 'landscape' myths and usage clearly relate to particular common frames of reference. As I noted in Chapter Five each common frame was characterised (although not determined by) players with distinctive roles in policy formation. In the next table (Table Thirty One) I have fused elements from the earlier analysis of common frames of reference and respondent characteristics, from the overall analysis of 'landscape' usage, and from the political analysis of 'landscape'.

The classification of respondents' characteristics (role, institutional base, policy orientation, environmental orientation) are drawn from Table 8. 'Landscape' meanings, use and associations are from Table 21 (page 123). The political analysis of landscape usage (respondents' policy orientation and political role of 'landscape') comes from Tables 29 and 30 (pages 182, 184).

Individual improvement	Land manager	Property rights	Non-intervention	Technocratic	Passive, single	Appearance	Improvement Picturesque (subjective)	To reject outside interference
Balance of local interests	Diverse roles	Local govt Local interest groups	Non-intervention Local government mediation	Technocratic	Passive, single	Appearance	(subjective)	To reject urban influence
System design	Politician Policy planner	Central government	Non-intervention	Technocratic	Plural	Landform Appearance	Issue	To support a case for reform

From the lower part of the table it is clear that the established, rural, land-based interests (land managers and local body politicians) made 'passive' use of 'landscape' with popular meanings and a 'subjective' myth to oppose the impact of 'outside' interests upon their own freedom of action. Conversely, in the upper part of the table, primarily urban-based interests advocated government intervention using 'landscape' in an active and plural way, with 'natural', 'objective' associations. However, this represents an ambiguous use, as within the active meaning there are divergent attitudes towards the environment, and contrasting political goals. Finally, two groups of technocratic public servants (Consensus by Administration and System Design) conceptualised 'landscape' plurality as an 'issue' that justified their own roles as consensus seekers and reformers.

Reference to the historical documentary record of political use suggests that this contemporary profile of usage can be interpreted as an expression of shifting policy forming coalitions. In the period before public sector reorganisation in the 1980s control of land use in the high country tended to be shared between landholders, central government advisers and catchment board staff, who were united by an acceptance of intervention policies in favour of land improvement. 'Landscape' did not loom large in their discourse, but became increasingly used by a range of urban based interests as a vehicle for both conservation advocacy and promotion of professional expertise (see, for example, contributions to the 1977 High Mountain Conference, and the 1981 NZ Draft Conservation Strategy).

Radical shifts in government policy during the 1980s transformed the traditional interventionist association of government department representatives and landholders into a new coalition of non-intervention, in which the compensation to high country land holders for a loss of financial support would be an ideological commitment by government to enhanced individual property rights. This new coalition (which involved a largely different set of bureaucrats) was set against the growing lobby of recreational and conservation groups seeking increased influence over high country land use. 'Landscape' was used by conservation advocates to legitimate intervention, but became adopted by landholders as a symbol of unwarranted interference.

The traditional influence of public administrators, central government scientists and regional government planners on policy formation was reduced by the widespread, Treasury-driven, ideological shift away from intervention, and increasingly marginalised by the new plurality of

competing politicised interest. Each group in turn used 'landscape' in different ways to attempt to maintain or expand its former roles.

In short, the diverse and evolving roles of 'landscape' in policy formation are expressions of the competing roles of the élite players involved. They illustrate how the use and control of language comprises a major feature in the struggle for power over land.

CHAPTER TWELVE: CONCLUSIONS

A.   REVIEW OF OBJECTIVES AND APPROACH

The focus of my thesis has been upon the roles and meanings of the word 'landscape'. Previous academic studies of 'landscape' have tended to emphasise broad patterns of meaning and use, highlighting its linguistic origins, its use in different disciplines, and its underlying ideology as a 'way of seeing', associated with particular social interests.

In contrast, I have concentrated my investigation upon the meanings and use of 'landscape' within a specific resource policy issue - the role and management of trees and plantations in the Canterbury high country. The emphasis of my research has been upon the micro-scale context of usage - that is, the way that 'landscape' has been used in everyday speech and writing by a selection of élite decision-makers and influencers.

Despite this shift in emphasis to the micro-scale, I have nonetheless found it necessary to examine a number of wider aspects of 'landscape' usage as part of my case study. For example, I derived my initial classification of 'landscape' meanings from a review of recent and contemporary academic 'landscape' literature. I also drew upon wider perspectives in the second phase of analysis, when I examined the conceptual meanings of 'landscape', its role as myth, and its political use in my case study.

The purpose of this short concluding chapter is to draw together the main findings of my different analyses, and to suggest, in an indicative way, some implications for theory and practice.

B.   SUMMARY OF FINDINGS

My findings may be summarised as follows:

1.	The term 'landscape' has plural meanings in academic and scholarly literature. I have classified these meanings into three categories - 'landscape' as land; interactive 'landscape'; and perceptual 'landscape'.

2.	This range of 'landscape' meaning was expressed in the speech and writings of decision-makers and influencers concerned with the contemporary resource policy issue of trees and plantations in the Canterbury high country.

3.	Plural meanings of 'landscape' were frequently expressed within the same social situation or set of documents. These plural meanings were often confused, overlapping and unspecified. This resulted in a range of possible interpretations. 'Landscape' meaning is therefore both plural and frequently ambiguous.

4.	Different meanings of 'landscape' were used in a variety of ways, by different people, to achieve a range of objectives.

5.	The role that 'landscape' played in speech, and particular dimensions of meaning it was given were associated with particular sets of attitudes concerning the management of trees and plantations. For example, those people with a commitment to active government involvement in the multiple use management of trees in the high country tended to be active, plural users of 'landscape'. They associated it with ideals of 'naturalness' and functional integration of land uses. People with a commitment to the freedom of individual managers to develop the productivity of their land without interference from others, tended to be passive, singular users of 'landscape'. They associated it with ideals of picturesque improvement. Those who sought government action to control tree planting and tree spread, in the interests of conserving the status quo, were typically active and plural users who associated 'landscape' with ideals of the 'natural identity' of New Zealand. The plain language and metaphorical 'meanings' of 'landscape' were less closely linked to the attitudinal context but the range of meanings used appeared to be influenced by the level of education of the user.

6.	There was considerable variation within and between individuals' usage of 'landscape'. There were also some differences between speech and writing. Oral use tended to be

more diverse and innovative, whereas written usage was more conservative. Nonetheless, both speech and writing exhibited plurality and ambiguity in meaning and use.

7.   There were several broader patterns of meaning and use of 'landscape' in historical documentary records, that complement aspects of contemporary usage in my case study:

      a)   Conceptual plurality of 'landscape' originates from an overlay of pictorial meanings from the Renaissance over earlier medieval usage that emphasised the organisation of human activity on the land. This plurality has continued to evolve through to the present, as different people and groups have adapted and adopted 'landscape' to their particular conceptual needs. Conceptual plurality is expressed in both contemporary written usage, and in the diverse and contingent patterns of oral usage.

      b)   'Landscape' has become associated with several distinctive ideals, such as naturalness, functional integration, national and regional identity, and picturesque improvement. These ideals show important elements of continuity, but also evolve and are adapted to specific needs and situations. They have been used to create particular 'landscape myths' concerning trees and plantations in the Canterbury high country.

      c)   Recent developments in the conceptual and symbolic meanings of 'landscape' in New Zealand have been closely linked to the activities and advocacy of several disciplinary and professional groups - particularly earth scientists, conservation scientists, landscape architects, and conservation and recreation advocates. These links are expressed both in contemporary speech and in writing.

8.   Finally, I have linked patterns of 'landscape' usage to the evolving roles, institutional bases, overall ideological orientation and relative power of the players involved. I have shown how the plural meanings and use of this word 'landscape' are part of a broader political struggle for control over land use.

In summary, I have identified complex, diverse and interrelated influences upon, and patterns of, 'landscape' meaning and use. There is historical continuity as well as evolution and change. Whilst there is much evidence to support the arguments put forward by the theorists who have argued that 'landscape' carries with it conventions and an ideology from the seventeenth and eighteenth centuries, I have also shown that its everyday use and meaning is dynamic, adaptive to new needs, and strongly influenced by the particular context and circumstances of use.

C. POTENTIAL FOR THEORETICAL INTEGRATION

In presenting my overall research strategy I suggested that I would conclude with an indicative theoretical integration of the empirical case study material. In this section I therefore relate the findings described above back to the theoretical framework within which I undertook the study.

I based my field work and analyses upon the concept of 'frame of reference', and used this to incorporate three types of integration - an individual's decision-making frames (Rein, 1983); multiple frames of social reality (Goffman, 1974); and analyst's frames, that focus upon particular aspects of a complex reality (Mitroff and Blankenship, 1973).

My analysis of contemporary oral usage of 'landscape' was primarily concerned with the decision-making frames of a number of individual players. The analysis of common frames of reference highlighted the way that everyday meaning and use of 'landscape' is strongly influenced by the shared interests and experiences of particular sets of users. Meaning is thus created, in part, at the social micro scale.

However, there were two other important dimensions in the construction of 'landscape' meaning. First, I have revealed the extent of individual variations and inconsistencies in language use. Despite shared meanings, individual players also construct their own dynamic and contingent meanings. This is not always conscious or rational. Second, there are broad patterns of meaning that transcend the individual and common frames, and that express broader cultural and social factors (for example, education).

Meaning is thus created at several different levels of reality, and expressed at different social and temporal scales. This corresponds to Goffman's suggestion that it is possible to interpret complex situations in terms of multiple frames.

I revealed different dimensions of meaning and use by using different analytical techniques. Each analysis highlighted aspects to which the method was particularly sensitive. Sometimes the results appeared contradictory - for example, the record of both conceptual consistency and variation. This matches Mitroff and Blankenship's expectation that multiple analysis of a complex 'messy' situation will reveal quite different emphases in interpretation.

I believe the greatest potential for integration between these different dimensions and levels of meaning and use lies in the concept of interpenetration (Knorr-Cetina, 1981). Knorr-Cetina has argued that macro and micro scales of reality interpenetrate; that is, each is revealed in, and influences, the other. Neither scale dominates. Thus broad continuities of 'landscape' meaning (such as 'landscape' as view) are revealed in the microscale reality of the interview. At the same time, each occasion that 'landscape' is used in one particular way, or more importantly, in a new way (as in a number of the documentary sources), that also contributes to the creation of macro scale patterns (for example, the overall conceptual evolution of 'landscape').

My contemporary oral research has captured a snapshot of the construction of 'landscape' meaning at the micro scale, whilst the documentary records give some indication of the broader macro scale structures of meaning to which these local episodes contribute, and upon which they draw.

D. SOME IMPLICATIONS FOR POLICY AND PRACTICE

1. Problems and opportunities

My thesis opened with a recognition that plurality and ambiguity in the meaning and use of language can be seen as both a problem and an opportunity. Resource policy formation is frequently portrayed as a rational, technical and instrumental endeavour (Miller, 1984/85). From

this perspective, plurality and ambiguity in the meaning and use of terms such as 'landscape' create problems. Diverse usage can also be seen as a problem by interest groups, such as landscape architects, who may wish to promote specific interpretations of the word. On the other hand, plurality and ambiguity in language can be viewed positively. Recognition of diverse interpretations of an issue can broaden understanding and awareness, and can highlight dimensions that might otherwise be overlooked (Drysek, 1982).

I have demonstrated conclusively that the word at the focus of my study, 'landscape', is used in plural and ambiguous ways within a single resource policy issue. I have revealed something of the rich and diverse context of language, attitudes and interests that characterise the issue of trees and plantations in the high country, and I have linked 'landscape' usage to this context. In this final section of my thesis, I will briefly review some implications of these findings in respect to first, the future management of trees and plantations in the high country, and second, more general issues of communication and role definition in resource policy formation.

2.   The future management of trees and plantations in the Canterbury high country

My analysis of the issue of trees and plantations in the high country, of the frames of reference of élite players, and of the roles of 'landscape' in regard to the issue, each concluded with the observation that public sector reform appears to have politicised and polarised sectoral interests in land use.

In the 1970s, issues of high country land use were typically conceptualised as technical management problems, requiring rational, scientific resolution, within the prevailing framework of active government investment and intervention. 'Landscape' was an integrating myth used by several groups of interested professionals to simplify and draw together different aspects of the issue. By the late 1980s the incipient conflicts of interest involved in choice between forest and grassland, earlier recognised by O'Connor (1970), had become explicit.

Separation of production and conservation functions, the withdrawal of government from agricultural subsidies, increasing contestability of public good research, theoretical advances in scientific understanding of mountain ecosystems, and the growing influence of urban conservation groups have served to redefine the management issue for participants as a conflict of

values and intentions and of dispute over the nature and extent of private and public property rights. All of these forces for redefinition of the management issue are at work at a time when resource degradation, epitomised in hawkweed invasion and rabbit degradation, presents a new dimension of challenge to the use sustainability concept of the Resource Management Act. While resource management has become ecologically and economically more difficult, 'landscape' plurality has been accentuated as different interest groups promoted their specific agenda using 'landscape' in different ways.

There are three potential outcomes, with different implications for future policy formation. On the one hand, a continued commitment to coordinated, rational planning, such as that portrayed by Hughes (1991) in her vision of 'an aesthetic blend' of mixed pastoralism, plantations, agroforestry and conservation for the Mackenzie Basin, requires a focus upon the potential for reconciliation of different interests with diverse frames of reference. Such a rational planning process would involve political justification of jointly pursued planning goals, rather than just their judicial or technocratic justification. O'Connor and Ackley (1981) in their examination of a possible basis for planning the Waitaki, recognised the necessity of this reconciliation process from contemporary Australian resource studies. The process will be best achieved through emphasis upon the preferred outcomes identified in my analyses. It requires also some agreement and understanding of 'landscape' meaning among parties.

The majority of my respondents expressed the view that the most likely, and to them most acceptable outcome would be modest, incremental change to a mixed land use regime. One interpretation of my findings is therefore that they would give support to the possibility of a negotiated 'balanced' outcome. This could incorporate and be enhanced by plural 'landscape' myths, provided that the specific meanings were clarified by qualifying terms (for example, physical landscape, visual landscape, landscape type).

However, this interpretation downplays the underlying conflicts of ideology that I identified, assumes that those holding more extreme views are willing to compromise, and assumes that viable management regimes for both trees and grassland can be formulated within current or anticipated structures of land tenure, capital and administrative legal system.

An alternative outcome might be that the contrasting frames of reference that I identified, when combined with ecologically variable or unstable and economically vulnerable conditions within the high country, constitute a 'wicked' problem, that defies adequate comprehension or rational resolution. From this perspective, the diversity of interests will <u>prevent</u> the development of viable policy for the high country as a whole, or even regionally, and instead will lead to ad hoc responses. Continued attempts to maintain pastoralism in a degrading environment, lack of coherent management responses to wilding spread, and lack of capital or other support for larger scale transformation to plantation forestry, would result in increasing desertification and gradual spread of woody species. 'Landscape' usage would remain ambiguous, and become increasingly contentious.

My prediction is that the most likely outcome lies between these two extremes. Pressure of specific issues may result in selected government intervention, both regional and central, to promote sub-regional integrated land use planning (for example, the Mackenzie). There will be cogent arguments from tourism and conservation interests for creation of scenic corridors along major routes. Urban lobby groups will continue to advocate conservation of representative ecosystems, particularly grasslands (for example, in the Arrowsmiths). Local communities may establish specific programmes for more sustainable land management (for example, land care groups). However, there is also likely to be gradual pastoral withdrawal from less manageable marginal lands, with consequential spread of woody species, if appropriate wilding control measures are not instituted.

In short, I predict a differentiation of policy and practice in different parts of the high country, as different sectoral interests form local coalitions over particular issues. In the absence of coherent and comprehensive goal-programming methodologies and of resource management measures for their application and implementation, this is likely to lead to increased variety of policy response and vegetation consequences.

'Landscape' is likely to play differing roles in these more varied responses, according to the particular array of interests. New Zealand's many 'little landscapes' (Hayward and O'Connor, 1981) may each yet generate their own versions of 'landskip' through 'landscape' (O'Connor and Swaffield, 1987).

3.   Communication in resource policy formation

Theoretical accounts of resource policy formation have frequently tended to treat language as a neutral medium (for example, Sabatier, 1987; Bowonder, 1987). There is, however, increasing recognition of the problems inherent in such a technical model of communication (Drysek, 1987). The process of resource management law reform in New Zealand has highlighted the way in which the language of policy formation is dynamic, political and contextual (Laitin, 1988; Farr, 1990). Despite an extended period of consultation intended to clarify the meanings of key concepts (Ministry for the Environment, 1988(b)), different groups have continued to adapt and modify meanings to meet their particular needs and ways of thinking.

My study of the plural meanings and uses of the term 'landscape' within a specific resource policy issue provides a detailed example of this process of the social construction of meaning. Although 'landscape' may be a particularly 'messy' term, due to its complex history, the essential characteristics of contextual usage that I have identified are indicative of the qualities we might expect to find in other terms such as resource, system, conservation, sustainability and management that are similarly used by different people, with different backgrounds, and different interests, to deal with complex and ill-defined problems. In short, if plurality and ambiguity in language is perceived as a problem in resource policy formation and resource management, the problem lies in the technical model of communication that has been adopted, in that it provides an inadequate account of the social processes involved.

The use of 'landscape' in the role definition of landscape architects provides a further specific example of the social construction of meaning in language. As I have noted, for much of the 1970s and 1980s the profession of landscape architecture linked its own role directly with a broad and inclusive concept of 'landscape'. By using 'landscape' as a metonym for environment, the profession argued that its particular association with 'landscape' required that it play a central role in environmental design, planning and management. Alternative usages of 'landscape' that did not support such a central role, were described as incorrect or misleading.

My study has shown that within the elite group of decision makers and influencers that I interviewed, this approach of the landscape architecture profession has had mixed success. On

the one hand, a range of players whose concerns and outlook were broadly sympathetic with the values promoted by the landscape architecture profession made active use of the term 'landscape', in ways that matched the profession's own advocacy.

On the other hand, a significant number of influential players either used less sympathetic interpretations, or made no use of 'landscape' at all. Furthermore, although the association of 'landscape' with 'landscape architecture' was widely recognised, it was interpreted in diverse ways. In particular, 'landscape' was frequently seen to represent a sectoral interest - quite different from the 'public interest' in 'landscape' promoted by the profession.

Whilst active linkage of 'landscape architecture' with 'landscape' has widened awareness of the profession, it has not succeeded in suppressing or supplanting 'landscape' usages that were not favoured by the profession. As Relph (1981) noted, it is surely too late in a long history of development to impose a single definition. My conclusion is that if the profession of landscape architecture wishes to promote its particular philosophy and services, then it must face the challenge of so doing without exclusive control of the term 'landscape'. Nonetheless, the prominence of the term in the profession's title means that its potential ambiguity must still be addressed in some way. The profession may have to define or restrict the meanings of 'landscape' in the term landscape architecture, in order to differentiate its meaning from other uses of 'landscape' that are not compatible with the professional practice of landscape architecture.

One possible resolution of these two 'problems' - of communication in resource policy formation, and of professional role definition - is to redefine the plurality of 'landscape' as an opportunity. I have shown that recognition of plurality of 'landscape' usage provides a way to articulate a range of understandings by the different players involved in an issue. For example, as one of my respondents noted, 'landscape' provided for him a way of legitimately introducing issues of emotion and identity into conservation advocacy. Others used it to express a desire for integrative understanding. Furthermore, a comparative analysis of these plural interpretations highlighted dimensions of concern and understanding that could otherwise have been excluded from consideration.

If such a process of comparative analysis of meanings serves to challenge the current myth of transparency and neutrality of language in resource policy formation, then it could also contribute to the emergence of a broader discursive programme of policy analysis, as promoted by Drysek (1987). That is, acceptance and recognition of explicitly value- laden terms within a particular issue can stimulate an examination of the plural values and interests in the issue as a whole.

As Cosgrove (1985) has indicated, the fact that 'landscape' is so frequently tied to a point of view provides a potent metaphor for a critical analysis of its roles and meanings in policy formation. However, I believe that the particular contribution of my study has been to show that there can be many 'points of view' expressed in 'landscape'. These change and develop in response to particular circumstances and needs. They provide a way to express new ideas and concerns, as well as carrying forward established understandings, and of course, interests. As Olsson noted,

"The real class struggle is not between socialists and capitalists. It is instead between those who love multiplicity and those who wish everything to be the same".

(Olsson, 1978:110)

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APPENDIX I : METHODOLOGICAL ISSUES

A. INTRODUCTION

Chapter One of my thesis, Introduction and Research Strategy, sets out the strategy I adopted for the overall study. I have followed a narrative structure that incorporates theoretical propositions and multiple analyses, with a progressive interaction between them. This appendix sets out the considerations that underpinned my choice of strategy. I first examine a number of alternative approaches to social investigation, and then draw out the key issues that influenced my strategy.

1.   The need for an explicit methodological statement

Hughes (1980) noted that every approach to research involves commitments to particular versions of the world, and ways of knowing that world. Thus, there can be "no conclusions without premises" (Simon 1983:5) and the methods used in research cannot be divorced from theory (Hughes, 1980). This recognition of the existence of 'presuppositions' underlying any particular approach to research (Harrison and Livingstone, 1980) helps explain many debates over method (Bogdan and Taylor, 1975). More importantly, it also provides the framework by which the academic community establishes and evaluates the intellectual authority of research results (Hughes, 1980). In a discipline where a single approach has total dominance there is a tendency for any references to the 'presuppositions' of research to be brief, or even implicit. Where there are competing or alternative claims to authority, a more explicit statement is needed.

I outlined the focus of my study in Chapter One, noting that its emphasis is upon aspects of professional communication within resource studies. It therefore lies within the broad realm of 'social' research, and it is from social theory that its presuppositions and methods are derived. The discussion that follows draws particularly upon Giddens and Turner (1987), Gregory (1978), Glaser and Strauss (1968) and Silverman (1985). Some of the general terms that I encountered have a diverse range of meanings assigned to them by different authors. When a term is in parenthesis this indicates that my use is specifically derivative of the authors whose ideas are being discussed at that point.

2.   The positivist tradition

In the introduction to <u>Social Theory Today</u> (Giddens and Turner, 1987) Giddens argued that "for a certain period after the Second World War a particular set of views tended to stand out above the rest and thus commanded a measure of general acceptance (within social theory). These views were typically influenced by logical empiricism in philosophy. Various interpretations about the character of science were developed by those usually associated with such a standpoint and despite the imprecision of the label, it denoted several common elements: a suspicion of metaphysics, a desire to define in a clear cut way what is to count as 'scientific', an emphasis upon the testability of concepts and propositions, and a sympathy for the hypothetico-deductive forms of theory construction. An essential part of this outlook was the idea of what Neurath called 'unified science', according to which "... no major logical differences between the natural and social sciences are seen to exist..." (Giddens, 1987:1).

Gregory (1978) and Hughes (1980) have both traced the origins and development of this tradition, that has come to be associated with the term 'positivism' (after the 'positive philosophy' of Comte) (Gregory, 1978). 'Critical Rationalism' (Drysek, 1987), based on the writings of Karl Popper, is a closely related recent development. It places particular emphasis upon the importance of procedures of 'falsification' - the critical testing of hypotheses by seeking to disprove them. Although Popper seeks to distance himself from 'positivism' (Brown, 1989:14), Gregory argued (1978) that he nevertheless remains within the same broad tradition. Critical rationalism and positivism certainly have more in common with each other than with other competing traditions in social science, and so for the purposes of this discussion I will accept Gregory's combination of the two, under the term 'positivist'.

Nachimas (1976) provided an examination of the application of 'positivist' methods to social research. He noted, "the function of methods in science is to institutionalise the demand for objectivity in the most explicit and systematic manner" (1976:7). The 'classic model' of positivist social science therefore sets up clear, ' value free' hypotheses, that must be capable of being tested, and sets out to establish replicable data samples and measurements by which to do this.

Does this 'positivist' tradition of science continue to claim sufficient dominance that it may be taken for granted as the basis for contemporary social research? Most social scientists would now argue that it does not. Giddens noted that "over the past two decades... a dramatic change has occurred" (1987:2). There have been shifts within the philosophy of natural science itself, and a "proliferation of approaches" in theoretical thinking within social disciplines. "Social theory has thus come to comprise a varied, often confusing array of approaches" (1987:3). The following sections outline some of the main strands of the debate between the proponents of the different options.

Phillips (1976) reviewed the arguments against adoption of 'natural science' methods for social investigation, a stance he labelled 'anti-naturalist'. He argued that such 'anti-naturalist' arguments are now "enjoying a new vogue" (1976:404), and listed them as :

1.   The problems that arise in quantitative methods when dealing with subjective social phenomena;

2.   A conflict of the need for intimate understanding of social groups with 'naturalist' demands for detached objectivity;

3.   The inappropriateness of experimental methods to social research;

4.   The problem of assigning meaning to statistical generalisations of social phenomena;

5.   The complexity of social life, and the difficulty of identifying unequivocal causal statements as a basis for hypothesis formation;

6.   The inevitable influence of social scientists upon their 'material'.

Taking these in turn, Phillips examined the criticisms, and concluded that "it is difficult to deny that recent work in the fields of social science and evaluation of social programmes is exposing problems which are rarely, if ever, found in physics" (1976:422). Nevertheless, he went on to suggest that this does not necessitate an acceptance of the 'anti-naturalist' position. Phillips referred to Popper's argument that it is the 'refutation of conjecture' that lies at the heart of

science, whether natural or social, and on this basis expressed "cautious optimism about the future of naturalistic social science and even piecemeal social reform" (1976:422). A review of the literature suggests that others have been less sanguine about such prospects. In the following sections I outline some of the alternatives proposed.

The approach I have taken is to examine a number of key issues and assumptions upon which the 'positivist' approach has been challenged. These include questions about the way that theory is developed; of the relative roles of quantification, intuition and subjectivity; and about the desirability, or otherwise, of using 'experimental' methods. I have drawn upon a range of deliberately contrasting traditions. However, I do not claim that those traditions are mutually exclusive, nor is my review exhaustive. I have selected my examples and drawn the differences as sharply as possible "in order to make explicit the implicit interrelatedness" of the issues involved (Brown, 1989:8).

B. THEORIES OF MEANING

1. Introduction

The main 'countermovement' to positivism in social science draws upon a diverse range of traditions, including pragmatic philosophy, hermeneutics, existential phenomenology and ordinary language philosophy. "These language interpretive theories of conduct are the inverse of positivism, replacing the positivist's foundation of brute facts with one of brute meanings" (Brown, 1989:xi). They focus upon understanding the social world, and I have termed these traditions collectively, 'theories of meaning'.

One fundamental challenge to the case for unified 'naturalist' science in social research has come from the emergence of a position known as phenomenology. Its philosophical origins lie with writers such as Husserl and Schutz, and their concern for the subjective 'lifeworld' of the individual. Their emphasis has been upon understanding the 'everyday experience of humans', and the meanings they attach to it (Seamon, 1979). This position shares with a number of others the belief that reality is socially constructed.

The particular significance of the phenomenological challenge to positivism is the way that it replaces the search for 'objectivity' (and hence a methodological separation of subject and object), with a concern for achieving a sympathetic understanding of human "being in the world" (Heidegger, 1971). Phenomenology focuses particularly upon the individuality of experience, and its proponents argue that in order to interpret human experience, the researcher must become directly involved and 'engaged' with the situation being investigated. It thus involves a rejection of the traditional quantitative and experimental methods of science. 'Phenomenological' investigations in the social sciences by writers such as Merleau-Ponty, Schutz and more recently Berger can therefore be characterised as descriptive research that is concerned with an empirical understanding of the ordinary perceptions and actions of people in everyday life (Wuthnow, 1984).

A second fundamental element of the 'countermovement' to positivism is an emphasis upon the 'interaction' between human subjects. Interpretive sociology, phenomenology, hermeneutics and ethnomethodology all provide a perspective upon social interaction, but it is particularly well expressed in the approach known as symbolic interaction. Symbolic interaction traces its origins to the American pragmatic philosophers, and to the 'Chicago School' of sociology (Becker and McCall, 1990). Symbolic interactionists explore how human events can be understood in terms of the way individuals continually interpret and take into account the (symbolic) meanings of what other people are doing and saying. Social reality therefore develops from a complex exchange of meaningful acts. Symbolic interaction is a strongly empirical tradition, that frequently uses largely inductive methods (Silverman, 1985), and thus, like phenomenology, challenges the methodological assumptions of positivist research, although in different ways. In the following sections I draw upon both the phenomenological and interactionist literature to examine issues raised by such 'theories of meaning'.

2.   The role of theory in research

The first issue that I wish to examine is the question of theory generation. The main source for this discussion is Glaser and Strauss' The Discovery of Grounded Theory (1968). Their departure from the (then) mainstream of social science came from a frustration with its emphasis upon verification of grand theory. They argued that the dominant hypothetico-deductive model was

focusing too much attention on the controlled testing of minor aspects of existing theoretical formulations, at the expense of creative theory generation.

As an alternative, Glaser and Strauss proposed a model of 'theory as process' (1968:32). This was a method of developing empirically grounded theory from repeated refinements of conceptual categories. These were themselves developed on small scale generalisations based on interview or documentary data. The method of 'comparative analysis' provided a "discussional form of formulating theory (that) gives a feeling of 'ever developing' to the theory, allows it to become quite rich, complex and dense, and makes its fit and relevance easy to comprehend. On the other hand, to state a theory in propositional form, except perhaps for a few scattered core propositions, would make it less complex, dense and rich, and more laborious to read. It would also tend by implication to 'freeze' the theory instead of giving the feeling of a need for continued development" (1968:32).

Glaser and Strauss argued that comparative analysis can be used to generate both substantive and formal theory. 'Substantive' theory is derived from, and relates to, specific social situations. 'Formal' theory is more abstract, dealing with more general forms of social relationship. Both are 'middle range' theory, and their emphasis is upon "generating and plausibly suggesting (but not provisionally testing) many categories, properties and hypotheses about general problems" (1968:104). The credibility of such 'grounded theory' was claimed to arise not from the methods of 'rigorous quantitative verification' but from the progressive emergence of plausible theory from the data, vividly described and codified; from the coherence of the theoretical framework; and from the empathy of the researcher with the data. Glaser and Strauss did, nevertheless, acknowledge the potential need for formal subsequent testing of certain core propositions, if the development of more formal theory makes that appropriate (1968:233).

An example of a 'phenomenological' investigation that used similar methods is provided by Relph (1976). Relph developed a conceptual model of 'place' based upon the qualitative analysis of interviews and workshops. With this, he attempted to explore the personal and subjective experiences of a study group. Both Glaser and Strauss, and Relph, therefore rejected the formal scientific method because of the constraints it placed on them in undertaking 'meaningful' social research.

The inductive emphasis of this countermovement to positivism has not been without its critics. As Fielding noted, "the stance is demanding, for it requires us to convince others that all analysis is partial, but our own is compelling" (Fielding 1988:7). He went on, "It is apparent that the range of utility of knowledge derived in this (phenomenological) fashion is limited... This is not to argue that they are not illuminating, only that the range of application cannot be established without the use of other sources of data...." Furthermore, "there are limitations on the validity of the generalisations of qualitative research and its strength as a basis for causal explanation". This latter problem applies to all case study research. Fielding argued that Glaser and Strauss' method of 'grounded theory' does not solve the problem of validity, as it has been widely criticised for both its dismissal of the need for testing and refining hypotheses, and for its naive assumption of field workers' ability to ignore prior conceptualisations.

The essence of the 'phenomenological' and 'interactionist' arguments appears to be, therefore, that as social phenomena are intrinsically meaningful - being expressions of human consciousness - they require distinctly different modes of investigation from natural phenomena. The counter argument, whilst recognising the difference in the phenomena themselves, suggests that interpretive methods bring their own problems of credibility. The 'phenomenological' and 'interactionist' challenges have, however, highlighted most of the 'anti-naturalist' arguments cited by Phillips - the problems of quantification, the role of intuitive understanding, problems of experimental methods and appropriate degrees of generalisation, and of the intrinsic complexity of social life. I will attempt to draw these out further in the following sections.

3.   The critique of quantification

The critique of quantification in social research has several sources. Cicourel (1981, quoted in Fielding, 1988:10) noted the problem of aggregating social data quantitatively: "When we aggregate across individual responses to items of a questionnaire we are forced to restrict severely if not eliminate the local and larger contextural conditions that could clarify the respondent's perspective. The aggregation is a summarisation process that obscures our thinking of the way local context and individual responses contributed to the larger picture". In other words the abstraction involved in quantification loses touch with the specific concerns of each respondent. Fielding went on, "the relevance of individual differences... is not part of the apparatus of quantitative work" (1988:11).

Wuthnow (1984:5) also noted the way conventions about data can obstruct understanding. As an example, he commented on the way that culture (being difficult to quantify) is regarded as being ephemeral when compared with 'hard' social facts, with the result that cultural patterns have been under-emphasised in explanations - a case of if it can't be measured, it can't be important (Fielding, 1988). This is also the basis for Glaser and Strauss' concern that a requirement for formal (quantified) hypothesis testing can result in 'less rich' explanations (1968:32).

The debate over the effect quantification can have upon the context of research has also been reflected in the literature on landscape perception. Carlson argued that any attempt to quantify landscape quality "gathers the most obvious... dimensions of preference... ignoring the most subtle" (1977:148), and "gives us no new information" (1977:146). He argued instead that objectivity can equally well be achieved through qualitative assessment, provided that it is based upon a theory of environmental critique. He concluded, "our interests must be guided by what we want to know, not by how we want to know" (1977:166).

This issue is particularly pertinent to the use of questionnaires. The use of a standardised question - which is necessary for any subsequent quantification or statistical analysis - inevitably 'prestructures' the response. It does this by implicitly suggesting the sort of terms to be used, by adopting a particular perspective on an issue, and, in multiple choice questions, by providing a limited range of options. In addition, the social relationship between researcher and respondent is defined by the formality of the schedule. This is described by Fielding as "context dependency" (1988:8). However, context is subsequently lost within the numerical summarisation, and the figures develop a reality of their own, increasingly separate from their "situated social production" (Knorr-Cetina, 1981, cited in Fielding 1988:9).

The result of these and other similar criticisms (Blumer, 1969; Ciroucel, 1981) has been, according to Silverman, that "since the 1960s, a story has got about that no good sociologist should dirty his hands with numbers" (1985:138). He noted that one outcome has been the characterisation of the two dominant approaches to research (termed, by him, positivism and interpretivism) as being 'polar opposites', the first utilising 'counting' methods, that test hypotheses, generalise and predict; the second using 'observing' methods, that generate hypotheses, illuminate and describe. Although 'positivism' can provide opportunity for

researchers to test and re-use generalisation about the data as a whole, in practice, within much social research the method has been characterised by "the use of crass counting procedures which arbitrarily categorise the data and then try to retrieve meaning by ex post facto interpretations of tests of significance" (Silverman 1985:140). A rejection of both this and the broader tenets of 'positivism' has resulted in the essay becoming a dominant form of writing in sociology, in which arguments are supported either by a theoretical critique, or by selective use of qualitative data.

Silverman goes on to adopt an increasingly widespread position - that is, to argue that this polarisation between 'positivism' and 'interpretivism' is extreme and unnecessary. Whilst being at pains to make clear that he is not defending positivism or quantification per se, he does make the case that there are some uses for quantification within research that is predominantly qualitative and interpretive in design. "Simple methods of counting can deepen and extend qualitative analysis" (1985:140). Furthermore, in a bureaucratic-technological society, 'numbers talk', thus increasing the social acceptance of a piece of research. The key requirement is "to count the countable" (1985:140) - ensuring that the numbering system is congruent with the structure of the phenomena being counted (Nachimas, 1976).

This stance effectively reverses the relationship of quantitative and qualitative methods established in the 'positivist' phase of social theory, in which "qualitative research was to provide quantitative research with a few substantial categories and hypotheses. Then of course, quantitative research would take over, explore further, discover facts and test current theory" (Glaser and Strauss 1968:15-16). Instead, the qualitative research methods (such as depth interviews) that previously acted as a 'pilot' for subsequent questionnaire design, wider population sampling and quantitative analysis within 'naturalist' research, became the dominant basis for theoretical development in the interpretivist programme, supported where appropriate by quantitative material.

It is interesting to note that Silverman's response to the qualitative emphasis of British sociology in the mid 1980s (that is, to reintroduce some degree of 'simple counting'), effectively restates Blumer's position established in the symbolic interactionist tradition in North America some twenty years before (Blumer, 1969). The notion of a combination of approaches is therefore neither new, nor for qualitative researchers at least, is it the primary issue of contention. For Glaser and Strauss "there is no fundamental clash between the purposes and capacities of

qualitative and quantitative methods or data". What was at issue for them, was "the primacy of emphasis upon verification or generalisation of theory - to which heated discussions on qualitative versus quantitative data have been linked historically" (Glaser and Strauss, 1968:17).

Whilst the countermovement to 'positivist' social research has therefore included within its critique an examination of the use of qualitative and quantitative methods, characterised by Phillips (1976) as a polarity, it may be more constructive to view the issue as a choice over the relative roles of quantitative and qualitative methods, made in the light of the particular subjects under investigation (Fielding, 1988). This in turn leads to choices about the methods used for coding and analysing the material, and about the degree of theoretical generalisation being sought in the research.

4.   Intuition and subjectivity

Both Carlson (1979) and Phillips (1976) linked the issue of quantification with a concern for intuitive understanding. Opponents of quantification have frequently been characterised as subjective, and it was certainly the case that traditional phenomenological approaches regarded subjectivity as of 'paramount' and nearly exclusive importance (Wuthnow, 1984). This flowed largely from its early philosophic emphasis upon direct comprehension of 'things themselves', in which intuition was conceived as relating to direct inspection and observation (Seung, 1982).

In phenomenology, the subjectivity lies within the method - a method that seeks to highlight the personal qualities of the researcher, rather than eliminate them. As Wuthnow pointed out, there are also distinct advantages in incorporating subjectivity into the subject matter of research. In areas such as cultural analysis, "cultural reality, in as much as it is a human phenomenon, is necessarily rooted at some level in human subjectivity" (Wuthnow, 1984:242). Acceptance of this subjectivity allows the incorporation of the 'specifically human' into the research. It also "provides one deterrent against the ossification of social reality into categories totally detached from the actors that individually and collectively produce them" (1984:242). The argument, in essence, is that as human experience is ultimately subjective, some aspect of subjectivity is an essential concern of any research into such experience.

There are also obvious problems involved in subjective research. For example, the descriptive collection of data through interpretive methods "largely rules out the use of codified data collection" (Wuthnow, 1984:243). However, as Giddens pointed out, "a reworking of questions about human actors need not lead to an exaggerated emphasis upon subjectivity" (1987:4). Instead, an acceptance of the subjective experience of humans is incorporated into the overall theoretical framework. All research into the meaning of human activity must seek an understanding of the intentions and perceptions of the people involved. This meaning cannot be explained in purely 'causal' terms, and requires empathetic understanding.

My main conclusion from this debate is that the notion of a mutually exclusive choice between objective and subjective stances becomes redefined within social research as one of differing degrees of subjectivity - depending upon the subject matter, method and context. Macro scale analysis of 'objective' social data such as birth and death records can legitimately be undertaken with a high degree of abstraction and codification (for example, it can be statistically analysed in a replicable fashion). On the other hand, microscale analysis of the 'subjective' sense of place of individuals in a small community (for example, Perkins, 1988 (a) and (b)), must of necessity rely to a considerable degree upon the sensitive subjective observation and recording of the individual researcher. Both subsequently require interpretation of the meaning that can be assigned to the reported findings.

On this basis, social research differs from natural science in its treatment of subjectivity by degree, rather than absolutely. The issues of choice in developing a research strategy are therefore also those of degree and focus.

5.   Experimentation and generalisation

An important 'anti-naturalist' argument is that experimentation (that is, the replication of observations under controlled conditions in which the observer does not interact with the outcome of the experiment) (Nachimas, 1976) is simply not possible in many social sciences. Society itself is changing continually, factors cannot be isolated and controlled, and in addition it is morally problematic to 'experiment' with humans (Phillips, 1976).

The arguments against the direct translation of laboratory experimentation to social situations have stimulated the reformulation of social survey research as 'quasi' experiments (Nachimas, 1976). In these, the main methodological properties of controlled experiments are reproduced within the survey design. They typically use sophisticated multi-variant sampling design and statistical analyses, in addition to sophisticated devices seeking to remove 'bias' from the process of recording. A formal structured questionnaire is one example of such a quasi experiment. As Phillips pointed out, quasi experimental methods have also been widely criticised, particularly in respect to the interpretation of results. Furthermore, even quasi experiments are unlikely to address the complexity of many social situations. Thus Mitroff and Blankenship (1973) have argued that complex 'ill structured' social problems require a different methodology to 'simple' problems. They described this as 'holistic', incorporating multiple disciplines, diverse analyses and different methods of enquiry.

This debate raises a number of further issues, including questions of sampling and the role of case studies, of recording and of replication.

a)   Sampling and case studies

Formal scientific method focuses on nomothetic explanation, that is, a universal explanation. The process of experimentation, and quasi experimentation, seeks to replicate the diversity of the 'real world' populations being investigated, and sampling seeks to be representative of these populations. Most statistical techniques achieve this by assuming that the population from which sample measurements are drawn is of a certain minimum size that corresponds to a basic mathematical distribution (for example, the normal curve). It can therefore be sampled in a controlled fashion (Siegel, 1956). Having achieved such a controlled and representative sample, the experimentation then typically focuses upon a strictly limited range of parameters.

This contrasts with the situation within much macro and micro scale social research. At the macro scale the problem is primarily one of complexity - the issue highlighted by Mitroff and Blankenship (1973). At the micro scale the problems are those of small, irregularly distributed populations, complex and subtle relationships and wide variety in the context of the study - all of which create major problems for 'representation' sampling.

The 'grounded theory' approach of Glaser and Strauss attempted to address these issues by the use of theoretical (as opposed to statistical) samples. They described this as "the process of data collection... being controlled by the emerging theory" (1968:45). Thus newly emerging understanding influences the latter phases of data collection. Sample size is determined by 'theoretical saturation' - the point at which additional data no longer contributes to the development and refinement of categories (Glaser and Strauss, 1968:61).

Theoretical samples are frequently associated with case study research. Rather than seeking breadth of study in a quasi experimental sample, the researcher chooses instead to pursue depth of understanding in a specific example. A case study is therefore not selected to be a representative typical case, but to be either a deviant or compelling case. A sample may be selected theoretically, in a deliberate effort to find cases that invalidate a theory (that is, a process of falsification, or maximal challenge (Denzin, 1989)). In this situation, a number of individual case studies may contribute to a broader piece of research. Alternatively, a single, large and complex case study may be subject to successive analyses, providing maximised diversity within the single study, rather than across studies (Mitroff and Blankenship, 1973). However, in this case, the 'experiment' forms the total concern of the research. As Drysek put it: "Holistic experimentation violates just about all the canons of systematic piecemeal social experimentation (for example, Popper's Critical Rationalism). Unlike the piecemeal approach, no elaborate controls are necessary, for generalisation of the results... is irrelevant" (Drysek, 1987:663).

b)   Recording

Recording issues range from the questions of quantification (discussed above) to the 'problem' (in experimental terms) of observer-subject interaction. Despite the development of 'non-obtrusive' measures for certain types of research, most social research involves the 'subjects' being aware of and responding to the researcher. The question thus becomes not one of whether bias can be eliminated, but what sort and how much bias is present, what effect this might have on the outcomes and what implications this has for the status of the findings (Silverman, 1985).

c)   <u>Replication</u>

Part of the logic of experimentation lies in the ability of others to cross check or replicate the results. However, this presents major difficulties in any 'live' social research, due to the evolving nature of society. Furthermore, any interactive survey introduces new concepts, meanings and ideas into the community being surveyed - thus changing the pre-conditions of any subsequent survey. Whilst data, once collected, can be re-analysed by others, the initial observations with their strong contextural dependency (Knorr-Cetina, 1988) can never be replicated in the experimental sense.

The range of ways in which the social survey differs from experimentation means that the <u>interpretation</u> of results requires different strategies, sensitive to the conditions and assumptions under which the observations were made. The focus of my discussion therefore returns to the main thrust of Glaser and Strauss' argument - that is, the relative emphasis that the researcher places upon theory generation, as opposed to theory testing. This leads in turn to a consideration of other related issues such as the choice between inductive and deductive methods, and between ideographic and nomothetic research. It also raises questions of the status of the knowledge generated.

Under the hypothetico-deductive model of science, hypotheses are developed, based upon existing theory. Controlled experiments (or quasi experiments) are then set up to test these hypotheses. Following the canons of Popper's Critical Rationalism, these tests are aimed at falsification - on the premise that successive testing will, over time, disprove 'false' hypotheses, leaving a robust core of theory that provides the best approximation to truth or reality at that point in time. As techniques, knowledge and understanding continue to evolve, these approximations of reality will in turn be challenged, until they too are proved to be wrong and replaced by better or more convincing approximations (Medawar, cited in O'Connor, 1986).

The main point of divergence from this model in Glaser and Strauss' approach is to move away from hypothesis testing. They argued that given the current underdeveloped status of social theory, greater emphasis should be placed on theory generation. This requires a more open and discursive strategy - hence their proposal for grounded theory, generated

inductively. In a sense, though, this can be construed as a relative rather than an absolute shift, for despite their invective against hypothesis testing, Glaser and Strauss acknowledged the possible need to subsequently 'test' core propositions. They also acknowledged the complementary roles of quantitative and qualitative data, albeit in a way that reverses the priorities traditionally assigned to them. Nor does the reduction of emphasis upon hypothesis testing imply a rejection of critical appraisal - rather, it reflects a shift in the approach adopted. Again, taking Glaser and Strauss as an example, their approach adopted a method of 'constant comparison' as the basis for verifying the emerging theory - checking the evolving theory against successive 'slices' of data, and evaluating it in terms of plausibility, relevance and theoretical integration. This parallels the approach adopted during the same period by the early symbolic interactionists such as Blumer (1969), as they searched for 'negative cases'.

The reason for this shift of emphasis is that the formal hypothetico-deductive method requires hypotheses to be clear, specific, non value bearing and testable (Nachimas, 1976) - a condition that the preceding discussion shows can be difficult to achieve in social research. Rather than reduce the scope and relevance of the research (as 'positivist' social researchers are accused of doing) qualitative researchers choose instead to modify their methods. Similarly, attempts to develop causal type explanation from qualitative data may involve a shift of emphasis from deduction to analytic induction (Fielding, 1988). This reflects the difficulty of applying formal tests of falsification to qualitative data.

The arguments for empirically grounded and descriptive social research that I have discussed above arise from a desire to reflect the richness and immediacy of social phenomena in the research being undertaken. They typically carry with them a focus upon 'substantive' concerns - that is, concerns about the relationships of a limited number of variables, often within a particular setting (Glaser and Strauss, 1968). Thus the countermovement to positivist social research can also be interpreted as a concern for the ideographic - the unique, as opposed to the nomothetic, or universal. The contrast with 'naturalism' (Phillips, 1976) comes in the unwillingness of interpretive researchers to assume the operation of universal laws as a starting point for research. This tends to reinforce their preference for inductive rather than deductive investigation.

This approach does not preclude the subsequent development of substantive theory into more abstract, formal theory, but the formal theory generated in this way remains 'grounded' in the situation from which it was developed. The main theoretical drawback is the relative status of such generalisations vis à vis the types of universal propositions that emerge from hypothetico-deductive procedures. It also reflects an acceptance of the validity of subjectivity (see above) and a parallel acceptance of the existence of 'multiple realities' within the human life world.

6.   Summary of issues

In summary, the issues of choice highlighted by my discussion of the phenomenological and interactive countermovement to 'positivist' methods are those of priority, intent, legitimacy and application:

a)   Priority

I believe that there can be little doubt that social phenomena may differ in fundamental ways from natural phenomena. The issue is whether the research priority should be upon pursuing the application of 'positivist' methods, with their acknowledged and established form of critical logic, in the hope that social issues will eventually "succumb" (Phillips, 1976:422), albeit with a significant loss of relevance meantime, or whether the priority is upon treating social phenomena on their own terms. This leads to the development and acceptance of alternative modes of investigation, that although possibly less powerful in logical terms, are perhaps more relevant and effective in increasing our current state of understanding.

b)   Intent

Glaser and Strauss built their argument on the need to highlight theory generation as opposed to theory testing. This strikes directly at what is potentially the weakest part of the formal hypothetico-deductive model (Silverman, 1985:4). Both Silverman and Castells developed this theme, emphasising the way that sociological research actually progresses (as opposed to the theoretical models of how it should progress). This reveals both a range of methods, depending upon the focus of concern (Silverman, 1985:5), and an iterative, or cyclical progression of understanding in complex or underdeveloped areas

(Castells, 1983; McKim, 1984). Thus the method derives from the purpose and context of the research.

c)   Legitimacy and scale of application

Perhaps the most fundamental difference between the 'positivists' and the phenomenological and interactionist critics lies with the willingness of the latter to accept and even champion the legitimacy of knowledge derived qualitatively and inductively. Their concern for the ideographic (the unique) as opposed to the nomothetic (or universal) also has implications for the treatment of the relationship of the particular to the general, and the micro scale to the macro scale. These two issues of legitimacy and scale of application are also addressed by the 'structural' and 'realist' challenges to positivism, which I discuss below.

C.   STRUCTURAL EXPLANATION

1.   Overview

In the previous sections I have contrasted 'positivist' approaches to social research with a countermovement that includes both phenomenological and diverse interactionist traditions. They must each in turn be distinguished from (as they take pains to distinguish themselves from) a third broad tradition, that of structuralism (Brown, 1990). To Popper, structuralism was typified by Marxist thought. To Glaser and Strauss, structuralism represented the 'grand theories' of writers such as Durkheim. Both these critics sought in their alternative approaches to resist the perceived dominance of theoretical structural explanation over empirical observation.

The structural tradition is complex and diverse, and it is clearly inappropriate for me to attempt any form of comprehensive review at this point. Instead, in the following paragraphs I briefly note the diversity of structuralism and then highlight the issues of choice that it raises for the development of a research strategy.

'Structural' explanation has been applied to culture, society, linguistics, political economy and knowledge. Each forms the base for extensive schools of thought, characterised by particular presuppositions and methods of investigation. Diverse as they are, all seek to explain social phenomena by reference to hypothetical but immeasurable underlying structures of reality. The interpretations of what constitutes this underlying structure are many and varied (Gregory 1978). However, they all share a concern for universal explanation, and a belief in the existence of implicit or unconscious social rules and relationships that are invisible or hidden from the social subjects involved.

Levi Strauss, for example, was inspired by Mauss' concept of gift circles in Pacific society, and focused much of his own work upon patterns of kinship (1963). Durkheim sought to explain modern societies in terms of their underlying functional relationships (Jones, 1986). De Saussure (1974) revolutionised linguistics by conceptualising language as a system of signs, the individual elements of which are not autonomous, but derive their meaning from their place within the system. Marx challenged (and through his modern followers, continues to challenge) the individualist models of political economy that derive from 18th century enlightenment thinking. He offered instead a structural analysis of society based upon property relationships (Kemp, 1982). Finally, Foucault (1980) has applied the structuralist approach to an analysis of the distribution of power and knowledge within society.

2.   Linking macro and micro

Structuralist approaches have been criticised for their supposedly anti-humanist stance, that appears to deny the possibility of human intention (Silverman, 1985), and that imposes a deterministic view of social change (Popper, 1960). They have also been attacked for the leap of sociological imagination that is necessary to move from observation to theory (Silverman, 1985:24). This is because their model of explanation based upon invisible underlying structures can meet neither the canons of positivism, nor those of an interpretive approach.

Nonetheless, the vitality of the structuralist tradition suggests to me that there is considerable intuitive appeal in many aspects of structural explanation, and the insights of its main proponents should not be taken lightly. The problem this poses in seeking to develop a coherent research strategy is the major difference in the structuralist approach to research method when compared

with other mainstream approaches I have discussed so far. This leads to competing rather than complementary claims for the legitimacy of their respective understandings.

As Silverman pointed out, "In a concrete sense, this is a problem which is usually easily resolved. Most independent researchers lack the resources to carry out large-scale macro research, and so unless they can use convenient indices of apparently macro processes, like official statistics, they tend to concentrate on micro studies of small scale processes" (Silverman, 1985:14). But he goes on, "However, it should not be assumed that micro work necessarily lacks a macro or societal dimension". In other words the theoretical framework may be macro or structural, even though the application is specific. The issue this highlights is the relative emphasis to be placed upon analysing the "effect of macro scale institutions on the actions of individuals, and whether patterns manifest at the aggregate level should be seen as expressing the system dynamic or as reflecting the interactions of individuals and groups" (Fielding 1988:1).

The central question is about the nature and direction of causal relationships. Both the 'positivist' tradition and the empirically grounded work of Glaser and Strauss are essentially reductionist in their treatment of causality, and build theory from the bottom up, albeit using different methods of validation. This is not an option available to structuralists, who must derive their theoretical structures both indirectly and in advance (Gregory, 1978:95, citing Levi Strauss, 1963). It is this predetermination that provokes the anger of positivist critics, with its potential for the researcher to selectively choose corroborating empirical evidence.

This opposition between macro and micro perspectives "has been fundamental to how many sociologists conceived and located their work" (Silverman, 1985:70). However, Silverman went on to argue that "It is misleading to assume that a fundamental choice must be made between these perspectives. While research data are often mainly gathered at either a structural (macro) or at an interactional (micro) level, sound analysis and intelligent conceptualisation requires that both levels (and their relations) be addressed..." He continued, "The rapprochement between macro and micro perspectives cannot be achieved by approaches which assume that micro phenomena can be reduced to macro structures, or vice versa. Nonetheless, although the levels cannot be reduced to one another, each presupposes the other (Silverman, 1985:70). The relevance of this discussion to my particular research interest is that it highlights the choice I had to make about the focus of my investigation into 'landscape'. I faced a choice of either

concentrating upon an initially empirical investigation into the meanings that are created in everyday use, or applying existing 'structural' theories of 'landscape' ideology to a particular situation or situations.

In the next section I outline the 'realistic' perspective, which may go some way towards resolving this dilemma.

D.   REALISM

1.   The relationship of theory and observation

Gregory, (1978) opened his theoretical challenge to positivism by taking the reader back to a consideration of underlying presuppositions. He examined the relationship between observation language and theoretical statements, claiming that positivism assumes observation to be both ontologically and epistemologically 'privileged'. By this he meant that observation refers directly to the real world and may be deemed true or false without reference to theory. Scientific theory is thus built up from a platform of 'brute facts' and of the causal relationships between them (Hughes, 1980). Gregory disputed this reductionist model, arguing instead for a 'realist' position (Bhaskar, 1978). This assumes that phenomena can, if necessary, be legitimately explained by reference to structures "typically beyond observation" (Gregory, 1978:59). It also treats theory and observation as 'reflexive'. This does not reverse the theory/observation relationship - making all observation theory dependent (which Gregory described as conventionalism), but instead asserts that all observation is, to some degree, theory laden (or, as Popper (1972) noted, all observation is observation in the light of theories).

Silverman provided a practical illustration of this contrast in approach when discussing alternative approaches to the use of interviews. He characterised a 'positivist' approach to interview data as one that aims to generate data independent of the research setting and the interview (Silverman, 1985). If the correct method is used, this gives access to 'facts' about the real world that can be independently cross checked. However, he warned of the "illusion of security" that tape recorded data can give if regarded in this way (1985:50), and argued that

individual words can only be fully understood by reference to the social and linguistic structure in which they occur. His alternative 'realist' position (1985:71) recognises the validity of both the particulars of an interview account and the more general social practices and structure that it displays (for example the conversational protocols). This included elements of both empirical and structural perspectives.

One implication of such a 'realist' position is the adoption of a 'network' model of inquiry (Gregory, 1978). Science becomes a discourse in which theories and observations progressively transform one another. Castells (1983) provided an excellent example of what this means in practice. He described his reflexive approach as a 'cautious strategy', one that reacts both against the "short sighted empiricism that forbade humans' thought to go beyond these situations that were measurable by rudimentary statistical tools" and against "the excessive theoretical formalism that has flawed social science". He aimed to avoid both "the negation of the possibility of any objective knowledge of human action and the idealistic attempt to construct a comprehensive theory as a pre-condition for any significant effort of investigation" (1983:339). I examined his procedure more fully in Chapter 1, but it comprises, in essence, an iterative process that moves between a provisional theoretical framework and several empirical analyses, with successive reinterpretations of each.

Does this 'realist' position comprise an 'anti-naturalist' argument in Phillips' terms? Giddens (1987) argued that it does not. Citing writers such as Kuhn, Toulmin, Lakatos and Hesse, he noted the emergence of a newer philosophy of science that repudiates the idea of theory neutral observation, and no longer pursues deductive laws as the highest ideal of scientific explanation. Under this reformulation science becomes an interpretative endeavour. In principle, therefore, a realist, network approach appears to offer both a practical and an increasingly 'socially acceptable' model of inquiry (Hughes, 1980), that could provide the basis for my study. However, before considering this option, I will examine two further approachs to research, that are complementary to the realist position.

E. HERMENEUTICS AND CRITICAL THEORY

Bleicher (1980) has traced the development of hermeneutics, "the science of interpretation". Its initial focus was upon the interpretation of the meaning of texts (dealing with the intentions of authors and the possibilities of such intentions being communicated to subsequent readers). More recently, its methods have been applied to the interpretation of reality itself. Thus science "is presumed to be an interpretative endeavour" (Giddens, 1987:2). Problems of meaning, communication and translation become important methodological issues.

1.   Interpretation and mediation

The philosophical challenge to the idea that research language is neutral has been paralleled by the increasing significance of the role of language generally in cultural studies and social theory (Hall, 1980; Trusted, 1987; Wuthnow, 1984). This has lead to both a focus upon the systematic expression of shared social meaning (for example, through semiotics (Hervey, 1982)) and to a concern for the individual's expression of meaning and social role (through discourse and conversational analysis (Potter and Wetherell, 1987)). The implications for this study are three-fold. First, hermeneutic studies have opened up fertile new areas of social research. These highlight the way that individuals or groups communicate within various social settings, and the relationships this process of communication has with their relative roles, actions and relationships. Second, they have provided a range of techniques. Third, and most significantly, they have provided the impetus for questions of interpretation to be placed centrally within the research process.

The positivist emphasis was on the use of formal method to achieve objectivity and legitimacy in research findings. In hermeneutics the emphasis shifts to a concern for dialogue between alternative perspectives. Thus hermeneutics accepts the validity of different traditions. Whilst positivist, and indeed structuralist approaches seek to explain an event or action definitively, hermeneutic understanding requires the comparison of contrasting viewpoints (Bleicher, 1980). Furthermore, prestructuring of understanding is accepted as inevitable - the challenge of critical research is to make such legitimate prejudice explicit, and to confront it with alternative ways of understanding.

Hermeneutics has diverse and at times conflicting strands within it. It has also converged with other traditions, such that, for example, there is much common ground between the hermeneutic acceptance of multiple perspectives and the phenomenological concern with the subjective meanings and understanding of individuals. The crucial difference is that phenomenologists accept the differences as they are. Hermeneutic researchers seek to actively reciprocate between the differences (Drysek, 1982).

The acceptance of 'legitimate prejudice' also reinforces the phenomenological concern with context - particularly in applied social or policy related research. Torgerson, for example, in reviewing issues of social assessment, focused upon 'contextuality' in pursuing an understanding of the actions of diverse social groups (Torgerson, 1980). Drysek also argued for an 'hermeneutic' approach to the policy analysis of 'messy' pluralistic issues (1987). Both cite the Berger Report that dealt with the social, environmental and economic impacts of the Alaska pipeline in Canada's Mackenzie Valley as an example of such an hermeneutic approach.

2.   Critical theory

Traditional hermeneutics therefore seeks to place diverse approaches to understanding within their respective traditions, and to build bridges between them. This position has been criticised, however, for its uncritical acceptance of tradition and of the authority that underpins it. Abel and Habermas have argued the case for a critical dimension within hermeneutics (Bleicher, 1980). Both critics point out the potential for understanding to be distorted by the limits of tradition, or by power structures implicit within the language. They therefore expressed a concern for the validity of the results of analysis. This enables the possibility of progress in interpretation.

A concern for the control of language is an appropriate point at which to introduce a further research tradition, that of critical theory. Critical theory itself is derived from the 'Frankfurt School' of the interwar period (Gregory, 1978:153). An important recent focus has been to make explicit the social interests that influence language, communication and knowledge. One aim is to pursue communication 'free of domination' (Habermas, 1979). The problem, as Gregory pointed out, is the relationship of the normative aspects of critical theory (for example, Habermas' 'ideal speech situation') to everyday practice. Drysek suggested two approaches. The first is the process of analysis through discourse. In a practical sense this may be expressed as mediation

(Drysek, 1987). The second is the notion of all-inclusive experimentation - the 'holistic experiment' (Mitroff and Blankenship, 1973).

3.   Legitimacy and scale

I concluded Section C by noting that the differences between positivist research and its countermovements in social science highlighted the question of legitimacy of the results of research. Extending the review has revealed further claims to potential sources of legitimacy for research findings. In summary, there are claims on the basis of :

a)   the critical and logical methods used (for example in hypothetico-deductive methods);

b)   the direct sympathetic experiential links to the phenomena involved (for example, phenomenology);

c)   the interpretation of human intentions and meaning (for example, interactionism);

d)   the internal coherence and logic of the theoretical structures produced (for example, structuralism);

e)   a process of mediation and dialogue between differing perspectives (for example, hermeneutics);

f)   the critical, open and discursive stance adopted (for example, critical theory).

These claims are not mutually exclusive, and may prove to be complementary, but each tend to be linked to distinctive epistemological orientations, different goals, and frequently different types of phenomena. The second aspect noted in Section C was the question of the appropriate scale and forms of explanation. At an operational level this question is typically resolved pragmatically. Most research is inevitably carried out at the micro scale due to limitations of resources. However, this is potentially misleading, in the sense that even micro scale applications must be informed by larger scale theory (Silverman, 1985). Furthermore, the notion of a presuppositional hierarchy (Harrison and Livingstone, 1980) requires some theoretical consistency between

research methods and research conclusions. As Giddens put it, "Debates over what social theory is, and can be, are reflected in arguments about its basic subject matter, however conceived. The crux of the debates concerns several interrelated questions: What is 'out there' in the social universe? What are the most fundamental properties of the world? What kind of analysis of these properties is possible and/or appropriate? ...One can find a full range of opinion" (1987:9).

What this means in practice is that a researcher who believes in an individualist view of society (that is, social outcomes are the result of free and rational individual decisions) is likely to be satisfied with the legitimacy of experimental 'positivist' social research. In contrast, one who adopts a more communal view (with an emphasis upon social interaction) will argue that the presupposition that social structures comprise independent individuals inevitably leads to "a fragmented, anarchistic model of society" (Fielding, 1988:4). They will seek an alternative approach, such as interactionism, or structuralism. In turn, an individualist may turn to 'positivist' arguments to challenge the legitimacy of interactionist or structuralist positions. At the heart of the issue is the problem of moving from statements about the actions of individuals to statements about the action of groups and vice versa (Abell, 1988).

Opinions on the most likely direction of resolution tend, perhaps inevitably, to reflect the epistemological orientation of the commentator. Fielding (1988) revealed the range when he reported on several recently proposed mechanisms for linking the macro and micro scales.

He concluded, "The micro/macro distinction, however asserted, is clear. It is the force of argument in this volume... that the assertion is misconceived. What is obsolete is the rigid separation, the dualism, or opposition, between the micro and the macro... the new province is all on middle ground" (Fielding, 1988:17).

The most useful developments in theory for my study are those that focus directly upon this 'middle ground' - directly at the relationship between micro and macro. Giddens has provided one lead, with the development of the concept of structuration. By this he meant that social structures are both "the medium and the outcome of day to day conduct in which actors engage" (1987:8). In other words repeated individual action creates structures, but the action itself is significantly determined by existing structures. The two levels reciprocate with each other.

Unfortunately the language of structuration is both complex and diverse, and the methodological implications are far from clear (Gregory, 1978).

As the name implies, Giddens' concept of structuration is one in which the macro-scale structure remains the dominant factor.

Knorr-Cetina (1988) offered an alternative interpretation. She described a process of 'interpenetration' of macro and micro scale. It shares much with 'structuration' in the sense that social reality is conceived as being created in a reflexive way, influenced by both macro and micro scale factors. However, Knorr-Cetina claims less privilege for the role of macro scale structures, and envisages a more open and contingent relationship between macro and micro. The dominant influence in any particular situation may be either, depending upon the context. Knorr-Cetina herself has tended to emphasise the micro-scale in her empirical research.

The macro/micro issue was therefore central to my investigation but complex to resolve. It quickly became clear, however, that I had to make at least a provisional choice about my theoretical emphasis in the early stages of the research project, albeit one that may be subsequently modified. This choice had to be made in the light of the phenomena I was investigating, and of the types of question I was trying to answer. As I explain in Chapter One, my choice was to emphasise the micro-scale, not initially because of an overriding theoretical commitment, but because this was an aspect that had been comparatively ignored in previous work.

F.   ISSUES OF CHOICE

1.   Classification of approaches

In the preceding review I have tried to give some indication of what Giddens described as the quite stunning proliferation of approaches in theoretical thinking within the social sciences (Giddens, 1987). Some writers have focussed upon the differences between approaches. Thus Hughes (1980) distinguished between the broadly positivist and humanist traditions. Johnson

(1983) extended this analysis within geography to identify empiricist, positivist, structuralist and humanist approaches Silverman (1985) introduced interactionist, ethnomethodologist and realist labels within sociology. Gregory (1978) distinguished these broad approaches according to three overall objectives:

a)   Empirical-analytic explanation: aims for control and prediction

b)   Historical-hermeneutic explanation: aims for enhanced understanding

c)   Critical explanation: aims for emancipation of and through knowledge

Gregory concluded that, within geography at least, these fundamental differences suggest that a search for synthesis may be mistaken, and that the natural sciences and social sciences should be kept apart.

Within social theory, on the other hand (free from the obligations of the subject matter of natural science, if not the methods), several authors have identified a convergence of concerns. Giddens made three points :

1.   There may be more overlap between different approaches than has generally been perceived - for example in a focus on language use.

2.   There are central lines of common development and focus - for example, a concern for subjective human action.

3.   There has been some progress towards resolving the division between causality and meaning - for example, through the development of interpretive approaches (Giddens and Turner, 1987).

Wuthnow (1984) and Silverman (1985) made similar arguments. Nonetheless, there remains "widespread disagreement as to the kind of science, if any, social science is and can be" (Giddens, 1987). The disagreement revolves around the very 'naturalist' and 'anti-naturalist' arguments set

out by Phillips (1976). Giddens concluded that in his view, "while a 'natural science' view of sociology still has many advocates, they now constitute a minority in social theory..." (1987:7).

In a very real sense, the diversity of option therefore presents a major challenge in developing a viable and legitimate research study. One prevalent response is to adopt and display "a badge of affiliation to a particular school", on the premise that all theoretical problems will be immediately clarified. An opposite extreme is to assert that the research task is primarily descriptive, and hence theoretical considerations are not significant: "Both approaches", says Silverman, "are mistaken" (1985:13). Nor can the alternative to "rigid polarities" be that "anything goes". Instead Silverman advised the researcher to ask a set of interrelated questions from which an integrated approach can be developed that is appropriate to the problem at hand. He suggested that these questions should include issues of theoretical orientation, scale, data and the mix of methods.

2.   Summary of issues

The main issues I have highlighted in this discussion are as follows:

a)   **Overall theoretical orientation** : Despite the many interweaving strands of social theory, there are sufficient differences to necessitate an initial commitment of purpose and inclination, in order to maintain a measure of consistency in approach. This choice will be linked to the initial problem definition.

b)   **Methodology** : The previous choice will in turn imply a commitment to the legitimacy of different research procedures. My discussion has suggested that within social theory as a whole, 'naturalist' methodology no longer holds a dominant, or even majority position. There are other claims that have also gained social acceptance (Hughes, 1980).

c)   **Quantification** : My discussion on quantification concluded that one major determinant of choice of emphasis will be the nature of the phenomena being investigated, and the extent to which they are intrinsically compatible with quantification. However, this primary choice does not preclude supplementary use of the less favoured approach. The methods of analyses suitable for the data concerned will also influence this choice.

d)   **Subjectivity** : The nature of the phenomena under investigation will influence the relative emphasis to be placed upon the treatment of subjectivity within the data. The overall orientation of the researcher will influence the role of subjectivity in the method.

e)   **Generalisation** : A choice of emphasis upon either theory testing or generation clearly depends to a large degree upon the existing state of theory in the area being investigated, as does the balance between substantive and formal theorisation. The focus in terms of macro and micro scale is more intractable. To a significant degree, this will be determined by the initial problem definition. However, it is clearly also desirable to acknowledge the interaction between the two, and to explore, if only tentatively, a range of positions in the macro/micro continuum.

There are three further issues that typically receive less formal attention in the literature, but that may ultimately be decisive in influencing choices of research strategy. They are the resources available, the skills and intellectual style of the researcher, and the structure of, and audience for, the report itself. Hakim (1984) drew attention to the need to refine and adopt a research strategy to match the financial and personal resources available, and to the time scale required. Silverman (1985) hinted at this in noting the likely focus on the micro scale. Hakim also made the practical nature of the enterprise explicit. For some, this means severely limiting the size and nature of the phenomena being investigated to those that 'fit' within well established methods. For others the 'messy' nature of a problem necessitates more flexibility in method, but with the concurrent acceptance of greater limitations on the application of their findings. The current climate of opinion suggests that both positions are valid, provided the assumptions are made explicit.

The second issue, of intellectual styles and skills, is attracting increasing attention in both theoretical and applied contexts. Mercer (1985) has suggested that one contrast between 'positivist' and 'humanist' orientations is a difference in emphasis in their intellectual styles - the former characterised by convergent thinking, the latter by more divergent approaches. The implication is that whilst all research is ultimately part of a social enterprise, each individual contribution will quite legitimately reflect the personal orientation of the researcher. It is the resulting overall diversity that provides for the long term vitality of understanding. However this acceptance of diverse methodology is more clearly characteristic of social research than of natural science.

Finally, the issue of presentation style must be addressed. Silverman (1985) pointed out that few sociological research projects actually followed the logical sequence subsequently suggested by the traditional forms of presentation. Gilbert and Mulkay gave one example of a similar situation within the natural sciences (1981). One result of the diversity of approaches to social research, particularly influenced by the increasing emphasis upon interpretation and discourse, has been to highlight the essentially narrative character of both research and its reporting - the 'storytelling' of science (O'Connor, 1986). Thus the final issue of strategy is the choice of format by which it is recorded.

3.   <u>Conclusion</u>

In conclusion, development of my research strategy required me to make an initial commitment in several areas. However, these commitments were initially provisional, and subject to review and revision as my understanding of the problem under investigation evolved. The main questions that I considered in developing my strategy were :

a)   the general theoretical orientation and assumptions of the research;

b)   the overall procedures to be followed;

c)   the relative emphasis upon quantitative and qualitative methods;

d)   the role of subjectivity in both the subject and methods of research;

e)   the degree of generalisation sought;

f)   the form of presentation.

It also reflected :

g)   the resources available;

h)   my personal style as a researcher;

i)   the needs of the audience.

Chapter One draws particularly upon this appendix in addressing the issues listed above.

APPENDIX II : DETAILED METHODS

A. INTRODUCTION

B. DATA COLLECTION : SELECTION OF SOURCES

1. The case for a case study
2. Types of data
3. Sampling approach

C. INTERVIEW PROCEDURES

1. Theoretical issues
2. Methods

D. ANALYTICAL PROCEDURES

1. Definition of frame of reference
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    a) Plain language meaning
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A.   INTRODUCTION

The detailed form of my case study required collection of both interview and documentary data from a range of individuals, interest groups, organisations and disciplines associated with my chosen topic. In the following notes I describe the steps I took in selecting and analysing this material, and discuss some of the detailed methodological issues involved.

B.   DATA COLLECTION: SELECTION OF SOURCES

1.   The case for a case study

Case studies are well established as one of a number of valid research strategies within social science (Hakim, 1987). As with all approaches they offer both advantages and disadvantages (Castells, 1983). The major advantages arise from the quality of data and depth of understanding that is possible in a case study. This is because they reveal the detailed patterns of a social setting, (Bulmer, 1984), and give access to the spoken views of the people involved, expressed in their own words (Antaki, 1988; Potter and Wetherell, 1987). Case studies are therefore particularly useful when dealing with social topics that are elusive, intangible or sensitive (Bulmer, 1984), and for situations where theory is poorly developed, by allowing the researcher to investigate the details and subtleties of a particular situation. They also treat a location, group or issue as a whole, and are vital when dealing with situations that rely upon their completeness for their integrity (Mitroff and Blankenship, 1973).

The main disadvantage of case studies is that there is a limitation on the formal application of the findings. 'Case studies have always been praised because of their capability for allowing in depth analysis, but blamed because of their singularity, making any extrapolation of their findings impossible' (Castells, 1983:341). However Castells argued that this drawback may be overstated. He went on, '... the general value of any observation depends upon the use to which it is put... while case studies cannot provide a systematic verification of accepted propositions, they are invaluable in the path breaking efforts towards new theories'.

Furthermore, a 'case study' may be defined in many ways. Much social research - particularly micro-scale research - relies upon material generated in a specific social setting, because that is the scale of the phenomenon being investigated. However in a sense, all social situations are unique in some way (Castells, 1983). Even when using quasi-experimental methods such as questionnaires, the application of survey findings is ultimately determined by the theoretical assumptions of the research. The contrast lies in the way in which the social setting for the research is defined (Hakim, 1987). Differences between case studies and surveys are therefore not absolute, but of degree.

Finally, case studies allow the researcher to accept that social situations (or policy issues) are frequently poorly structured (Mitroff and Blankenship, 1973). They require few assumptions about the possibility of 'separating out' particular variables, and allow researchers to change and modify categories and approaches during the progress of the study. This is in contrast to the demands of mass survey techniques, which require extensive statistical assumptions about the description and nature of the phenomena being measured. The question becomes one of balance. Statistical rigour is frequently only achieved in social research at the expense of relevance (Giddens, 1987). The essential point, it seems, is that 'the in-depth study of one particular social setting yields a different and sometimes more useful perspective than a large scale study of individuals from a whole population' (Bulmer, 1984:210). Case studies can clearly be a valid approach, depending upon the problem and the resources available for research.

My research problem exhibited all the characteristics better suited to case study investigation rather than mass survey. It was concerned with language use and meaning, which are highly dependent upon the context of use (Potter and Wetherell, 1987); the situations I investigated were socially complex (Mitroff and Blankenship, 1973); involved multiple perspectives and meanings (Drysek, 1982, 1987); and were poorly defined theoretically, requiring a cautious, exploratory approach (Castells, 1983).

2.   Types of data

There are two main types of data available for the analysis of professional communication - 'naturally occurring' data such as everyday conversation, or documentary records, upon which the

researcher has had no influence; and 'artificial' data such as interviews that have been generated in some way by the researcher (Silverman, 1985; Potter and Wetherell, 1987).

Potter and Wetherell noted two key problems in the use of everyday conversation as a data source: the practical problem of recording technique, and the ethical problem of undertaking 'surreptitious' recordings without the participants' knowledge. Two further problems are associated with research focusing upon particular concepts. Although everyday conversations provide evidence of normal patterns of language use, huge volumes would be needed to reveal usage of particular, specialised terms such as 'landscape'. Furthermore, when dealing with language used by professions in the development of policy (as opposed to everyday social interaction) it is practically impossible to gain non-obtrusive access to large numbers of meetings, offices, corridors and anterooms for recording.

Researchers therefore turn to 'artificial' or generated data - that is, language used in situations created by, involving, or stimulated by the researcher. The most common is the interview. There are many variations. Each has different research goals, adopts different levels of formality for the interview itself, and treats the data generated in different ways (Silverman, 1985). Interviews range from being treated as highly structured research instruments - 'talking questionnaires' - to informal 'conversation encounters' (Potter and Wetherell, 1987). Potter and Wetherell drew a further distinction between a 'traditional' approach to interviews that seeks *consistency* within the data, as evidence of 'genuine phenomena, and not biased or distorted responses' (1987:163), and the use of interviews in discourse analysis, that seeks *variations* in response, as evidence of different 'interpretive repertoires'.

Although the term 'unstructured interview' is frequently used to describe informal methods, all interviews are 'prestructured' to some degree, hence their 'artificial' status. (Silverman, 1985). They do not stand in 'simple correspondence' to the real world, in the sense that the responses from the subjects might express exactly the same attitudes, language patterns, and conversational forms that would be present without the involvement of the interviewer. 'Bias' or 'contamination' is always involved, whether in the form and content of the questions, the active intervention of the interviewer, or their informal influence through verbal responses and body language. Indeed, the interview itself is a created 'event', carrying social meaning, symbolism

and behavioural expectations (Bulmer, 1984). Thus the issue is not one of avoiding 'bias', but of clarifying and specifying the nature of the interaction.

Silverman argued that interviews 'mediate' between the researcher and the cultural realities they are investigating, and their outcomes must be interpreted. Interviews, like documents, are therefore primarily qualitative tools, although the data generated may be analysed quantitatively, if that is appropriate to the research goals (Silverman, 1985).

I also considered using questionnaires. The primary advantage is their standardised format and economy, allowing extensive data collection, numerical aggregation, statistical analysis and replication. This makes them ideal tools for quasi-experimental research (Phillips, 1976). However, there are clearly major problems in investigating language use by questionnaire. The forms of response are heavily prestructured by the form of the questions. In this investigation of usage of the term 'landscape', for example, a questionnaire approach would require me to present examples of usage or meaning to each respondent that I approached, thus inevitably 'feeding' concepts and associations that may not have been part of their existing way of thinking. I developed trial questionnaires, but these revealed such extensive problems of prestructuring of responses that I rejected this data collection method as being unsuited to the purposes of my study.

Documentary records provide an alternative form of naturally occurring data on language use. They may included official documents, published material, letters or official transcripts (for example, records of parliamentary debates) (Potter and Wetherell, 1987). Documentary records have several key features: they are reasonably accessible and efficient to use; they are usually attributable to a particular author; they are clearly independent of the researcher; and they can provide sequential evidence from the past (Pitt, 1972). The drawback is their selectivity and variability - in the original production of the documents, in their survival, and in their recovery or use by the researcher (Glaser and Strauss, 1968). Furthermore, there is no statistical basis for inferring the extent to which the documents represent all language use. Documentary sources are therefore most congruent with a qualitative methodology.

3.   Sampling approach

I used theoretical (or purposive) sampling to select my respondents. Its aim is to provide a range of individuals whose characteristics encompass all the theoretically important aspects of the problem under investigation (Glaser and Strauss, 1968; Potter and Wetherell, 1987). Theoretical sample size is determined by the nature and complexity of the phenomena, by the range of theory being explored, and by the practicalities of data collection and analysis. A commonly used concept is that of 'saturation' - the point at which additional data (for example, additional interviews or documents) contribute little or nothing extra to the conceptual understanding of the phenomenon (Bertaux, 1981). In life history research this may be after fifteen or so subjects from a similar background. Comparable figures have been suggested for intensive qualitative research (Silverman, 1985).

Collins (1988) discussed the theoretical implications of sample size in social research in some depth. He noted that the amount of evidence needed to prove or disprove a theory varies with the logical relation of that theory with other knowledge. Glaser and Strauss (1968) made a similar point in their proposal for a 'comparative' method of theory generation.

As Castells noted (1983) all social phenomena are unique to some degree, so that all social research is dealing with ultimately unique situations. The key questions are the degree of generalisation being sought or claimed for the findings (Glaser and Strauss, 1967), and the theoretical relationship of the research to other existing theory (Collins, 1988). Hence "a theory based upon a small number of historical instances (or even one) can be accepted with confidence to the extent that we can accumulate more detailed evidence in keeping with our model" (1988:504), and "the most important way in which the validity of a theory can be established is by showing the coherence of its explanatory principles with other well grounded theory" (1988:505).

As Potter and Wetherell noted, when dealing with microscale patterns of inter-professional discourse, "Because one is interested in language use, rather than the people generating the language, and because a large number of linguistic patterns are likely to emerge from only a few people, small samples or a few interviews are generally quite adequate for investigating an interesting and practically important range of phenomena. For discourse analysis the success of a

study is not in the least dependent on sample size...." (1987:161). The critical point is that a small size sample in statistical terms does not imply a reduced value in theoretical terms.

My approach was as follows. The 1988 seminar on Forestry in the High Country (Gregory, 1988) invited and appeared to attract a wide range of people. I studied the roles and backgrounds of the participants, and identified several types of interest group. The speakers who represented the main interests were approached as key informants, and a pilot study of 15 interviews undertaken. Pilot studies (Oppenheim, 1966) involve selecting a small number of individuals in advance of a large study. They use the approach proposed for the main study, in order to assess its likely performance. Key informants are individuals who are selected because the researcher believes them to be particularly well informed on the topic in question (Castells, 1983). There is no claim to representativeness. From this initial pilot study I developed an enlarged net of key informants, selecting players from different levels of relevant organisations (for example, local, regional and national managers), or on the basis of property ownership or management in the study area. I also used 'snowball' recommendations from completed interviews. The 'snowball' technique uses each key informant as a guide to subsequent informants (Constantini and Hanf, 1972). By asking each one for names of others who are thought to be particularly well informed, a network is built up, with names that were frequently repeated being included in the next round of data collection. Clearly the sample was not a comprehensive population, and there were a number of individuals (for example, several runholders) who were contacted, but for whom circumstances prevented an interview being completed. Nonetheless almost 60 interviews were undertaken, and theoretical saturation was approached (that is, the final few interviews added very few new insights or substantive 'landscape' usages). By qualitative standards, the sample was both large and relatively representative of the population from which it was drawn.

My documentary sources were selected both geographically and functionally. Geographically, in the sense that the sources I identified were related explicitly to the case study area, and functionally, in that I concentrated on tracing back 'landscape' usage, and evolution of usage, within disciplines or interest groups identified from the interviews. In some cases this involved searching for material written by those interviewed. In others it involved identifying articles by others within a discipline whose significance was suggested by subsequent citations, or by apparent patterns of change. The search was not comprehensive, but was extensive and followed

the models of scholarship proposed by Billig (1988). I limited my search to published sources. They are all included in the general bibliography.

B. INTERVIEW PROCEDURES

1. Theoretical issues

The purpose of my interview was four-fold: first, to identify the respondent's individual 'frame of reference' and the 'common frames' relating to the issue of trees and plantations in the Canterbury High Country; second, to identify patterns of 'landscape' usage; third, to identify variations in 'landscape' usage; and fourth, to enable me to relate these patterns and variations to the 'common frames' of reference about the overall issue.

My definition of 'frame of reference' as a model of expressed feelings, beliefs and intentions, and my research focus upon patterns of language usage, pointed strongly to the adoption of an 'open' interview technique that encouraged respondents to speak in their own words (Antaki, 1988). However, I have already noted that all interviews are structured to some degree - the critical point is how much and in what direction. There are several issues arising from the theoretical status one assigns to an interview.

First, my discussion on 'frames of reference' in Chapter Three concluded with an initial preference for a 'realist' stance (Silverman, 1985) that treated interviews as a 'display' of social realities. This can then be analysed to identify an underlying pattern of language use in a social setting. However, I also acknowledged the value of subsequently undertaking an analysis of variation in language within an individual's speech. These aspects need different forms of interview - the first more passive, the second interventionist (Potter and Wetherell, 1987).

Second, during the initial pilot interviews it also became clear that some actors did not volunteer the use of 'landscape' at all. Clearly some prompt was needed to find their background interpretations of its meaning(s). However, I could not undertake this early in the interview, for fear of prestructuring the overall interview, and influencing their expressed frame of reference on the main issue.

A third dilemma arose from the question of 'openness'. Traditional 'positivist' approaches (Silverman, 1985) seek to avoid uncontrolled variation in response by adopting standardised formats and by assuming the responses are 'authentic' expressions of the actor's beliefs. Other approaches are less sanguine about the neutrality of the situation, suggesting that the relationship between the interviewer and actor is influenced by social background, linguistic conventions and their perceptions of each other's role (Deutscher, 1984). An interview may even be treated as a performance, or a construction of 'negotiated' reality (Ciroucel, 1981). One outcome is that interview subjects can be expected to try to 'suss out' the researcher, in order to present intelligible and credible information, or to present themselves in the best light (Jones, 1985(a)). Jones therefore argued that "researchers are more likely to get good data, and know what data they are getting, if the interviewees are told at the outset what the research topic is" (1985:48). This reduces the energy spent in 'second guessing'. Again, the problem for me was that this would involve the introduction of a term, 'landscape', at the outset of the interview, in all probability triggering the use of a particular 'repertoire' of usage (Potter and Wetherell, 1987), and suppressing another one. For example, one of my findings was the close relationship between 'landscape' usage and conservation advocacy. Had I introduced 'landscape' as a primary focus of the interview, I would have implicitly displayed to my respondents a concern for conservation issues, and they would have adapted their conversation accordingly.

The final aspect related to the form of the questions. In a structured 'talking questionnaire' interview all questions are predetermined and of standard form. In an in-depth interview, using a 'passive' interview technique, the intention is to stimulate the subject to talk about a topic with only a minimum of direction. The tactics may be different again in an interview intended for discourse analysis - where the interviewer actively tries to stimulate the subject into discussing a topic from a range of perspectives, and to acknowledge the differences between them (Potter and Wetherell, 1987). Jones concluded, "there can be no definite rules... What is crucial is that researchers choose their actions with a self conscious awareness of why they are making them..." (1985:49).

2.   Methods

The approach I adopted in this study was to follow a 'funnel' procedure (Oppenheim, 1966) in which the focus and stance of the interviewer changes during the course of the contact with the subjects. Initial contact was by letter, with a follow up phone call, both of which focused upon the topic of trees and plantations in the Canterbury high country. I made my interest in the use of concepts about resource policy and land use explicit, but made no reference of any sort to 'landscape'. At the start of the interview itself, I maintained this 'partial openness', and during the first phase introduced into the discussion a predetermined set of issues concerning trees and plantations in the Canterbury high country. These followed a broadly standard form and sequence, but were adapted to ensure continuity in the discussion (see Table five, reproduced from Chapter Five).

Table 5 : **Interview themes**

Phase One

1.   Summary of personal background of respondent, and of their involvement with the high
        country.

2. ⸱ ⸱ ⸱Respondents' perception of the main issues associated with trees and plantations in the
        high country.

3.   Respondents' attitudes about the rights, responsibilities, practices and resources for
        management of trees and plantations in the high country.

4.   Respondents' attitudes about the processes of decision making.

5.   Respondents' ideas about the nature of the information needed for management.

Phase Two

6.   Respondents' understanding of the 'landscape' aspects of the issue, and attitudes towards
        rights, responsibilities etc. concerning 'landscape'.

Phase Three

7.   Respondents' ideas about the future of the high country.

8.   What values are important in influencing respondents' attitudes?

9.   Any individuals, articles, events of particular significance in influencing attitudes?

10. ⸱   Any key opinion leaders I should talk to about the issue?

11.   Any points we have missed that are important to the respondent?

During this first phase I made no specific response to interviewees' use of 'landscape' where it occurred and treated it as a normal part of the exchange. Then, at a midpoint in the interview I introduced 'landscape' as being a concept of particular interest to me, followed by a series of questions relating to the 'landscape' aspects of the overall topic. Finally, in the later phases of the interview, I prompted subjects to return to any aspects that they felt had been underplayed or left out, to ensure that their views were fully represented in the transcript.

The tone I adopted throughout was conversational. I encouraged subjects to clarify their views when any apparent conflict or ambiguity occurred, but in a supportive rather than challenging way. I recorded the complete interview, using a small battery recorder and high resolution microphone. I made the cassettecorder as unobtrusive as possible, whilst enabling it to be monitored. I sought consent to record the interview in the preliminary phone contact, and confirmed this before the start of the interview. I assured my subjects of confidentiality, in that no statements would be individually assigned to interview subjects by name. However, I did seek consent for the selective and unassigned use of phrases for illustrative purposes.

Details of personal background were normally sought at the start of the interview. This reversed the recommended sequence in questionnaires, but was undertaken to both establish a rapport between the subject and myself as researcher, and to 'normalise' the presence of the cassettecorder. In every case where I adopted this procedure, the subjects relaxed visibly during their 5 to 10 minute personal resumé, and appeared to enter into the main part of the interview with their attention on the topic rather than upon the cassettecorder. I tested the cassettecorder before each interview, and again immediately after the interview was completed. Despite pretesting incomplete recordings occurred on four occasions, due to operator error, or to mechanical failure. On these occasions I immediately made a written record based upon personal recall (Jones, 1986(a)).

Continuation of trust and some form of follow up is an important element in depth interviews (Jones, 1986(b)). At the end of the interview I made a verbal commitment to circulate a summary record of the whole interview programme, when completed, in order that individual interview subjects could relate their own positions(s) to the others interviewed. A formal letter of thanks was sent.

Potter and Wetherell (1987) described open ended interviewing as a 'craft skill', and recommended a pilot study to refine the procedures. My experience lends support to this procedure as the process appeared to improve with practice. By a mid point in the programme it became typical for the interview subjects to reflect positively on their experience at the end of the interview.

Silverman (1985) argued that it is necessary to clarify the status assigned to data generated in interviews. Despite my use of the 'funnel' technique, all the interviews were significantly 'pre-structured' in a number of ways. Although the approach to interview subjects was made from the Centre for Resource Management, I was already known personally to a number of subjects from my association with landscape architecture. In a small community, some kind of preknowledge of this sort is inevitable. Thus despite my explicit focus on 'concepts of resource management', an implicit awareness of my potential interest in 'landscape' by a number of my subjects must be acknowledged. This only became apparent in 8 of the 58 interviews. The awareness also had a beneficial aspect - as one subject put it :

*   *Knowing your background does affect what you say... to a certain extent... it doesn't change it, but affects the degree of openness... I could get into some of the things I talked about that maybe I couldn't if I was being interviewed by an engineer...*

Within the interview itself, the sequential structure of questions was intended as a loose framework for the subjects to expand upon in their own way. I intended my contributions to act only as a general stimulus to talk. In most cases this occurred. However in a few situations the subjects limited their responses closely to the questions I introduced, which had the effect of limiting the range of attitudes they expressed. In all cases the responses were focused upon the general topic. Overall, the position appears to have been close to Silverman's description of 'realist' interviews - that is, the interviews displayed aspects of reality that both lie beyond the interview (for example, universal conversational practices or social values) and that particularly relate to the interview itself (for example, the subject's response to the specific situations or questions).

The focus of my case study was upon language use in relation to 'common frames' of reference. I defined these as a social reality. However, access to these common frames was via the subjects'

individual frames of reference, which can only be based on their personal expressed attitudes. The particularity of the interview therefore constructed the initial focus. However, I have taken the individual 'frame of reference' to express some social elements, so that when I used a number of interviews to develop a set of 'common frames', I was seeking evidence of a social reality beyond the interview. This stance facilitates multiple analyses of the transcripts. Some of my subsequent analyses sought common patterns of language use (for example, plan language meanings and associative meanings); other analyses sought specific variations within an individual's usage (for example, different 'interpretative repertoires'). My interview transcripts contained within them evidence of both.

The 'realist' position that Silverman advocated has a further advantage. My definition of frame of reference as a 'model of expressed attitudes' placed myself as analyst in a surrogate position for a 'real world' resource manager. I received a set of views on the topic and tried to make sense of them. Although my process of data collection was inevitably 'prestructured', the form of prestructuring reflected many aspects of the 'real world' situation in which language would normally be used; that is, with one resource management player explaining his/her views on a topic to another. Clearly it is important not to try to take this analogy too far, but I believe it serves to reinforce the validity of the method I adopted. Ultimately, however, interviews "will always be something of a compromise" (Potter and Wetherell, 1987:165). As Silverman points out, it is the use to which the data are put that fundamentally determines their validity.

C.   ANALYTICAL PROCEDURES

My analysis of the interview transcripts followed four phases. First I determined the individual frames of reference. Then I derived the 'common frames'. Third, I identified patterns and variations in 'landscape' usage from several perspectives. Finally I related these patterns and variations to the common frames of reference. The latter two phases were closely integrated. The following notes concentrate upon the first two phases. The latter phases are examined in some detail in the main text.

1.   Definition of frame of reference

My definitions of 'frame of reference' and 'common frames' (in Chapter Three) noted that they were models of expressed attitudes - that is, my analysis of the beliefs, feelings and intentions expressed by the subject about the topic. There are three contrasting approaches to this type of analysis. They reflect the 'paradox of categorisation' (Bulmer, 1984:259) about the nature of the assumed relationship between theory and observation. That is, do the concepts used to categorise observation reside within the phenomenon, or within a predetermined theoretical position, or do they develop from the interdependence between the two? Each position leads to different analytical methods. In the first instance, an example would be Glaser and Strauss' process of 'comparative analysis', by which the categories 'emerge' from the data. However, this "*tabula rasa* view of inquiry" (Bulmer, 1984:256) has been widely criticised for its assumption that analysts can avoid any presupposition about the data (for example, Harrison and Livingstone, 1980). At the other extreme the process of categorisation can impose concepts entirely independently of the character of the data, for example, some forms of content analysis (Nachimas, 1976). However, this creates major problems in interpreting the meaning and structure of interviews, as there is no attempt to interpret the subjects' own understanding of the phenomenon being discussed (Silverman, 1985).

Bulmer (1984:259) listed ten possible sources of categories and argued that the particular approach adopted must depend upon the context of the research. This varies according to "the general sociological orientation of the researcher, the richness of existing literature, and the nature of the phenomena being studied". My analysis of 'frames of reference' required three different stages of categorisation - the initial characteristics of the attitudes of the subjects being interviewed, those used to derive the 'common frames', and those used to characterise the common frames once they had been derived.

The approach I adopted in the study shifted in emphasis as it moved from the initial categorisation of attitudes to the final descriptions of common frames. Initially, my aim was to model the expressed attitudes of the subjects - "a concern to understand the world of the research participants as they construct it" (Jones, 1985(b):56). My method adopted Antaki's assumption that subjects present coherent and structured explanations (Antaki, 1988). It owed much of its procedure to Jones (1985(b)). The extensive recorded interviews (which ranged in length from 15

minutes to 2 hours, averaging 1 hour) were coded directly from the tapes. I first paraphrased each interview on large sheets of paper, supplemented by notes on non-verbal aspects of the interview. Key passages were transcribed fully. With this general overview of the interview, the next step was to replay the tape to clarify critical sections and to re-examine the key concepts and relationships used by the subject (Jones, 1985(b)). This initial procedure used 'common sense' constructs (Bulmer, 1984) - terms widely used in public discourse on the topic. They were refined and rechecked to provide a 'summary diagram' for each interview. The set of questions in the interview ensured that certain issues were addressed by all subjects. Certain key concepts such as 'high country', 'trees', 'government' or 'management' are examples of the sort of 'common sense' constructs I used. However, they were only included in the summary diagram if they formed important parts of the subject's account - thus 'high country' might appear as a key concept in one summary diagram, but not in another.

I analysed relationships between concepts, based upon causal links expressed by the subjects (after Antaki, 1988) and by any strong associative links (that is, repeated associations within the discussion). I therefore imposed categories to a certain extent, but tried to minimise the influence I had on the way these were used or related together.

My procedure also sought to minimise any specific interaction between the analyses of different interviews. Where possible the analysis was undertaken soon after each interview was completed, to minimise potential feedback between interviews. They spread over a period of approximately 12 months. As the timing of individual interviews was opportunist, there was no functional relationship between successive interviews or coding sessions - each stood alone, typically associated only with one or two other geographically convenient interviews. Finally, an internal check was made for consistency. I did this by recoding several of the earliest interviews at the end of the sequence (without resighting my summary diagrams), and then compared the second diagram I had generated, with the first. I found no significant changes in emphasis, which suggests to me that my coding was reasonably consistent throughout the process.

For the second stage of analysis each summary diagram was transferred to a card. I then sorted and searched the 58 cards for common patterns of response. Successive sorting and refinement lead me to identify seven distinctly different patterns of response. I designated these 'common frames'. Each common frame was based solely upon the pattern of concepts and relationships

that I derived from the interview. No other factors (such as role) were considered at this stage. Most of my subjects fell clearly into a distinct common frame, and I noted any borderline cases. No overall labels were attached to the common frames at this stage. They were entirely inductive groupings.

My next step to re-examine the paraphrased transcripts. First, I analysed a range of conventional parameters that I had sought in the personal phase of the interview (for example, age). Second, I used more general theoretical categories concerning attitudes to environmental management. Thus subjects' age, discipline, educational achievement, role, cultural origin, and degree of familiarity with the high country were noted and coded. Then each card was coded according to the subject's definition of the issue, their preferred outcome, their attitude towards government's role in resource management, and their overall orientation in environmental management. My derivation of these categories is noted in Chapter Five.

All the cards in each 'common frame' were then analysed in terms of these parameters, and each common frame characterised in terms of the distinctive factors that emerged. The outcome is presented in Chapter Five. It will be clear from this description that my emphasis shifted from individual categorisation based upon the 'common sense' constructs expressed by my subjects, to more general categorisation that was derived from the similarity of their responses, but was characterised by theoretically defined concepts. By doing this, I hoped to minimise any prestructuring due to my own attitudes towards the case study issue. I have adopted a more deductive approach in regard to the relationships between 'landscape' usage and the inductively derived frames of reference.

2.   'Landscape' analysis

The second overall phase of my analysis aimed to identify forms and patterns of 'landscape' usage. For each interview I made a transcription of all sections of the interview in which the term 'landscape' was used by either interviewer or subject. In addition I selected one subject from each of the categories of common frames and fully transcribed the interview. My selection sought the subject whose individual frame of reference most closely approximated to the overall common frame.

I then analysed 'landscape' usage in each interview from four different perspectives - plain language meaning of 'landscape', the nature of the metaphors used, the symbolic associations of 'landscape' and the functional use of 'landscape' in the overall conversation.

a)   Plain language meaning

This analysis categorised the plain language meaning of 'landscape' in all of the interviews. I used categories derived from my theoretical review of 'landscape' (Chapter Two) for coding. This was based upon the predicates of 'landscape' in the transcript (that is, the words used in association with 'landscape' to describe its attributes (Potter and Wetherell, 1987:133). Two problems emerged, making categorisation less straightforward than I had expected. First, the plain language meaning was often not completely clear from the text. Second, a significant number of players appeared to adopt plural meanings within the interview. The first issue was addressed by adopting a provisional categorisation, and then cross checking with the second phase of my analysis - that of the structure of the metaphors used with 'landscape'. The latter problem was initially resolved by introducing a 'plural use' category and by listing all meanings identified in an individual's speech.

b)   Metaphorical use

This analysis identified the way 'landscape' usage adopted distinctive metaphors. Lakoff and Johnson (1980:56) claimed that "most of our normal conceptual system is metaphorically structured; that is, most concepts are partially understood in terms of other concepts". They therefore argued that instead of being 'marginalised', metaphor could provide a key to understanding the use of language. My second analysis used that key to unlock the diffuse nature of much of the everyday usage of 'landscape'. Lakoff and Johnson made a convincing case that many of our concepts use basic physical metaphors - up/down, in/out etc.; others are more complex, using structural metaphors (such as describing an argument using concepts normally applied to war). Metaphor therefore provides a way of understanding different types of experience, and of developing conceptual categories of experience. Where the plain language meaning of 'landscape' was not clear, analysis of its expression as metaphor also helped differentiate, for example, between 'landscape' as land surface and 'landscape' as a picture.

The procedure I used was straightforward - all phrases from each interview that used 'landscape' were analysed for their implicit metaphorical structure. The categories were checked and recoded following the analysis to ensure consistency of interpretation. The choice of categories was derived from Lakoff and Johnson's claim that everyday usage of metaphor draws on natural experience. For each 'landscape' usage already identified in Chapter Two, I was able to identify a range of corresponding 'landscape' metaphors (for example, landscape as land typically uses a surface metaphor). Some were immediately obvious (for example, the 'face of the earth'). Others required more interpretation. As in the plain language analysis, all the interviews were analysed, and I also used the predicates of 'landscape' as expressed by my respondents to identify the metaphorical structure they were using.

c)   Symbolic associations

My third analysis examined the way that 'landscape' was frequently associated with other concepts and came to symbolise them. My theoretical review had revealed a growing interest in the symbolism of 'landscape'. Most of this has been focused upon 'landscape' as a concept within art, literature, design and broader society (for example, Barrell, 1972; Clark, 1976; Pound, 1984; Cooper, 1988; Jellicoe, 1984; Cosgrove, 1985; Daniels and Cosgrove, 1988; Turner, 1979). However, there is also a growing interest in the symbolic role of words and concepts within policy analysis and organisational discourse. Manning, (1988) provided a recent example as he analysed the meaning of the term 'risk' within the British nuclear industry. My preliminary reviews of the interview transcripts suggested that there were indeed several strong symbolic themes linked to 'landscape' usage in the interviews, and my third analysis sought to identify these.

The method I used was derived from 'loose belief analysis' (Manning, 1988), in which interviews are 'deconstructed' (Parker, 1988) and then reconstructed to reveal common patterns of meaning. Appendix Figure One shows the detailed procedure. The key concept that starts the process is 'landscape' - either cited explicitly or inferred by the context (for example, an earlier reference). The predicate words or phrases are listed (as in the plain language analysis) but are themselves then analysed for their denotative meaning (that is, what objects or concepts do they refer to). This 'second level' which

underpins the use of 'landscape' is then reordered into associated groups or contexts, which are categorised according to common factors or references. Thus for example one symbolic association of 'landscape' that frequently emerged was 'naturalness'.

Appendix Figure 1: **Loose belief analysis**

STATEMENTS ——> DENOTATIVE –> GROUPING ————> UNDERLYING
ABOUT   MEANINGS   OF DENOTATIVE   SYMBOLIC
'LANDSCAPE'   MEANING   ASSOCIATION
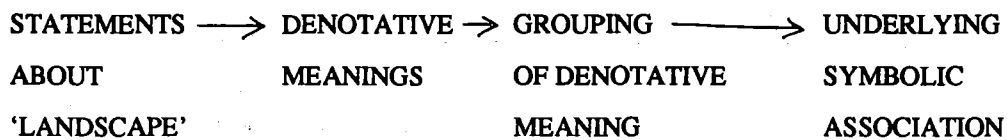
The 'deconstruction' of an interview in this way is based on knowledge about its institutional and social context (Manning, 1988). It is clearly interpretative in the sense that the derived meanings are assigned by the analyst. Nonetheless, the patterns that emerged offer valuable additional insight into the usage of 'landscape'.

d)   Functional analysis

My final analysis of 'landscape' usage examined the functional way that individuals used 'landscape' in their conversation - how big a role did it play, what did they use it for? Both Potter and Wetherell (1987) and Gilbert and Mulkay (1981) warned against the assumption that interview accounts contain a single consistent description, and argued instead for a focus upon variation in language use. They believed that this variation can reveal important aspects of the role of particular words in people's speech. My plain language analysis did indeed encounter apparent variation within a number of interviews, as well as between them. I therefore undertook a discursive analysis of 'landscape' usage.

The first step was to analyse the general role that 'landscape' played in the respondent's explanations: whether it was an 'active' part of their frame of reference, or whether it was 'passive', that is, needed to be prompted. I applied this analysis to all the interviews. The second step looked in more detail at variation in use within individual accounts. Analysis of variation is labour intensive, and may be validly undertaken on only a single text. Its purpose is not to identify universal patterns, but to reveal specific variations (Potter and Wetherell, 1987). I did not have the resources to analyse all my transcripts in this way, so I selected one interview from each of the common frames, and analysed in

detail the variations in 'landscape' usage during the interview. I also tried to identify the functions and consequences of the differences - why should an actor use 'landscape' in one way in this sentence, and in a different way two paragraphs further on? Potter and Wetherell described this approach as an iterative process of checking and recoding in order to separate out distinctive repertoires of usage within a single interview, an approach echoed by Gilbert and Mulkay (1981) and Hornsby Smith (1981). Having identified distinctive types of usage in a limited number of cases, I then compared the results with the rest of my (partial) transcripts in search of evidence for or against their wider use.

APPENDIX III : NOTES ON THE ETYMOLOGY OF LANDSCAPE

A.   INTRODUCTION

B.   NOTES ON OVERSEAS DEVELOPMENTS

1.   Origins of plurality

2.   The sisterhood of the arts

3.   Modern usage

     a)   Perceptual

     b)   Physical

     c)   Professional

     d)   Popular

     e)   Interlinkages

     f)   Critical review

     g)   Summary

C.   NOTES FROM GERMAN DICTIONARIES

APPENDIX III : NOTES ON THE ETYMOLOGY OF 'LANDSCAPE'

A.   INTRODUCTION

My case study has identified a range of meanings of 'landscape' being used in contemporary resource policy. These included 'land-based' meanings such as 'landscape' as landform, or environment, 'interactive' meanings such as 'landscape' as the design and improvement of land, or 'landscape' as a symbol, and 'perceptual' meanings such as 'landscape' as a view of scenery. This range was evident in both spoken and written discourse. It was also expressed in my general review of 'landscape' literature (Chapter Two). In this appendix I include notes on my analysis of the etymological pathways through which this variety of meanings of 'landscape' has evolved. The total story is complex, and of necessity my notes concentrate upon the aspects that I believe to be most relevant to contemporary New Zealand usage. They are complemented by the detailed examination of New Zealand sources contained in Appendix V.

Part B contains the main analysis. It outlines my interpretation of the main steps in the evolution of plural meanings overseas. Part C contains notes and extracts from German dictionaries that provide further background to my account. Published references are all included in the Bibliography.

B.   NOTES ON OVERSEAS DEVELOPMENTS

1.   The origins of plurality

My review of overseas developments in the meaning of 'landscape' draws particularly upon Barrell (1972), Turner (1979), Relph (1981), Tesdorpf (1982), Jackson (1984) and Cosgrove (1984, 1985). There are conflicting arguments as to the origins of 'landscape'. Cosgrove based his critique on the assumption that: "Landscape first emerged as a term, an idea, or better still a way of seeing the external world, in the fifteenth and early sixteenth century" (1985:46). This interpretation has been adopted in New Zealand by Pound (1984, 1987) and Wedde (1987). However, both Jackson (1984) and Tesdorpf (1982) referred to the roots of 'landscape' in Indo-

European languages predating the Renaissance. They examined its earlier usage in compound form during the period described by Glacken (1967) as the Christian Middle Ages.

Tesdorpf reported that the earliest recorded usage of a recognisable form of the word 'landscape' was in 9th century Old German, when 'lantscaf' referred to a territory associated in some way with a defined group of people. Its twin roots are 'lant', which became land; and the suffixes 'skab' (Indo-European), 'scaf' (Old German), and 'scipe' (Old English), which became 'schaft' (High German), 'scap' (Dutch), or 'scape' (English).

'Lant' had meanings of a defined part of the earth's surface, an arable field, or a territory. The suffix -skab and its later variations are variously reported as referring to creation, construction, condition, quality, property, or collective (Tesdorpf, 1982; Jackson, 1984; Webster's, 1971). The composite form translated into mediaeval Dutch as 'landschap', meaning "a collection of farms or fenced fields, sometimes a small domain or administrative unit" (Tuan 1974:133), and Middle German as 'landscap', meaning "a tract of land" (Webster's 1971:1269). It was expressed in Old English as 'landscipe', meaning "a collection of lands" (Jackson, 1984:7) and latterly a region (Webster's 1971:1269). In Middle High German it was expressed as 'landschaft', referring to a distinctive group of people, or a collective, or the territory where the duties of such a collective are carried out (Tesdorpf, 1982). The mediaeval usage of 'landscape' in its earlier forms in several European languages was therefore broadly cognate, and referred to an area of land defined in some way by human activity: "a composition of man made spaces on the land" (Jackson, 1984:7).

A major new usage appears to have developed in Renaissance Italy in the sixteenth century. Cosgrove (1985) pinpointed its emergence to the year 1521, with the adoption of the parallel form 'paesaggio' by the Italian aristocracy, to describe a painting of land. These paintings of "stuffs, bricks and mortar, the grass of fields, the shadows of trees, and bridges and rivers, which they call landscapes..." (Michelangelo, quoted in Clark, 1976:54, translator unknown) were usually by Flemish painters, and were becoming collectors' pieces at the time. By the latter part of the century this new meaning had been translated into Dutch, English and German (Tuan, 1977; Cosgrove, 1985; Tesdorpf, 1982).

In German this resulted in immediate plurality - with 'landschaft' referring both to territory, and to a painting of land (Tesdorpf, 1982). The situation in English was less clear, it not being certain whether the new meaning moved into a vacuum, created by the disuse of the earlier form 'landscipe' (Relph, 1981), or whether the old and new meanings were used in parallel for a period (Tesdorpf, 1982). There are a number of references to 'landscape' listed for the following period 1600-1660 in the Oxford English Dictionary (1989). These include 'landscape' (1603 and 1612), 'landtschap' (1605) and 'landschape' (1683). Reference is also made to the form 'lantskip' (Dekker, 1606) and 'landskipe' (Haydock, 1593). The forms closest to the Dutch (scape, schap, schape) appear to have been used in a more pictorial sense, whereas the forms closest to the Old English appear to refer to a region, expressing the earlier meanings. I believe that this lends some support to Tesdorpf's argument that the two usages were concurrent for a period. Indeed, Samuel Johnson referred to both meanings as late as the mid eighteenth century, describing 'landscape' as "a region; the prospect of a country" (quoted in Barrell, 1972:2).

The evidence from my contemporary case study, which shows how different usage characterised different social groups, suggests to me, by analogy, that this earlier plurality may also have been expressed in different patterns of use by different groups or classes. The earlier meanings were closely associated with the everyday occupation and management of rural land, whereas the newer uses were clearly associated with the leisure activities of a small elite. The introduction to Britain of the new usage also coincided with a period of centralisation of social power and activity upon London and the Royal Court (Williams, 1973). My hypothesis is that the newer, perceptual usage was adopted as a fashionable term in that elite society, whereas the older usage became increasingly irrelevant to them. This process would have been accentuated by the transformation of much rural land holding that was already taking place through enclosure, in which mediaeval patterns of communal land tenure and management (that earlier meanings of 'landscape' referred to) were replaced by enclosed and individual land holdings.

Furthermore, usage by the social elite would have been recorded, and thus survives as evidence to the present, whereas oral, rural usage leaves no trace. In short, I suggest that the social values and processes that Cosgrove identified as being associated with the new 'pictorial' meanings of 'landscape' would, at the same time, have had the effect of both replacing earlier usage, and of excluding evidence of older usage from the historical record. There seems little doubt, however, about the subsequent dominance of the artistic and literary concept of 'landscape' in written

records of elite usage during the seventeenth and eighteenth centuries (Turner, 1979, Barrell, 1972).

2.   **The sisterhood of the arts** (Clark, 1976)

The period 1600-1800 saw a major extension of 'landscape' usage. Turner noted that "as the (17th) century progresses, artists and writers try to make the landscape deeper, spatially and emotionally" (1979:21). By this he meant that the 'pictorial' usage of landscape was extended and applied in an increasing range of situations. This continued during the eighteenth century.

Renaissance 'landscape' painting idealised nature (Clark, 1976) and a number of early citations of 'landscape' in English referred to this association. For example, A. Gibson wrote in 1660, "as in a curious lant-schape oft we see nature, so followed, as we think she is" (OED, 1989:628). However, early forms of 'landscape' also meant a view or vista; for example, Nashe wrote in 1599 "a dimme farre of launce-skippe" (OED, 1989:629) (a dim, far off landscape). Denham's poem 'Cooper's Hill', dated 1640, in which the "arts of prospect" try to imitate the themes and patterns of landscape painting, has been suggested as a watershed in poetic form (Turner, 1979:5). Denham adopted a controlled and structural visual 'scanning' of the features of an area as a structure for the poem. This is reminiscent of the measured movements of the land surveyor's instruments. Cosgrove (1985) explored this link between landscape, perspective and surveying in depth.

The subsequent evolution of prospect poetry (Barrell, 1972) and picturesque sensibility (Watkin, 1982), by which 'nature' was described and appraised according to the principles of pictorial composition, facilitated the extension of 'landscape' to refer to a view of land, both specific and generalised. An early reference to a general view is in Milton (1667): "The Sun.... discovering in wide lant-skip all the East of Paradise and Edens happie Plains" (OED, 1989:629). This is clearly an imagined 'landscape' but Barrell noted that during the following century attention turned increasingly to the form and character of objects within 'a landscape' (1972:50). Thus in 1762, Lord Kames wrote, "a taste for natural objects is born with us in perfection; for relishing... a rich landscape... culture is unnecessary" (cited in Jacques, 1983:102). By 1795 Coleridge wrote, on climbing Brockley Coomb, "What a luxury of landscape meets My gaze" (OED, 1989:629).

Both landscape painting and prospect poetry frequently focused upon the representation of landed estates. 'Landscape' was thus fundamentally linked to ownership (Cosgrove, 1984; Turner, 1979; Williams, 1973). It was only a small further step for 'landscape' to be translated into physical estate improvement. Brownwell (1978) acknowledged the major role of Alexander Pope, both in translating poetic and visual sensitivity into design, and in extending its scope, 'leaping the fence' and 'concealing the bounds'. Addison, describing the 'Pleasures of the Imagination' in the Spectator magazine, wrote in 1712, "May not a whole estate be thrown into a kind of garden... that may turn as much to profit as the pleasure of the owner?... man may make a pretty landscape of his own possessions" (cited in Jacques, 1983:21). 'Landscape' thus came to mean a piece of land improved according to picturesque principles.

Landscape painting, poetry and improvement clearly fulfilled a major symbolic role in English society during this period (Williams, 1973; Turner, 1979; Daniels and Cosgrove, 1988). Estate improvement was adopted as an idealisation of nature, as an expression of personal status, as a metaphor for the state, and as a vehicle for political and social criticism. 'Landscape' also came to signify ideals, and to be used as a mode of social critique: "To the picturesque landscape which pleases the sight (Blenheim) adds the moral landscape that pleases the mind" (Maver, 1797 in Jacques, 1983:155).

It is important to acknowledge, however, that 'landscape' usage was not restricted to the arts. Smith (1969) examined the empirical tradition of scientific observation promoted by the Royal Society. In the late eighteenth century, stimulated by European exploration of the Pacific, the needs and activities of scientists and explorers began to disrupt and challenge the prevailing tradition of 'landscape' representation based on neo-classical notions of picturesque unity, and introduced a concern for the accurate representation of ecological relationships. Hence, "The placing of plants, animals and primitive peoples in their appropriate environmental situation became a matter of increasing importance for the landscape painter" (Smith, 1969:4) and "landscape painters became fully conscious of the fact that the world contained distinct types of scenery with their own forms of visual unity" (1969:5). 'Landscape' was increasingly modelled upon empirical experience, and came to signify that experience.

In summary, I believe that there were four crucial characteristics of 'landscape' usage during the period 1600-1800. First, the close links between the different aspects of the arts resulted in a complex transfer of terminology and metaphor that continues to influence and infuse current usage. For example, the vocabulary of theatre became linked to nature appreciation. Ben Jonson illustrated an early step, "First, for the Scene, was drawne a *landtshap*, consisting of small woods" (1616) (OED, 1989:628). Here, 'landscape' provided a background for a play. In 1712 Addison wrote, "Scenes and Landskips more beautiful than any that can be found in the whole compass of nature" (OED, 1989:629) and by 1822 Loudon referred to "the scenery of nature, called landscape, and that of a garden, are as different as their uses" (cited in Jacques, 1983:183).

Second, there was a transfer and accumulation of associated ideas and symbolic meaning. Thus when William Kent sought "to copy nature" (Barrell, 1972:50) in his physical designs for estate improvement, he inherited the picturesque ideals of 'landscape' from Renaissance painting, from poetry and from earlier examples of estate design based on these, and the social ideology that created them.

Third, estate improvement and empirical 'landscape' observation translated 'landscape' from the realm of art into the realm of land management, design and science. Finally, as a result of these developments, there was a significant widening and expansion of the range of meaning of 'landscape', as it was used in a variety of applications.

By the end of the 18th century, 'landscape' was a term applied to paintings of land and nature, to pictorial views, to a general prospect of land, to the appearance of nature, to an improved estate, and to an intellectual and moral ideal. Within 200 years the earlier meaning of territory appears to have largely disappeared from the written record. A new perceptual usage had been introduced, that had itself expanded to include elements of an increasingly complex socio-economic reality. But this time, the meaning carried with it a range of complex visual associations. Earlier forms of usage, associated with feudal forms of land management, no longer appear in the records of the social elite, whilst any popular usage that may have persisted is inaccessible to us.

3.   Modern usage

The eighteenth century meanings of 'landscape' have been carried forward in English to the present. They have also interacted with German usage. Both English and German meanings were adopted in the New World - in America, Australia and in New Zealand. I have identified six important developments. First, the 'perceptual' meanings of 'landscape' as a picture or view continued to widen; second, there has been a major development of the physical meanings of 'landscape'; third, 'landscape' has been adopted in professional planning and design terminology; fourth, landscape usage has been popularised; fifth, its meanings have been transferred between disciplines and applications, and finally, it has been subjected to critical review.

a)   Perceptual landscape - a widening of meaning

Barrell (1972) argued that the poet John Clare adopted 'landscape' to mean the experience of nature. Ruskin made this usage explicit. In Modern Painters (1856) he praised the sensory genius of Turner, and elevated 'landscape' to a spiritual and moral position: "the ruling passion of my life" (in Relph, 1981:38). It became an expression of God in Nature. Late in the nineteenth century, the existential dimensions of landscape were again expressed, this time in secular form, by Cezanne (Merleau Ponty, 1964). This theme has been returned to by humanist geographers and phenomenologists in the 1970s (Tuan, 1977; Relph, 1981; 1984), as 'landscape' has been taken to mean "the visual context of human existence" (Relph, 1981:62).

b)   Physical landscape

The German meaning of 'landschaft' as territory underpinned a major expansion of the physical meanings of 'landscape' as it entered the vocabulary of the emerging discipline of geography. Smith (1969) noted the role of Carl von Linne (Linnaeus) and subsequently Alexander von Humboldt, in their adoption of the term 'landschaft' to describe distinctive types or combinations of climate, soil, vegetation and animal life. Towards the end of the nineteenth century a number of German scholars put forward definitions of physical 'landscape' as the basis for geographical study. Pioneers such as Richtofen, Passarge and Schulter used the term to describe distinctive interrelationships

between man and nature: "a landscape (landschaft) must be viewed as a type (Landschaftraum)... as assemblage of interrelated elements" (Passarge, cited in James, 1981:181). This line of development has continued to the present, as 'landscape' (landschaft) is used to describe a distinctive area (Tesdorpf, 1982), and landschaft ecologie describes the systematic study of biophysical processes in time and space (Troll, 1971).

German usage also influenced other continental countries. In Russia Dokuchaiev applied a concept of 'landscape' type to soil studies in 1889 (James, 1981:229). Troll (1971) reported that Berg translated the emerging concepts of 'landscape' as geographical zones directly to the Russian in 1913. The tradition was revitalised again in the post war period by Isachenko's use of ecosystem ideas: "The landscape... is a dynamic system in which matter and energy are circulating (James, 1981:240).

Physical concepts of 'landscape' also developed in North America, as earth science adopted the notion of 'landscape' type (Smith, 1969). Thus W.H. Davis appeared to imply an areal concept; that is, 'landscape' as an area of land, in which, "Landforms are the core... to which other elements of landscape could be related" (James 1981:286). Hartshorne (1939) reported a major influence of German usage during the early part of the 20th century, focussed particularly on the Berkeley School of Geography of Carl Sauer. His 1925 essay 'The Morphology of Landscape' argued that "area of landscape is the field of geography, because it is our naively given important section of reality..." (Sauer, 1963:316); ..."an area made up of a distinct association of place forms" (Sauer, 1963:321).

Sauer was dealing primarily with cultural 'landscapes' and the use of 'landscape' to refer to the distinctive patterns of cultural activity and artefacts continues to the present day (Jackson, 1970, 1984; Stilgoe, 1982). However, his writings also influenced physical geographers (James, 1981). The 1920s and 30s witnessed renewed activity in geological field survey (James, 1981), and by the post war period the areal meaning of 'landscape' as regional pattern was also well established in the earth sciences. Thus Aitcheson and Grant (1968) reported on the US Corps of Engineers 1963 Definition of 'landscape' as "a region throughout which a specific assemblage of environmental factor classes occur, and

throughout which these factor classes are related to each other in a similar way" (1968:130).

The search for appropriate methods of analysis of 'physical landscape' was not limited to Europe and North America. In Australia, Mabbutt (1968) reviewed early English work in land assessment, and used 'landscape' in association with land unit, land system, and pattern, to imply physical surface differentiation. He designated the emerging method of land classification that used areal identity of land patterns as "the landscape approach". Amongst those he cited were the English authors Bourne and Unstead, the Australians Christian and Stewart, and the Russian Prokayev, illustrating the increasing interchange between different national traditions. 'Landscape' therefore became a term that referred to regional or subregional assemblages of land elements and land systems in English, as well as German and Russian.

c)   Professional

The term 'landscape gardening' was associated with rural estate gardening in late eighteenth century England (for example, Repton, 1805). As population, wealth and power shifted to the Victorian city it came to be applied to the laying out of suburban villa gardens for the new professional (Loudon, 1822). There is debate over the phrase 'landscape architecture'. Turner (1982/83) argued that it originated in Scotland. American scholars give the credit to Olmsted, who used it in 1865 to describe his partnership with Vaux when working on Central Park, New York. Certainly Olmsted, and his associates, extended the activity of landscape architecture to include design and planning at a range of scales - urban parks, communication corridors, housing estates, park systems and wilderness parks. He also established the concept of landscape architecture as a public service, in addition to a service for private clients that was dominant in English practice. In 1899 the term was formalised with the incorporation of the American Society of Landscape Architects, and entered the academic curriculum at Harvard in 1900. This early development of university training has resulted in a particular emphasis on North American practice upon comprehensive and abstract ideals of 'landscape'. Landscape architects also became increasingly involved with regional planning and natural resource assessment (Fein, 1972). Thus in the post World War II

period the "landscape approach" (Mabbutt, 1969) was also adapted by landscape architects into an overlay method of analysis (McHarg, 1969). In the 1970s computerisation lead to the term 'total landscape' being applied to comprehensive parametric computer inventories of physical and cultural resources (Fabos, 1978, 1985).

A second expansion of usage was linked to the subsequent growth of urban design. Influenced by the Modern Movement in design, the landscape architect Tunnard stimulated a renaissance of site planning and urban design within landscape architecture (Simonds, 1961). In the post war revival, 'landscape' was thus increasingly applied to the external spaces of the city - which became the 'urban landscape' (for example, Halprin, 1972). This was reinforced by the renewal of interest in cities by geographers, using the terminology of physical and existential 'landscape' (Relph, 1981, 1987).

In the UK, the emphasis was different. Concern for scenery preservation in the interwar years reinforced the historical link between 'landscape' and rural scenery (Cornish, 1943). In the 1960s the landscape architecture profession followed the American lead and expanded into landscape planning, assessment and larger scale development. However, the emphasis of 'landscape' assessment remained upon rural scenery (Linton, 1969), whilst the initiation of a government programme of derelict land reclamation effectively revitalised the long tradition of 'improvement'. University training became widely established in the 1960s, but even in the 1980s, 'picturesque' concerns remain in the forefront of professional practice, in the form of garden festivals.

d)   Popular usage

The growth of tourism and its associated guide books popularised the concept of 'scenic landscape' appreciation in the nineteenth century. This usage was facilitated by printing technology and photography and has continued to expand with the development of colour photography and mass tourism in the twentieth century (Clendon, 1983). Increased wealth and suburban expansion in the interwar years stimulated 'landscaping' as a consumer item. The OED (1989:629) noted a reference to landscaping in 1868 but this was used in a pictorial sense. References to 'landscaping' as physical improvement commence in 1930: "suburban developers and home owners are paying more attention to

landscaping today' (New York Times, 1930 in OED, 1989) - a trend that has continued to the present. In addition, these 'popularised' versions have become adopted in other contexts. For example, the 1943 County of London Plan referred to 'landscaping' of open spaces (OED, 1989:629). New road construction was "landscaped into the countryside and not stuck on it" (Motor, 1959 in OED, 1989:629).

e)   <u>Interlinkages</u>

Several transfers between different languages and cultures have already been noted. Further examples highlight the importance of diverse stimuli in the evolution of usage. The movement between German and English was not one way, nor was German usage free of visual association. Cosgrove (1985) identified Italian and Dutch origins of landscape painting terminology, that influenced both German and English usage in the early sixteenth century. Two hundred years later it was the English interpretation, expressed as the English 'landscape' style, that was exported, both to Continental Europe and North America. English sources are also evident in earlier North American usage (Marx, 1964) and in the South Pacific (Smith, 1969). By the mid nineteenth century, Olmstead was clearly drawing on English sources for his treatment of Central Park (Howett, 1987).

The influence of the German geographical tradition in terms of 'physical' landscape has been noted. However, both Hartshorne (1939) and Cosgrove (1985) cautioned against assuming that this usage is totally distinct from perceptual meanings. Both identified perceptual elements in the German translation and commented that the resultant ambiguity in geographical usage originated from a failure to clearly identify and interrogate sources. Olschowy (1976) noted the influence of the English 'landscape' style on German practice in the early nineteenth century. Cosgrove also reminded us that the holist tradition in German geography originated with von Humboldt and that he drew upon Goethe in his conception of 'landscape', with the latter's emphasis upon emotion and visual aspects. This perceptual dimension was made explicit in 1906 when Schulter, in an influential address, proposed that the subject matter for geography should be "the things on the surface of the earth that could be perceived through the senses, and... the totality of such perceptions - the landscape" (James 1981:177).

Hartshorne pointed out that "Modern German geographers are attempting to define a word which, while retaining an indefinite association with the concept of the perceptible landscape - as commonly understood - shall at the same time precisely define the objects of geographic study. Consequently each geographer's definition of the word will vary according to what he thinks geography should study" (1939:153). He criticised Sauer's failure to clearly specify his adopted meaning.

More recently, increasing international communication has facilitated rapid transfers of ideas, in both academic and professional usage. This is well illustrated by Stewart's (1968) collection of papers on land evaluation, and by the dissemination of concepts of landscape ecology over the past decade (Troll, 1971; Naveh and Lieberman, 1984; Forman and Godron, 1986).

f)   Critical review

Finally, the diverse uses of 'landscape' have come under critical review. This conscious reappraisal has further influenced the meaning and interpretation of 'landscape'. Ruskin provided one of the earliest examples (Relph, 1981). Hartshorne (1939) dealt at length with the context of 'landscape' use in geography and in the post war period a number of academics have reviewed its meanings (Hartshorne, 1939; Troll, 1971; Turner, 1976; Relph, 1981; Stilgoe, 1982; Tesdorpf, 1982; Jackson, 1984; Cosgrove, 1984).

This examination has had three effects. First, it brought the plurality of 'landscape' usage to the attention of academics and professionals; second, it introduced unfamiliar meanings and interpretations to those academics; and third, new meanings were developed out of the critique. For example, 'landscape' itself became defined as an ideology (Cosgrove, 1985), a 'way of seeing'. He concluded, "When we take over landscape into geography, and particularly into public policy, we inevitably import in large measure the realist, visual values with which it has been loaded" (1985:58). 'Landscape' was also recognised as a cultural symbol. Jellicoe proposed the 'Landscape of Man' as "potentially the greatest of all arts" (1984:1) Others used 'landscape' as a term for the visual symbolism of the environment, proposing an iconography of 'landscape' (Daniels and Cosgrove, 1988; Howett, 1985).

g) Summary

Appendix Figure Two summarises the diverse strands of development I have outlined and illustrates both the continuity of meanings within linguistic traditions, and their development and transfer. It reveals the diverse sources of the plurality that I identified in Chapter Two.

Appendix Figure 2:The evolution of 'landscape' meanings (after Swaffield and O'Connor, 1986)
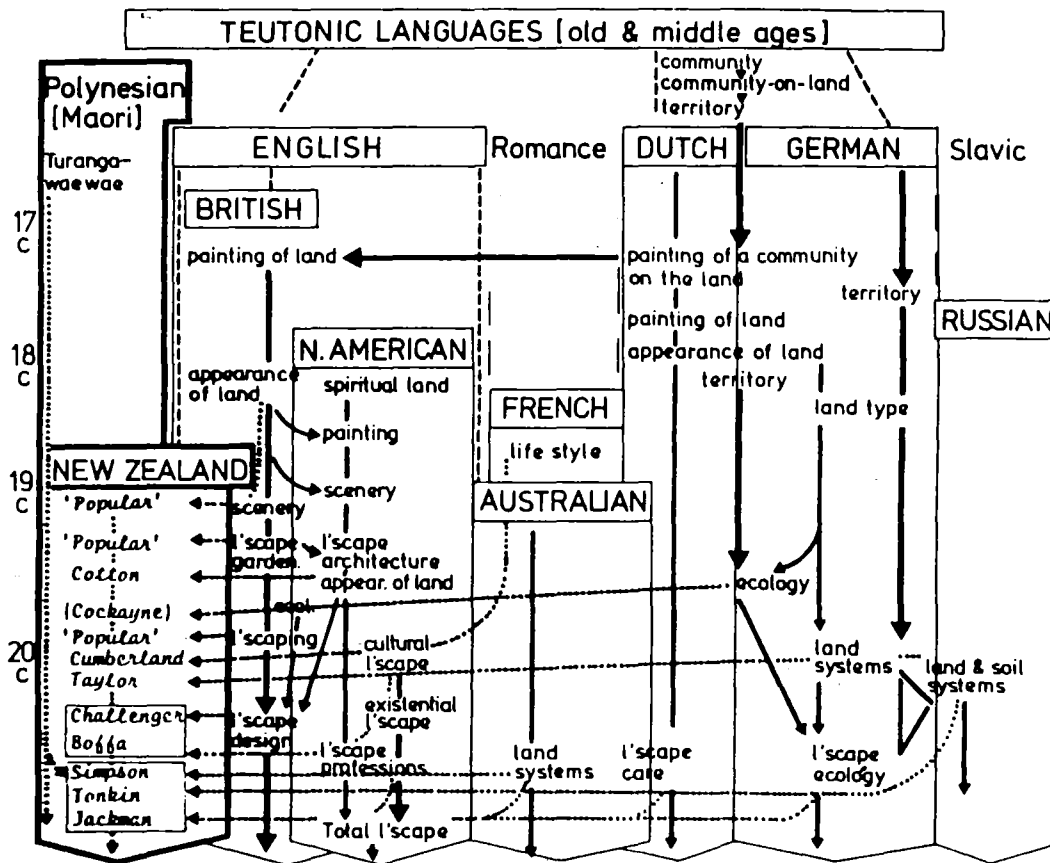
C. NOTES FROM GERMAN DICTIONARIES ON THE ETYMOLOGY OF 'LANDSCAPE'

1. GRIMM's Deutsches Wörterbuch (1885 Leipzig, verlag von S. Huzel) lists six usages:

    a) A region (gegend) described as a land complex with regard to the location and character of natural phenomena

        (landcomplex in bezung auf lage und natürliche beschaffenheit)   (c. 1675)

    b) The source of beauty of a place, or the artistic or pictorial description of a place or region (daher, und schön in alten queller, die kunstlerische bildliche danstellung einer solchen gegend)   (c. 1866)

    c) A community, all the social connections in a region

        (landschaft, als ein sozial zusammenhangendes ganzes, gegend, regio) (no dates)

    d) Land

        (landschaft sinne gleich)   (no dates)

    5. The inhabitants of such land

        (landschaft, die bewohner einen solchen)   (c. 1538)

    6. The territory or land of a community

        (landschaft, die vertreter eines territoruns oder eines landes...(based upon on Italian source: provinciales una congregati)   (no dates)

2. DUDEN's Etymologie (1963 Mannheim, Bibliographisches Institut) lists landschaft under 'land' as natural region. (Gegend, natürliche belandeeinheit)   (no dates)

3. WAHRIG's Deutsches Wörterbuch (1975 Bertelsmann Lexikon-Verlag) lists landschaft as a geographical term for the natural character of land, or a region. It also notes -

a)   different 'types' of landschaft (for example, ideal...)

b)   landschaft as regional custom (... lich)

c)   landschaft <u>garden</u> (garten), in the English style

d)   Landschaft conservation or care (...pflege)

e)   landschaft protection (...schutz)

(no dates)

4.   OXFORD-HARRAP Standard German-English Dictionary (1977 Oxford, Clarendon Press) has three main usages:

a)   region, tract of country

b)   countryside (surrounding a town)

c)   landscape region or unit in geography. This entry also notes usage as natural scenery and a picture of landscape.   (no dates)

APPENDIX IV : DETAILED REVIEW OF CASE STUDY PROPOSITIONS

A.   INTRODUCTION

B.   PROPOSITIONS CONCERNING FRAMES OF REFERENCE

    1.   Proposition One

    2.   Proposition Two

    3.   Proposition Three

    4.   Proposition Four

        a)   Specific New Zealand content

            i)   Common frames of reference

            ii)   Trees and plantations in the high country

            iii)   Counter-evidence

        b)   New Zealand theoretical context

        c)   Overseas evidence

        d)   Theoretical insight

C.   PROPOSITIONS LINKING 'LANDSCAPE' USAGE TO FRAMES OF REFERENCE

    1.   Proposition Five

    2.   Proposition Six

    3.   Proposition Seven

    4.   Proposition Eight

D.   'LANDSCAPE' USAGE AND SOCIAL FACTORS

    1.   Proposition Nine

    2.   Proposition Ten

    3.   Proposition Eleven

APPENDIX IV: DETAILED REVIEW OF CASE STUDY PROPOSITIONS

A.   INTRODUCTION

This appendix contains an examination of the working propositions that my case study was based upon, in the light of the empirical findings. It provides a background to the theoretical review presented in Chapter Eight.

I started the case study investigations with the following propositions:

One: The openly expressed beliefs, feelings and intentions of an individual player involved in a resource policy arena can be summarised as a personal 'frame of reference'.

Two: An individual's 'frame of reference' will draw upon other 'frames' of reality such as disciplinary norms or world views. It may therefore reveal elements of conflict and ambiguity.

Three: The players involved in an apparently complex arena will express a range of different frames of reference.

Four: There will be a limited number of 'common frames of reference' that encompass most, if not all, of the established players in a particular arena.

Five: 'Landscape' has plural meanings.

Six: The players in an apparently complex resource policy issue will express diverse 'landscape' usage.

Seven: The particular meanings of 'landscape' used by an individual will reflect his/her frame of reference.

Eight: Common frames of reference will display similar patterns of 'landscape' usage.

Nine: 'Landscape' meaning will be related to the discipline and/or professional background of the user.

Ten: The range of meanings of 'landscape' used within a complex resource policy issue will express plural meanings in wider documented usage.

Eleven: The principal meanings of 'landscape' used in an issue will express the dominant world view or ideology that prevails amongst the players involved.

Statistical tests are not suitable for the critical examination of a largely qualitative study, and a different approach is therefore needed. Silverman (1985) argued that the credibility of qualitative research relies upon its coherence, plausibility, and theoretical fruitfulness. Simple counting methods can also help. I therefore examined each of my working propositions in turn, in the light of the case study findings, using these criteria.

Section B reviews propositions one to four concerning the concept of frame of reference. Section C reviews those dealing with 'landscape' usage in relation to the frame of reference (propositions five to eight), and Section D reviews the more general propositions concerning 'landscape' meaning (nine to eleven).

B.   PROPOSITIONS CONCERNING FRAMES OF REFERENCE

I started with four propositions:

1.   **Proposition One : The openly expressed beliefs, feelings and intentions of an individual player involved in a resource policy arena can be summarised as a personal 'frame of reference'.**

My concept of an individual's 'frame of reference' drew upon several theoretical sources. Did it hold up in practice? The *prima facie* evidence suggests that it did, under the terms in which it

was presented. Many authors have concluded that individuals can present coherent accounts or explanations as part of their conversation (Antaki, 1988; de Haven Smith, 1988; Jones, 1986a). It is less easy to define what constitutes such an explanation. As Antaki put it, "There is certainly no mechanical way of searching through a transcript of talk and spotting everything that could count as an explanation. On the other hand our intuitions about what does or does not have the general feel of an explanation are reasonably sharp" (Antaki, 1988:1). The coherence and completeness of an account is something that emerges from the text - it is something that makes sense in the context of its presentation.

I therefore examined each of the individual 'frames of reference' I had derived from my interview analysis in the light of the particular situation of the player involved. I asked the questions, is this account plausible, is it coherent, and does it 'make sense' in context?

My examination found much to support the notion of a frame of reference. I present below two typical examples, profiled anonymously to maintain confidentiality. Both reveal a framework of attitudes that clearly derive from the personal and social situation of the individual concerned, through which they responded to my general questions on the issue of trees and plantations in the high country.

Example 1 : 'Graham' was a middle aged natural scientist. For much of his career he had been involved in research into the establishment, performance and biological productivity of woody vegetation in the mountains, as part of the forest research culture associated with the Craigieburn area. The majority of his publications report on revegetation and productivity research, and emphasise the potential of trees in the high country.

Appendix Figure 3: **Graham's summary frame of reference**

HIGH COUNTRY → LOW PRODUCTIVITY   SCIENTISTS'

= MODIFIED   GLOBAL VIEW

= DEGRADED

IMPROVEMENT   TREES   = PRODUCTIVE   GOVERNMENT

= ECONOMIC   RESPONSIBILITY

NATURAL

BEAUTIFUL   LANDHOLDERS'   INACTION   = LACK OF

RIGHTS   LEADERSHIP

LANDSCAPE   CAUTIOUS

SYSTEMS   ADMINISTRATORS

LANDSCAPE   STRAIGHT LINES   EMOTIONAL URBAN

CHARACTER   IN TUSSOCK   INTEREST
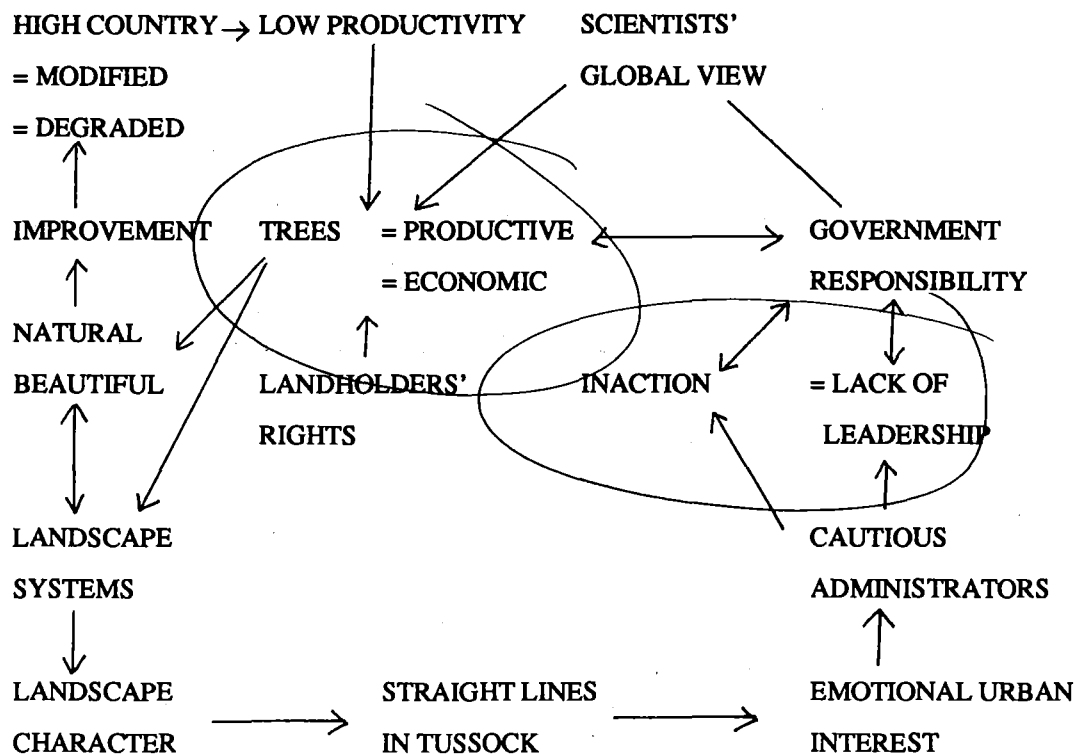
Appendix Figure Three shows the key features of 'Graham's' frame of reference based on the interview. He defined the issue as a lack of leadership. 'Graham' believed that the high country is modified and degraded, with low productivity. In contrast trees are highly productive, economic, and improve the biological productivity of the mountain ecosystems. He indicated that in earlier years his primary concern was to stabilise the mountains. In the interview, he argued that it is also government's responsibility to take a global view of rising carbon dioxide levels. However, he felt that cautious administrators have been over-influenced by 'emotional' urban interests, who equate trees in the high country with straight lines in the tussock. There had therefore been a loss of direction, and a lack of responsible action.

I interpret this frame of reference as clearly reflecting 'Graham's' professional formation and experience as a scientist, and the subsequent emphasis of his work. However, the confidentiality of the conversation also encouraged him to voice his personal beliefs and concerns. He saw that state sector reorganisation appeared to threaten the continuity of much of the work he had been involved in, at the same time that global environmental issues provided him with a renewed justification for it. He thought that administrators lacked initiative because of their unwillingness

to actively support tree planting, and his frustration at the perceived lack of action was directed towards the opponents of tree planting, characterised as urban and emotional, in contrast to the logical considerations of the scientists. These views appear both coherent and plausible in relation to the broader attitudinal and institutional context I outlined in Chapter Four. I subsequently categorised 'Graham' under the common frame of reference of 'multiple use management'.

Example 2 : 'Angus' was a public servant in his early middle age with responsibility for promoting wise resource management under the new environmental statutes. His tertiary education was in the social rather than natural sciences. He had no personal connections with the high country, which formed only a small part of his overall range of responsibilities. Appendix Figure Four illustrates the main features of his frame of reference.

Appendix Figure 4 : **Angus' summary frame of reference**
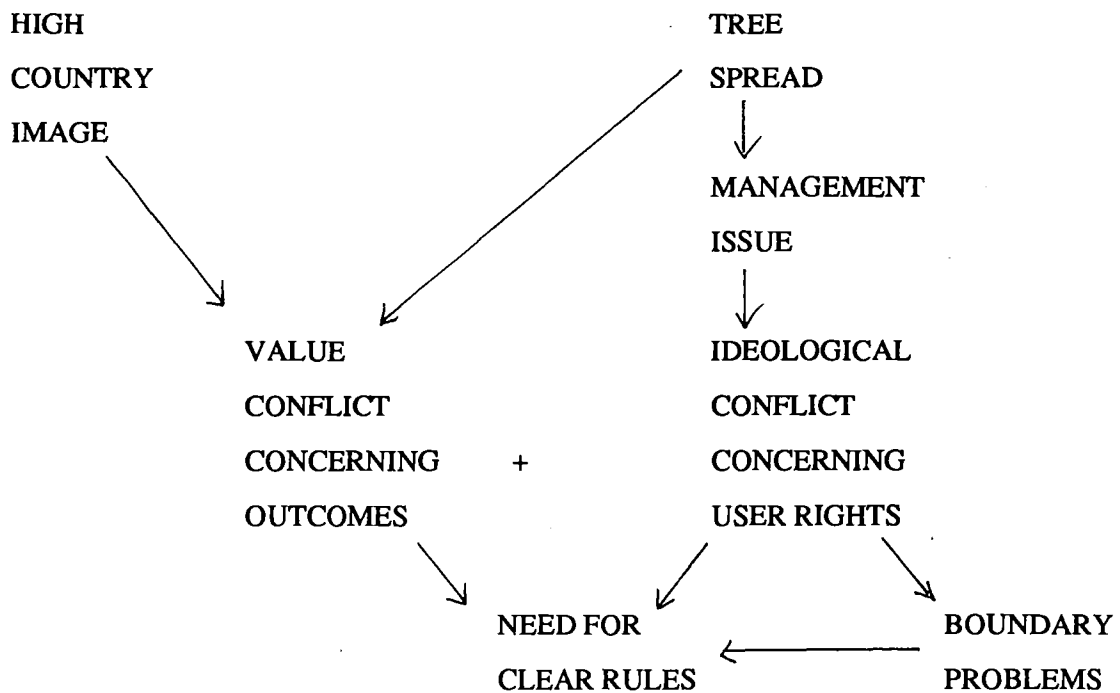
'Angus' defined the issue in social and procedural terms. He put it like this: the high country is a cultural concept, and its traditional image is threatened by wilding tree spread. This leads to a value conflict over the preferred outcome, and an ideological conflict over the rights different groups have to influence this outcome. The central issue is therefore the need to develop clear

rules and procedures by which these conflicts can be resolved. This provides an interesting intellectual challenge.

This frame of reference also appears to be entirely compatible with the context of the case study. The attitudes expressed by 'Angus' were coherent and plausible in terms of both his background and position. I categorised 'Angus' in the common frame of 'system designers'.

My examples here are clearly only outline sketches, but illustrate the close relationship I found between the frames of reference I identified and the context of the case study. I believe they provide support for my belief that the 'frame of reference' is a valid and useful concept. Is there any evidence from the transcripts to challenge my notion of 'frame of reference'? Potter and Wetherell (1987) argued that people's accounts are characterised by variation, not consistency. I certainly found hints of this in my analysis, for example, in the 'conservative management' group.[1] Some individuals also appeared to display significant inconsistency within their position during the interviews. One respondent (whom I shall call 'Bill') was a recreational advocate and a landowner. He expressed both a distrust of individual freedom, and a resentment of local authority powers:

*   *I'm not interested any longer in hearing that farmers are good guardians of the high country. I've examined the leases - they're appalling for what they don't say. They're not accountable. The University of Canterbury is a bit of a joke. They have no control... yet I have weed and dog inspectors looking over my fence. Yes - there are two sides to me...*

'Bill's' role as an advocate for recreational interests in the high country led him to argue for both a public right of access, and for public control over the management of land, in order to conserve its recreational qualities. On the hand, as a landowner himself, he strongly resented the exercise of similar powers by the same local authority, over his own lowland farm. His frame of reference is summarised in Appendix Figure Five. I categorised this in the 'conservative management' frame.

1/   My quotations in Chapter Five illustrate a degree of ambivalence in some of their views.

Appendix Figure 5 : 'Bill's' summary frame of reference

HIGH COUNTRY   PUBLIC RIGHTS ————————————> LEGITIMATE USE

= VAST   OF ACCESS   BY ACCLIMATISATION

= CROWN LAND   SOCIETIES

= NATURAL   SYMBOL OF   *CONFLICT*

= FRAGILE   INDIVIDUALISM   CONCERN FOR

                                            HABITAT

                EXPLOITED   CONSERVATION

                BY FARMERS

                                             NEED FOR

                DESTRUCTIVE EFFECT   *MANAGEMENT*

                OF EXOTIC TREE SPREAD
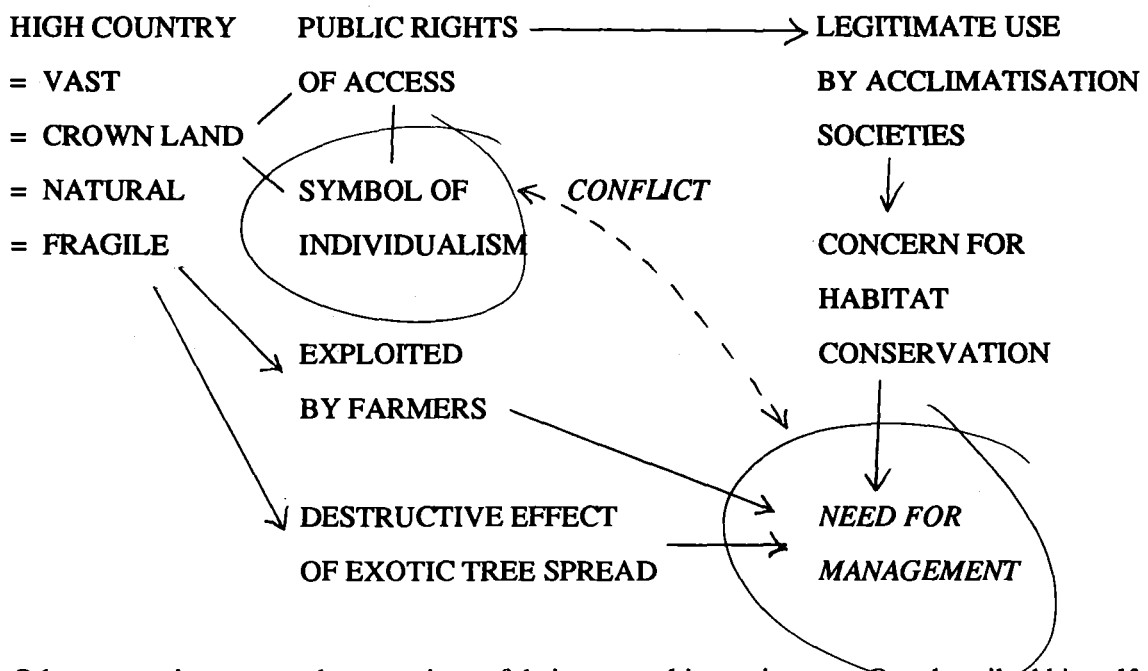
Other respondents were also conscious of their personal inconsistency. One described himself as 'an octagon', with a number of different faces he presents depending upon the circumstances. Another mused on the conflict between her personal preference for undeveloped and natural environments, and her professional training that favoured multiple use and management.

Such splits or conflicts are entirely consistent with the methods of discourse analysis (Gilbert and Mulkay, 1981; Potter and Wetherell, 1987). However, they do not disprove the notion of a dominant frame of reference. Each offers a different perspective upon the complex reality of an interview (Silverman, 1985). In particular, the frame of reference, as defined in this study, is a generalisation, based upon 'broad brush' interpretations. Its purpose is to provide a simplified model of key concepts and relationships. A deeper and more time consuming analysis of the detailed structure of an individual's discourse could reveal variations. They are not mutually exclusive. However, the existence of such variation, warns me against assigning 'frames of reference' greater status than they deserve. They remain working constructs, 'models' of expressed attitudes prepared for the purpose of classification and comparison of a wide range of individuals and groups. I do not claim them to be comprehensive representations of social reality.

In summary, I believe my transcript evidence supports the general notion of a personal frame of reference, but I would argue that the evidence of inconsistency in the accounts also provides support for my second proposition, as follows:

2.   **Proposition Two: An individual's 'frame of reference' will draw upon other 'frames' of reality, such as disciplinary norms or world views. It may therefore reveal elements of conflict and ambiguity.**

My third example (above), 'Bill', provided one good illustration of such multiple frames. The inconsistency in his views arose from a divergence between his personal experience as a landowner, and his social role as an advocate for recreational interests. In other cases there were tensions between personal beliefs and experience, and broader social norms or ideologies. 'Andrew' was a forestry consultant. He expressed a strong belief in the need for careful management of the 'fragile' high country environment. However, he reported an unresolved personal tension between his personal experience of 'exploitive' farmers, and a distrust of professional elites and of the idea of government controls (Appendix Figure Six). I classified 'Andrew' under 'multiple use management'.

Appendix Figure 6 : **Andrew's summary frame of reference**

HIGH COUNTRY — EXPLOITIVE   PERSONAL DISLIKE

=   FRAGILE   FARMERS AND   OF GOVERNMENT

       SYSTEM   RECREATIONALISTS   AND PROFESSIONAL

                                                                ELITES

       BROAD   NEED FOR CAREFUL   *UNRESOLVED TENSIONS*

       EASY   MANAGEMENT

       LANDSCAPE

                          NEED FOR 'FIT'

                          TREES = IMPROVEMENTS
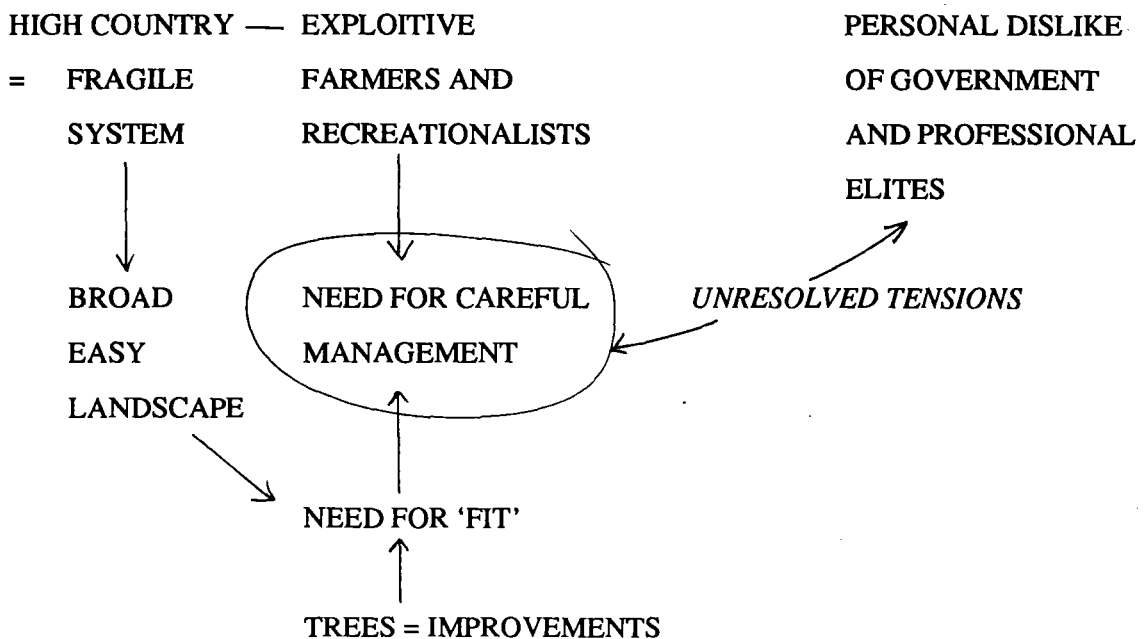
Sometimes there was tension between an individual's expression of a broader social ideology, and the professional norms that they had learnt. 'Neil' worked in a planning authority. He expressed a strong personal commitment to the primacy of market mechanisms, and indicated that he was in sympathy with the emphasis upon private property rights in resource management law reform. Yet when we discussed the specifics of the issue of trees and plantations in the high country, he also expressed strong professional convictions about the 'right' types of outcome he would expect from the resource management process. In other words, he still adopted elements of a normative planning approach (Appendix Figure Seven). 'Neil' was a 'system designer'.

Appendix Figure 7 : **Neil's summary frame of reference**

HIGH COUNTRY =   RESOURCE =   PRIVATE PROPERTY

PUBLIC   DEMANDS FOR   INTERFERENCE
CONCERN   GOVT ACTION

                              GUIDELINES

TREES   AFFECT

VISUAL   GOOD PLANNING

LANDSCAPE   NEED FOR

             DESIGN PRINCIPLES
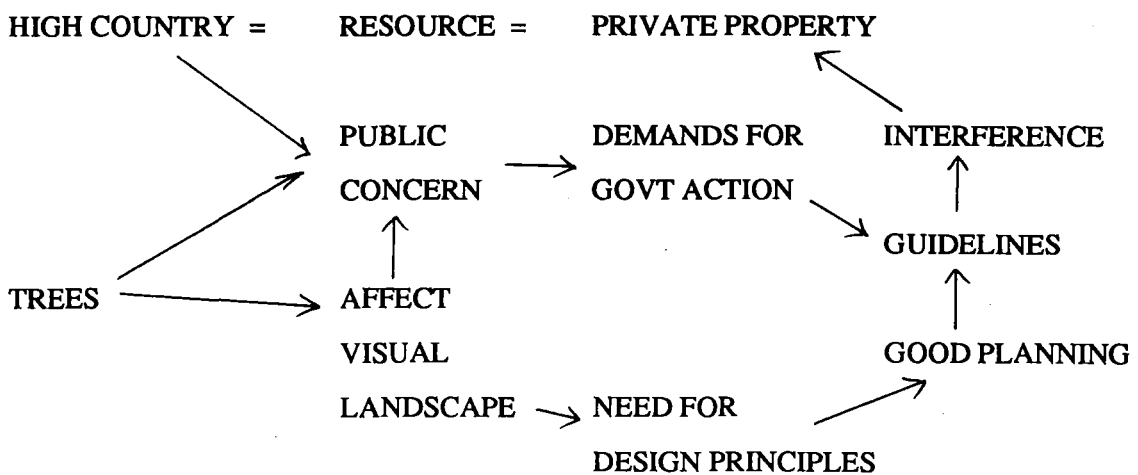
Each of these respondents was expressing attitudes that derived from several sources - from their personal experience, from their social roles, from their disciplinary training, and from modern social ideologies, such as the contemporary belief in an individualist property owning society (Zepke, 1981). In a number of cases, these different 'frames' created tension or conflict. I identified six individual 'frames of reference' that expressed significant inconsistencies or tensions, and there were a number of other examples of lesser tensions. In addition, many of the individual frames of reference (40) expressed the view that conflict formed part of the overall issue. I have classified these views as follows (Appendix Table One). They were all associated with, and formed part of different common frames.

Appendix Table 1 : **Perceptions of conflicting 'frames'**

Dimensions of conflict in the issue	Common frame	No. of respondents
Ordered management vs chaos	Multiple use management	8
'Common sense' vs emotional opposition	Multiple use management	6
	Consensus through admin.	1
Picturesque planting vs boring plantations	Multiple use management	3
	Consensus through admin.	1
Responsible tribal stewardship vs irresponsible individualism and dishonest government	Multiple use management (Maori advocates)	2
Public interest in 'natural' tussock vs commercial and sectoral promotion of exotic trees	Conservation by control	7
	Conservative management	1
New Zealand identity vs exotics	Conservation by control	3
Rural balance vs urban constraints and government interference	Local balancers	4
	Individual improvers	3
	Conservation by control	1

In conclusion I believe the combined evidence of multiple influences upon frames of reference supports proposition two. I found no significant evidence to the contrary.

3.   Proposition Three: The players involved in an apparently complex arena will express a range of different frames of reference.

My examples in the previous sections present clearly contrasting frames of reference. These are illustrative of the range revealed within the fifty eight interviews. Even with broad levels of generalisation, I found it impossible to derive a single 'common frame' that encompassed them all. Yet they were all based on an interview that followed the same sequence of themes, after the same letter of introduction. The only explanation I can offer for the diversity is that each individual chose to respond to the interview in different ways - they expressed different sets of attitudes - which I have described as different frames of reference.

, I found further evidence for this diversity from a basic categorisation and counting of two aspects of the interview responses. First, I classified a respondent's primary definition of the issue of trees and plantations in the high country. I used three broad categories - social, process and normative. Definition as a social issue indicates that the respondent presented the issue as a conflict of social values or rights; definition as a process issue indicates that the respondent presented the issue as a functional problem - the need to ensure that decision making was proceeding effectively. Definition as a normative issue indicates that the respondent presented the issue as a situation in which there was a correct outcome, which needed to be achieved.[2] Appendix Table Two summarises the results:

Appendix Table 2 : **Definition of issue**

Definition	No. of respondents
Social	13
Process	22
Normative	20
No issue	3
	58

2/   This differs from a 'social issue', in that the respondents did not acknowledge the social origins of their belief - the 'correct' outcome was seen as an objective truth.

Clearly this gross measure disguises many subtleties and variations. Nevertheless it indicates the broad spread of opinion in those interviewed.

Second, I categorised the interviews according to the preferred outcome. The categories I used were derived inductively from the transcripts. They were: biological productivity, economic productivity, optimum balance of uses, sustainability, nature conservation, conservation of the status quo, and achievement of consensus. Again these are gross categorisations, and I noted only one outcome from each interview. Nonetheless, they also indicate a wide range of attitudes (Appendix Table Three).

Appendix Table 3 : **Preferred outcome**

Preferred outcome	No. of respondents
Biological productivity	3
Economic productivity	10
Optimum balance of uses	5
Sustainability	7
Nature conservation	4
Conservation of status quo	18
Achievement of consensus	11
	58

I believe this provides strong evidence from my analysis in favour of there being a range of different 'frames of reference'. I found no evidence to the contrary.

4.   **Proposition Four: There will be a limited number of 'common frames of reference' that encompass most, if not all, of the established players in a particular arena.**

In Chapter Five I presented seven different 'common' frames of reference, derived from my analysis of the interview transcripts. The credibility of these 'frames' can be assessed in several ways.

First, are they coherent and plausible within the specific New Zealand context? Second, are they coherent and plausible in relation to more general theoretical treatments of social and environmental attitudes in New Zealand? Third, do they correspond to empirical evidence from overseas? Finally, are the categories I have developed theoretically fruitful? (Glaser and Strauss, 1968; Bulmer, 1984; Silverman, 1985; Potter and Wetherell, 1987).

a)   Specific New Zealand context

   i)   **Common frames of reference**

   My review of the main dimensions of the issue of trees and plantations in the Canterbury high country (in Chapter Four) drew upon a range of published material. I identified a number of different perspectives upon the issue, and a number of potential conflicts. They were all revealed in the common frames of reference I have derived from the interviews, each weighted and interpreted according to the prevailing concerns of individuals that adopted the particular frame. For example, concerns about erosion, and the potential for revegetation, that were well represented in the literature, were referred to most explicitly within the 'multiple use management' frame. This contained most of the forestry scientists and earth scientists, many of whom had worked on these issues in the past. The perceived role of trees for shelter, production and amenity in the high country (reported by Murray, 1986) was clearly expressed in the common frame of 'individual improvers'.

   The concerns that I found expressed in the literature about the preservation of the 'naturalness' of tussock grasslands against wilding spread were graphically displayed within the common frame of 'conservation by control', and were acknowledged as an issue in all other frames. However, it was clear from the details of the interviews that the nature of the issue was defined in different ways. The conservation-oriented players

saw wilding spread into the tussock land as a physical management problem. Those from an administrative background (local balancers, consensus through administration, system designers) conceptualised the issue primarily as a conflict of opinions. Finally, one set of respondents, the 'individual improvers', tended to regard this as a created issue. There was a widespread recognition that wildings were a more intractable issue than plantations but there were differing degrees of confidence in the possibility of management.

Organisational issues deriving from restructuring also featured widely in the interviews. For those individuals whose previous positions had, in their view, been adversely affected, the changes were portrayed in problematic terms - for example, a 'lack of leadership'. For others with experience of local body processes, longer standing concerns were expressed (for example, local versus outside interests). Finally, those involved in creating the new arrangements believed that change presented opportunity and intellectual challenge.

These common frames clearly tap into different aspects of contemporary New Zealand ideas and attitudes concerning the case study topic. A second test of coherence is whether the whole story 'hangs together'. In Chapter Five I presented a brief interpretation of each 'frame'. In the following paragraphs I present a summary account that draws these separate interpretations together.

ii)   Trees and plantations in the high country

Trees and plantations have long been an integral, but minor, part of pastoralism in the high country. They offer benefits in terms of shelter, and also serve to domesticate the areas around homesteads. Their relative significance relates to the stage of development of the station (Murray, 1986). However, trees did not constitute an issue for land managers, unless either someone wishes to influence their freedom of choice, or wilding spread threatens grazing. Stock consultants shared the concern for shelter and grazing. Together, these interests constituted the common frame of 'individual improvers'.

'Multiple use management' describes a more complex set of interests. First, there are the natural scientists and forestry consultants. Their interest in tree planting stemmed

originally from the revegetation mission of the Protection Forestry Branch. As ideas about the nature of erosion have changed, they have developed new perspectives on tree potential, whilst maintaining a basic commitment to tree planting. Reorganisation and cost recovery require more explicit justifications for research, which they have therefore placed in a broader context of global issues and environmental management. The switch of governmental emphasis away from revegetation and high country issues was described by them as a lack of leadership. This served to shift the focus of their demands for research funding away from their own roles and actions.

These views overlapped significantly with a second set of respondents, the environmental resource planners. They sought more general goals such as sustainability and optimum land use, through planning. Trees appear to offer biological and economic potential, and thus make up part of a possible multiple use package. Recent moves to separate the functions of governmental agencies appeared to threaten the opportunities for integrated planning and coordination. Thus the issue of trees provoked concerns about land management procedures in general, and about their roles in particular.

Finally, several respondents expressed a Maori perspective. For them, trees and forests traditionally provided a cloak to the land, and maintained water quality. Tree planting was seen as a way to renew the forest cover. They sought and anticipated an increased role in high country management. The apparent withdrawal by government from active promotion of planting was seen as a betrayal of Crown stewardship. Thus the issue of trees became linked to the 'need' for management.

The 'conservation by control' frame expressed two sets of interests. It included representatives of recreational and conservation groups, seeking to maintain the familiar character of the high country, and advocates for biological conservation, whose scientific perspective was frequently overlaid by a strong personal attachment to tussock grasslands. Trees within the tussock became an issue for several reasons: there was growing realisation of the potential for wilding spread, and increased scientific understanding of tussocklands themselves; it was a very tangible, symbolic issue; and with the relative successes in regard to bush preservation it has become a higher political priority.

The 'conservation management' frame contained quite diverse individuals. All expressed a strong personal attachment to the existing 'naturalness' of the high country, but their training or role also made them aware of the potential for limited tree planting. They were therefore willing to accept slow change, provided it is well managed.

Finally, three common frames expressed the views of different groups of administrators. The 'consensus through administration' frame was characteristic of four former Lands and Survey staff, all trained in public administration to achieve negotiated solutions. For them, trees and plantations was a messy problem to be resolved. The 'balance of local interests' frame was characteristic of several elected representatives, or their advisors. They were sympathetic to the landholders and managers, but conscious of their responsibility to accommodate other interests. For them, trees represented an issue that exemplified the tensions between local and national government. Lastly, the 'system designers' were the architects of the reorganisation. They saw trees and plantations in the high country as a minor issue, but one that presented an opportunity in discussion to work through the broader issues of environmental management.

The common frames I have derived summarise the attitudes of individuals whose presentations of the issue of trees and plantations were structured in similar ways. In some frames, this represented a closely shared set of conceptual ideas (for example, the system designers); for others it represented shared experience (for example, the local balancers, or consensus seekers); yet other common frames embraced individuals from quite different contexts, but whose response to the issue of trees focussed on a similar set of concerns (for example, management for multiple opportunities). All the positions presented within the common frames were coherent and plausible when placed in the context of the case study. As in the individual frames of reference, they all 'make sense', but each for different reasons.

iii)   Counter-evidence

Is there any evidence to challenge my concept of common frames? The main area of possible contention is in the delimitation of the boundaries of each group. That is, what degree of differentiation is necessary to justify the existence of a common frame?

Much of my preceding discussion has presented supporting evidence, that relies on clear patterns of similarity. It is much more difficult to determine at what point legitimate variations between different frames of reference constitute evidence against the concept of common frames itself, as to do this it is necessary to separate out the question of 'common frames' per se, from the detailed process of classification. The strongest case against 'common frames' would arise if there were evidence that the majority of individual 'frames of reference' were so different from each other, that they could not legitimately be included in any common frame. This was clearly not the case. In total, there were perhaps five individuals whose frame of reference was sufficiently different from all the others to make categorisation difficult. Conversely, the most striking aspect of the analysis was the way in which similar patterns emerged from different interviews. Ultimately the issue represents an example of the 'paradox of categorisation' (Bulmer 1984). The 'frame of reference' and hence 'common frames', are explicitly analysts' models. Their 'real world' status must ultimately rely upon the criterion of whether they make sense in the context. The evidence suggests that they do.

b)   New Zealand theoretical context

Next, I asked the question, are the common frames I have identified coherent and plausible when set against more theoretical treatments of environmental attitudes in New Zealand. There have been several recent studies examining attitudes concerning resource management in New Zealand. Hayward (1988) postulated contrasting ecocentric and development-orientated world views.[3] Zepke (1981) added a further dimension, of contrasting preferences for individualist or co-operative action. Finally, Eckersley (1989) has argued for the role of education as a primary function in the development of a 'new class', who advocate decision making based on principles such as sustainability, rather than material interest.

My analysis of the environmental orientation of individual's frames of reference suggested a general pattern in the common frames. Although the classification was of a

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3/   Paralleling O'Riordan's (1981) classification.

very 'broad brush' nature, the two conservation frames clearly display a more 'ecocentric' orientation than the predominantly 'technocentric' orientation of the remaining common frames (Appendix Table Four).

Appendix Table 4: Environmental orientation and common frame of reference

1.	Multiple use management	predominantly technocentric
2.	Conservative management	moderately ecocentric
3.	Consensus through admin.	technocentric
4.	Conservation by control	ecocentric
5.	Individual improvement	technocentric
6.	Balanced local interests	predominantly technocentric
7.	System design	predominantly technocentric

A similar contrast emerged when I matched attitudes towards individualism and intervention against common frames of reference (Appendix Table Five).

Appendix Table 5 : Social orientation and common frame of reference

Predominantly interventionist	Predominantly individualist
Multiple use management	Individual improvement
Conservative management	Balanced local interests
Conservation by control	System design
Consensus through administration	

However, the strongest association I found was between common frame of reference and educational level. Appendix Table Six shows the individuals with undergraduate and postgraduate qualifications, categorised by common frame.

Appendix Table 6 : **Education and common frame of reference**

	No. in common frame	Undergraduate qualification only	Postgraduate qualifications
Multiple use management	17	3	12
Conservative management	8	2	5
Consensus through admin.	4	2	2
Conservation by control	9	-	4
Individual improvement	9	2	-
Balanced local interests	5	3	-
System designers	6	1	5

When these three sets of characteristics are combined, a more distinctive pattern emerges (Appendix Table Seven).

Appendix Table 7 : **Environmental attitudes and common frames of reference**

Common Frame	Summary attitude
Multiple use management	Highly educated, predominantly technocentric, predominantly interventionist
Conservative management	Highly educated, moderately ecocentric, predominantly interventionist
Consensus through administration	Well educated, technocentric, predominantly interventionist
Conservation by control	Mixed education, generally ecocentric, predominantly interventionist
Individual improvement	Lower educational level, technocentric, individualist
Balanced local interest	Lower educational level, predominantly technocentric, predominantly individualist
System design	Highly educated, generally technocentric, predominantly individualist

Although each 'common frame' appears to be characterised by a distinctive set of general environmental attitudes, they do not correspond directly or simply with the theoretical models that have been put forward. For example, the highly educated players who might be interpreted as Eckersley's 'new class' appear to be represented in at least three common frames (multiple use management, conservative management, system design) and encompass both individualist and interventionist attitudes, and technocentric and more ecocentric orientations.

Furthermore, the broad brush classifications disguise many of the individual variations revealed in the interviews - for example, the way that one respondent (subsequently classified in the 'multiple use management' frame) claimed to be both an 'improver', with a more technocentric outlook, and to be 'strong on conservation'. Another example of individual variation from the simple models arose in the balance of local interest frame, as one individual argued for an individualist position versus central and regional government, but favoured a cooperative approach at the very local level.

So the situation is complex. My common frames of reference do express certain characteristics predicted by broader theoretical studies, but their configuration does not correspond directly to the categories predicted by the models. Does this amount to a challenge to the concept of a common frame of reference? I would argue that it does not. First, I turn to the empirical evidence from overseas.

c) <u>Overseas evidence</u>

A number of authors have reported on questionnaire and interview surveys that identified attitudes to specific environmental issues. Converse (1987) used the concept of 'issue publics' to describe the way opinions appear to fall into distinctive and internally consistent patterns. Although these issue publics may reflect educational level and broad socio-political orientation (Constantini and Hanf, 1972), more recent studies have emphasised their dependence upon tangible local issues (Maggioto and Bowman, 1982, de Haven Smith, 1988). That is, the patterns of attitudes expressed are specific to particular situations or circumstances. These American findings on 'issue publics' appear to parallel the characteristics of the 'common frames of reference' I have identified in New Zealand, in that my 'common' frames are primarily structured by the local issue, but also appear to express some broader attitudinal factors. I believe this enhances the empirical credibility of my findings.

d)   Theoretical insight

The apparent tension between local and more general influences on attitude also suggests several interesting theoretical dimensions to my 'common frames of reference'. First, the combination of the different influences in the 'common frames' matches closely the situation predicted in my theoretical discussion of Goffman's 'frame' analysis, in Chapter Three. That is, the frame metaphor is multi-faceted.

Second, the differences in broader attitudinal emphasis between the different common frames of reference reinforce the importance of the 'situation' in determining an individual's interpretation of an issue.[4] Each common frame expresses broader values, but the factors that make each frame distinctive emphasise *different* aspects of that broader social reality. Three frames (multiple use management, conservative management and system design) are particularly characterised by high educational levels.[5] The 'administration by consensus' frame appears to derive from a shared experience of a particular institutional sub-culture. [6] Each is distinctive, but for different reasons.

Third, these differences in emphasis, and the apparent dominance of local factors, suggest that the broad attitudinal models proposed by authors such as O'Riordan (1981, 1983) and Zepke (1981) must be qualified when used empirically.[7] My analysis of 'common frames' has revealed the subtlety of individual responses to a particular situation, that would be overlooked and lost in a broad brush 'dimensional' analysis based on generalised indicators such as education. Instead, it suggests that frames of reference appear to mediate between the general and the particular, and thus contain elements of each.

4/   As portrayed in the situational policy analysis discussed in Chapter Two.

5/   As in Eckersley's (1989) 'New Class'.

6/
The institutional 'thought style' (Douglas, 1986) that characterised the former Department of Lands and Survey.

7/   This conclusion parallels and reinforces the qualifications to the use of 'world view' models noted by O'Riordan in his formulation of the technocentric-ecocentric classification (1983).

Finally, this linkage of specific circumstances and broader influences in a frame of reference gives some hint as to the possible processes involved, which are also relevant to my analysis of 'landscape' usage. As individuals attempt to make sense of an issue (trees and plantations in the high country) they draw upon and use broader social concepts and ideals (private property, multiple use, 'landscape'?). These are modified to fit the circumstances and in turn, become institutionalised. This may reflect a process of interpenetration (Knorr-Cetina, 1988). My frames of reference represent a 'snap shot' of this process (Goffman, 1974).

In summary, I believe the close linkage of my common frames with the particular circumstances of the case study topic, and the partial expression in them of broader attitudinal structures, provides significant support for both my fourth proposition, and the three preceding propositions concerning frames of reference. It suggests to me that the concept of frame of reference is sufficiently plausible, coherent and theoretically fruitful to provide a background against which 'landscape' usage can be analysed.

C.   PROPOSITIONS LINKING 'LANDSCAPE' USAGE TO FRAMES OF REFERENCE

This section examines propositions Five to Eight.

1.   Proposition Five: 'Landscape' has plural meanings.

This proposition was derived from my initial review of scholarly and professional literature concerning 'landscape'. It is supported by both my documentary and transcript evidence. The following table (Appendix Table Eight) shows my initial classification of 'landscape' meaning, and the meanings I have identified in the case study sources.

Appendix Table 8 : **Plural Meanings of Landscape**

Initial classification	Documentary sources	Interview transcripts
Landscape as land		
Physical features	x	x
Territory	x	x
Type of biophysical setting	x	x
Environment	x	x
System	x	x
Interactive landscape		
Planned land	x	x
Code	x	-
Symbol	x	x
Social idea	x	x
Perceptual landscape		
Insight	x	x
Picture	x	x
View	x	x
Scenery	x	x
Visual environment	x	x

The only evidence I found to challenge the proposition of plural meanings in any way was the extensive usage of 'landscape' as appearance. Fifty-two (90%) of my respondents used 'landscape' in this way, which if taken in isolation could be interpreted as evidence that 'appearance of land' is the primary and underlying meaning of 'landscape', to which other variations had been added. However, I believe the widespread occurrence of 'physical' and 'interactive' meanings, and the metaphorical structures that underpin them, is evidence of genuine plurality.

2. **Proposition Six: The players in an apparently complex resource policy issue will express diverse 'landscape' usage.**

I identified several indications of diversity. First, Table thirty nine above shows that 'landscape' usage in the interviews revealed almost the full range of meanings that was expressed in written usage. Second, thirty-two of my interview respondents (55%) exhibited plurality in their usage (that is, they used more than one meaning), and plurality was evident in a number of contemporary documentary sources. Third, the interviews revealed a range of 'landscape' metaphors, and twenty-seven respondents (47%) used mixed metaphors. Fourth, I found five important symbolic associations that were widely expressed. Finally, there was wide variation in the level of usage (from very active to totally passive). Thus although there was clear evidence that several particular landscape meanings were widely used (for example, 'landscape' as appearance), there was also overwhelming evidence for diversity in meaning and use.

3. **Proposition Seven: The particular meanings of 'landscape' used by an individual will reflect his/her frame of reference.**

The evidence linking individual usage to frame of reference is mixed. In Chapter Five I classified my respondents' frames of reference into seven 'common' frames, and in Chapter Seven separately analysed the different aspects of 'landscape' usage against them. I found that the linkages between plain language meaning and common frame were not strong, with a number of meanings appearing frequently in several different 'frames'. There were few clear links between plain language usage and individual characteristics such as age or role. I also found much variation in linking metaphorical usage to common frames. On the other hand, there were quite strong associations between the symbolic meanings of 'landscape' (such as 'naturalness'), and common frames, and between aspects of functional usage (for example, active/passive usage) and common frames.

It appears that frame of reference has some influence on an individual's particular pattern of usage, but there is also significant variation. The approach an individual takes to the issue of trees and plantations clearly influences the role 'landscape' plays for them (as indicated by the functional and symbolic associations) but does not control the underlying meaning they attach to the word (that is, plain language and metaphorical meanings).

Furthermore, the evidence of assigned usage (that is, people recognise that 'landscape' is a concept that is used by particular interest groups) suggests that some individuals, at least, consciously select their mode of usage to suit their immediate purpose and circumstances. Frame of reference is not a determining factor in every aspect of 'landscape' usage, but instead structures the general context of use.

In summary, the case study evidence does not support an unequivocal proposition that an individual's 'landscape' usage will reflect their frame of reference. However, it does suggest that individuals use those meanings of 'landscape' that they are already familiar with in a way that is congruent with, and supports, their overall position on the particular issue being discussed (as expressed by the frame of reference).

4.   **Proposition Eight: Common frames of reference will display similar patterns of landscape usage.**

This proposition shifts the focus from the way specific meanings of 'landscape' are used, to the overall patterns of usage within a common frame. The following table, Twenty One (reproduced from Chapter Seven) summarises my findings.

Table 21:   Summary: Patterns of 'landscape' usage and common frames of reference

Common frame of reference	Dominant meanings	Dominant metaphors	Dominant ass'ns	Characteristic range of usage	Characteristic mode of usage
Multiple use management	Appearance Setting (Environment) (Improvement)	Pattern	Naturalness Integration	Plural	Active
Conservative management	Appearance Setting Environment	X	Naturalness Identity	Plural	Active
Consensus by administration	Appearance Environment Setting	Pictorial	Issue	X	Active
Conservation by control	Appearance Setting Environment Landform	X	Naturalness Identity	Plural	Active
Individual improvers	Appearance (Improvement) (Landform)	Pictorial Picturesque	Improvement	Single	Passive
A balance of local interests	Appearance	Panorama	X	Single	X
System design	Landform Appearance	Surface	Issue	X	X

(Note: X indicates no strong pattern of usage in this category.)

There are clear generalised patterns of 'landscape' usage that are both coherent and plausible when viewed in the context of the overall common frame of reference in which they occur. First, the 'conservative management' and 'conservation by control' frames both used plural meanings, dominated by plain language meanings of 'landscape' as appearance, setting or environment, with associations of naturalness and identity, and active usage. For the users in these frames, 'landscape' was typically a complex experiential concept that helps express conservation goals and values. The only difference between the two frames was the usage of 'landscape' as landform in the 'conservation by control' frame. Detailed analysis reveals that this is due to the presence of several natural scientists in that category. The plural usage reflects generally high levels of education, and thus exposure to a wide range of meanings, and an inclination to express them.

Those with the 'multiple use management' frame also made active and plural use of 'landscape', but the emphasis shifted slightly to more areal aspects, using pattern metaphors, and an association with functional integration. Here, 'landscape' helped express land management practices and goals.

In contrast, others adopted a simpler visual and pictorial usage. Those with the 'individual improvers' and 'balance of local interest' frames adopted single meanings of appearance, with panoramic or pictorial metaphors. The 'individual improvers' also made clear associations of 'landscape' with improvement and picturesque ideals. For them 'landscape' signified a concept of visual beauty. However, they were passive users, indicating that 'landscape' was either not part of their conception of high country issues, or was regarded as a concept used by other specific interests.

Finally, the respondents in the two frames that contain many of the bureaucrats - the 'consensus through administration' and 'system design' frames, saw 'landscape' as an issue because of the way 'landscape' is used by various interest groups to articulate particular concerns that need evaluating. However, these users each interpreted the substance of 'landscape' differently. The administrators adopted plural meanings with an underlying visual structure, whilst the 'system designers' adopted a more biophysical interpretation, with an areal structure. Detailed analysis suggests that this reflects differing exposures to biophysical and visual usage.

Is there evidence to challenge the proposition that common frames of reference will display distinct patterns of 'landscape' usage? There are two possibilities. First, Table Twenty One shows that in some common frames, there is no strong pattern of usage in several categories. In three of these frames - consensus through administration, balance of local interests and system design, this may reflect the very small numbers of individuals involved (4, 5 and 6 respectively). With larger numbers (as in other frames) a more distinctive pattern may have emerged. On the other hand, it may indicate genuine diversity in usage. The other category with unclear patterns was the metaphorical usage in the two conservation frames. Detailed analysis suggests that this reflects the diverse disciplinary and educational backgrounds of those involved. However, the fact that despite this diversity these frames exhibited strong patterns of symbolic associations suggests to me the importance and validity of the common frames in influencing the role of 'landscape', but not determining its meanings.

The second basis for challenge would be to argue that the patterns are due to some other variable. Chapter Seven showed the association of educational level with degree of active usage, but I was unable to identify any other broad explanatory influences. Furthermore, it was only when the different analyses of 'landscape' usage were combined into the composite table that the clear distinction between frames emerged. This suggests to me that the common frames of reference are primary factors in 'landscape' usage. However, as the previous discussion on proposition six concluded, they are unlikely to be overall determining factors. Instead, they combine two aspects. They express broader social influences such as education, which appears to affect the potential range of 'landscape' usage. They also provide the functional context within which individuals select the actual usage. They are thus both enabling and directing. This interpretation is entirely congruent with the origins of the 'frame' concept discussed in Chapter Three.

In concluding this review, I believe two points need reiteration. First, the propositions linking 'landscape ' usage to frames of reference are upheld in general terms, but, second, they must be qualified. As originally presented the propositions are too deterministic and unequivocal, assigning greater causal influence to the frames of reference than the evidence can sustain. Instead, the case study material suggests a more conditional and contingent role for the frames of reference. They have been useful and successful in providing a vehicle for identification and analysis of 'landscape' usage, but they do not, in their current form, provide a complete explanation for the patterns of usage identified.

D.   LANDSCAPE USAGE AND SOCIAL FACTORS

This section examines my final three working propositions:

1.   Proposition Nine: 'Landscape' meaning will be related to the discipline and/or professional background of the user

When I analysed the interview transcripts, I found very few clear disciplinary or professional patterns in *oral* usage.[8] The only clear associations I found were that first, the three landscape architects all defined 'landscape' as environment, and linked it to a professional activity seeking to fit human activity into nature; second, that the concept of 'landscape' as system was the predominant usage by earth scientists; and third, that agriculturalists (both graduates and farmers) consistently emphasised the visual aspects of 'landscape', and tended to regard it as an issue that was promoted by urban interests. Overall, however, my main finding was that oral usage in the different disciplinary and professional categories was very diverse.[9]

In contrast, and with a few notable exceptions, formal written usage was more clearly influenced by discipline. These findings suggest that an important qualification must be made to the theoretical models that give discipline a primary role in determining the nature of concepts used in professional communication (Miller, 1984). Oral usage appears to be much richer, and contingent upon the issue being discussed, than Miller's model predicts. However, individuals do appear to be more conservative, and more consistent with their formal training, in written usage.

8/   I categorised each of my respondents by either the discipline of their tertiary education, or if they had no tertiary qualifications, by their predominant training or activity. The tertiary categories were: agricultural science, agricultural commerce, earth science, engineering, forestry science, planning and resource management, public administration, landscape architecture, and others (for example, law). My non-tertiary categories were: commerce, farming, forestry and park management, public administration, other. I then analysed the results of each of my four 'landscape' analyses by disciplinary category.

9/   Furthermore there were very few links between discipline and common frame of reference. The exceptions were that four of the seven forestry graduates I interviewed expressed a multiple use management frame; three of the six planners were 'system designers', and four of the seven non-graduate farmers were 'individual improvers'. None of these associations is surprising. More notable, though, is the generally poor linkage between discipline and common frame of reference.

2. **Proposition Ten : The range of meanings of 'landscape' used within a complex resource policy issue will express the plural meanings in wider documented usage.**

My analysis of oral usage in the interviews showed that virtually all the meanings revealed in scholarly and professional literature (Chapter Two) were used in relation to the issue of trees and plantations in the high country. The proposition therefore gains some support. However, this support must be qualified by the selective nature and focus of the sources and the study. My interview respondents were virtually all European, middle aged males. Most of the authors of documentary sources had similar backgrounds. The sources I consulted, although broader than the case study topic itself, were, nevertheless, focused upon particular disciplines and professions related to it. A significant number were overseas sources, although all were available in New Zealand libraries. Neither written nor oral sources were therefore representative in any way of New Zealand society as a whole. I can offer little evidence in regard to 'landscape' usage by women, other age groups, Maori people, or other ethnic groups. The proposition may therefore be better expressed as relating to the usage by a dominant elite of decision makers and influencers.

3. **Proposition Eleven : The principal meanings of 'landscape' used in an issue express the dominant world view or ideology that prevails amongst the players involved.**

This proposition reflects the arguments by writers such as Milbrath (1985) and Miller (1985), that professional communication expresses a prevailing world view. Unfortunately, my interview programme evolved in a way that now makes this proposition impossible to examine comprehensively. As I noted earlier, my analysis of frames of reference did identify several important aspects of an individual's 'world view' - for example their attitudes towards the role of government in making resource policy decisions. I evaluated their overall orientation towards the environment and towards social co-operation or individualism. I also identified more tangible factors such as level of education. However, the deliberately 'open' nature of the interview meant that the respondents played a major role in defining the aspects of the issue of trees and plantations in the high country that they felt were important. I did not seek to formally measure their attitudes along predetermined dimensions, nor have I analysed the transcripts as a whole

from this perspective. I cannot therefore use my case study to critically challenge the proposition in a comprehensive way. Nonetheless, it offers some tantalising hints.

Respondents with the 'individual improvement' frame of reference revealed the clearest elements of a consistent 'world view', and also revealed clear patterns of 'landscape' usage. They appeared individualist, non-interventionist and technocentric. Most had a non-tertiary education. Their usage of 'landscape' was typically simple, passive, strongly visual and associated with ideas of improvement and the picturesque.

Most other common frames revealed more complex and mixed attitudes and usage. The two 'ecocentric' frames (conservative management and conservation by control) both used 'landscape' in association with ideas of naturalness and identity - but naturalness was also an important association for the generally technocentric 'multiple use management' frame. Those with the most 'interventionist' frames (multiple use management and conservation by control) were active, plural users of 'landscape', with extensive use of 'land-based' meanings such as setting and environment - but so also were those in the 'conservative management' frame, who were decidedly ambivalent about the appropriate levels of intervention.

The information I do have upon world views and ideology therefore reveals few clear patterns of 'landscape' usage, but does suggest some relationships between usage and attitudes that contribute to a particular world view. However, even these partial links are clearly modified by more specific circumstances.

I therefore offer three conclusions. First, there is evidence of some form of relationship between usage and world view. Second, the relationship is clearly complex, and modified by particular circumstances; and third, a more definite conclusion will require further research and interpretation.

In this final table (Appendix Table Nine) I draw together the conclusions from my examination of the eleven working propositions.

Appendix Table 9 : Summary of status of working propositions following the case study analyses

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	Proposition	Outcome of review
1.	The openly expressed beliefs, feelings and intentions of an individual player involved in a resource planning arena can be summarised as a personal 'frame of reference'.	Supported, with the qualification that a frame of reference is only one aspect of a complex reality. It is not all-inclusive.
2.	An individual's 'frame of reference' will draw upon other 'frames' of reality, such as disciplinary norms, or world views. It may therefore reveal elements of conflict and ambiguity.	Supported.
3.	The players involved in an apparently complex arena will express a range of different frames of reference.	Strongly supported. No evidence to the contrary.
4.	There will be a limited number of 'common frames of reference' that encompass most, if not all, of the established players in a particular arena.	Supported. Evidence does suggest additional insights into the nature and role of 'common' frames.
5.	'Landscape' has plural meanings.	Strongly supported.
6.	The players in an apparently complex resource policy issue will express diverse 'landscape' usage.	Strongly supported.

7.	The particular meanings of 'landscape' used by an individual will reflect his/her frame of reference.	Partial support. Frame of reference appears to influence the role 'landscape' plays for an individual, and the specific meanings it has for them, but does not control its underlying conceptual meaning.
8.	Common frames of reference will display similar patterns of 'landscape' usage.	Partial support. Frames of reference will enable and direct usage, but do not determine.
9.	'Landscape' meaning will be related to the discipline and/or professional background of the users.	There are patterns of disciplinary influence in documentary usage, but generally not a strong relationship in oral usage.
10.	The range of meanings of 'landscape' used within a complex resource planning issue will express the plural meanings in wider documented usage.	Supported, but qualified by the socially unrepresentative nature of my documentary sources.
11.	The principal meanings of 'landscape' used in an issue will express the dominant world view or ideology that prevails amongst the players involved.	Could not be properly evaluated. Some evidence in support, but needs further research to test fully.

APPENDIX V :   LANDSCAPE USAGE IN HISTORICAL DOCUMENTARY
SOURCES RELATED TO THE CASE STUDY TOPIC

Contents

A. INTRODUCTION

I complemented my analysis of oral usage of 'landscape' with an examination of the nature of 'landscape' usage in a range of historical documents associated with the case study. These sources included scientific and professional journals, and conference proceedings, that focused upon one or more of the following areas :

* land use management in the high country
* trees and forestry
* interest groups that I had identified in my analysis of contemporary frames of reference as having a potential role in developing 'landscape' usage (for example, the New Zealand Institute of Landscape Architects).

I also drew upon early scientific records such as The Transactions of the New Zealand Institute, and upon Shepard's unsurpassed monograph of early european settlers' accounts (Shepard, 1969). A complete record of sources is included in the bibliography.

My method was to seek articles or passages that were relevant to the issue of trees and plantations in the high country, or that dealt with aspects of land management and environment in a more general sense, and to search for 'landscape' references. Where they occurred, I classified the meanings of 'landscape' based on my overall typology of meaning presented in Chapter Two.[1] I also searched for any distinctive associations between 'landscape' and other words or concepts, and noted whether 'landscape' usage changed significantly within a single article, and between successive articles by the same author. Where appropriate, I have included as footnotes quotes from the relevant documents. I present the material chronologically, under five headings - European settlement (1777-1900); Twentieth Century New Zealand (1900-1960); Concerns for the Countryside (1960-1970); Professional extension (1970-1985); and Administrative reform (1986-1989).

1/ **Landscape as land** - physical features, territory, type (of setting), environment, system; **Interactive landscape** - planned or improved land, code, symbol, social idea; **Perceptual landscape** - inscape, picture, view, scenery, visual environment.

My overall findings are that :

i) The range of meanings of 'landscape' used in the literature has expanded since its initial introduction to New Zealand by early settlers.

ii) The frequency of use of 'landscape' has increased, but there are definite 'fashion cycles' of particular meanings.

iii) Early meanings (for example, 'landscape' as scenery) have continued alongside newer interpretations.

iv) There have been several distinctive associations of 'landscape' with other concepts.

v) The meanings of 'landscape' have expanded and changed rapidly over the past two decades.

vi) Certain individuals appeared to play important roles in extending the meaning of landscape.

vii) Particular meanings have often been closely linked to particular disciplines or professions.

viii) Despite these distinctive overall patterns, specific use by individual writers appears to have also depended upon the context in which the individual is writing.

B.   EUROPEAN SETTLEMENT (1777-1900)

I found four distinctive but complementary meanings of 'landscape' in the records of early settlers. The first and most widespread is of 'landscape' as a panoramic view of land, as in the seventeenth and eighteenth century concepts of 'prospect' (Shepard, 1969). This was well illustrated by Angas : "it is delightful to look down upon so glorious a landscape" (1847:233).

The second meaning is of 'landscape' as a picture. Augustus Earle (1827:2), for example, commented on the "glow of the setting sun, (which)... beautifully illuminates the landscape". The third meaning is that of 'landscape' as improved land, indicated by the occurrence of 'landscape' in association with references to improvement. "New Zealand, too, with all these elements of fine scenery, this stock of raw beauty, is a fertile cultivatable country, where plough, sickle and mill would singularly enrich and brighten the landscape". (Hursthouse, 1857, in Shepard, 1969:48). This was often expressed as a garden or park-like setting: "the landscape bore a strong resemblance to some of those beautiful pleasure gardens in England". (Nicholas, 1817, in Shepard, 1969:48). On occasion 'landscape gardening' also received explicit mention in an urban or domestic context (Challenger, 1989).

In the second part of the century a new meaning emerged, that of 'landscape' as the appearance or physiognomy of vegetation. This was prefigured by Fitton (1856) using "the characteristics of the New Zealand landscape" to refer to indigenous features of the country, (cited in Shepard, 1969:6). Monro (1868:9) wrote: "One genus of trees, the fagus, or birch of the colonists, occupies the ground, to the exclusion of almost everything else, and impresses its peculiar physiognomy upon the landscape". The usage was fully expressed by Cockayne at the turn of the century: "...Aciphylla colensoi... gives a peculiar and special physiognomy to the landscape when growing in abundance" (Cockayne, 1899:127). However, overall usage of 'landscape' was not widespread. Established explorers such as Heaphy did not use 'landscape' in their descriptions of the new country (1842), nor did politicians like Vogel when arguing for forest preservation (NZPD, xvi, 1874).

C.   TWENTIETH CENTURY NEW ZEALAND (1900-1960)

I identified three main features of usage during the first half of the twentieth century. First, the use and meaning of 'landscape' was extended in the natural sciences. Second, it was largely absent from debates on scenery preservation, or in land use disciplines such as forestry. Third, usage as 'landscape gardening', 'landscaping', and 'landscape architecture' appeared in urban based sources.

In the natural sciences, the biophysical dimensions of 'landscape' were developed. Marshall referred to landscape 'type' in his Geography of New Zealand (1905). In the first addition of New Zealand Plants and their Story Cockayne referred to 'landscape' as the distinctive appearance of land: "That characteristic stamp which the native vegetation gives to the New Zealand landscape has frequently disappeared" (1910:126). By the second edition it is clear he meant its general *biological* character: "Those striking features of the landscape which stamps our country as New Zealand - swamps, forests, grasslands, bracken clad slopes, and manuka thickets..."(1919:15).

Cockayne and the geologist Speight collaborated with the writer B.E. Baugham in a booklet on the Summit Road, that included references to 'landscape' as both 'landform' and 'scenery' (Baugham, Cockayne, Speight, 1914). Speight also applied 'landscape' to the physical *form* of land. In the Physiography of the Cass District (1915) he referred on several occasions to 'landscape features' and 'details of the landscape' in the context of land surfaces. This was developed further by Cotton who adopted both a 'prospect' form and appeared to refer to 'landscape' as land surface: "The broad features of the landscape as seen from a high point of view.....the surface appears to have been post mature... differences in the present day landscape must be due mainly to differential upheaval (1912b:308). By 1916 the extension of meaning was explicit, when he referred to the 'Otago' landscape as a mosaic. Successive editions of Geomorphology of New Zealand : Part I (1922, 1942b) also showed increased frequency of use of 'landscape', a pattern reinforced in his other publications in the 1940s and 50s (Cotton, 1941, 1942(a), 1948).

I found two further developments of meaning and use within the natural sciences during the 1940s and 50s. First, Cumberland frequently used 'landscape' to refer to the physical and cultural features of a region (1940, 1946). This 'geographical' meaning of 'landscape' as type of setting was subsequently adopted by many in the emerging discipline. He also introduced 'landscape' in these general terms into a number of articles on soil conservation (1944(a), 1944(b)). Second, the use of 'landscape' as land surface became linked to soil patterns (Taylor and Pohlen, 1962).

Significantly, however, a number of important authors in the natural science disciplines did not use 'landscape'.[2] Equally striking was the lack of reference to 'landscape' during the parliamentary debates on scenic preservation associated with Harry Ell during the period 1899-1903,[3] and its absence from the subsequent scenery preservation statute and from the reports of the implementing agencies. Occasional references to 'landscape' as scenery appeared in tourism publications (Baugham, 1916), in the New Zealand Journal of Agriculture (Hutchins, 1916) and in early editions of 'Forest and Bird' (Myers, 1924; Cowan, 1933). However, the sole reference in statute was the 1927 Counties Act, which referred to "the natural beauty of a landscape or the view of rural scenery".

There is also evidence of 'landscape' used as 'scenery' within more urban settings. The new town planning profession of the interwar years continued the ideals of the City Beautiful Movement and included among its aims the conservation of "the beauties of nature, the natural forms of landscape, the wild birds and flowers" (Hector, 1919:107). It aimed to retain "the natural beauty of the New Zealand landscape" (Parr, 1919:242) within the city. The usage that was most widespread in the 'urban' literature of the period was the closely related association of 'landscape' with the activity of beautifying, in the form of landscape gardening, landscaping and landscape architecture.[4] By post World War II these urban meanings had begun to separate. 'Landscaper' or 'landscape gardener' implied a practical plantsperson aiming to achieve 'landscape effect' (Peren, 1945) and 'beautification' (Anderson, 1941) through the 'landscape style of Capability Brown' (Lysacht, 1947). The 'landscape architect' prepared the plans for such purposes (Barnett, 1938; Jones, 1945). Longer established meanings also continued in the arts, as

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2/ None of the botanists, Wall (1924), Zotov (1938), or Fisher (1952) used 'landscape'. In geography, despite Marshall's earlier references to 'landscape' type, the New Zealand geographer George Jobberns made very little use of the term 'landscape'. It appears in the title of a series of 'scenic' articles in the 1930s, but is otherwise largely absent (for example, Relph, 1958). In soil conservation literature, only Cumberland uses 'landscape' to any extent. McCaskill's limited use was largely in quotations from Cumberland; Gibbs and Raeside (1945) made no mention. Even Cumberland himself was inconsistent in usage - "Why Geography" (1956) contains no 'landscape' references. In forestry, the 1913 Royal Commission made only one reference to "the surface features of the landscape" (1913, xvii) as a component of scenery, but subsequent publications and studies refer instead to amenity (Forests Act, 1949; NZFS, 1953) or the 'aesthetic values' of 'local environments' (Holloway, 1954).

3/ See Dingwall (1984); Roche (1981, 1985, 1987); Wynn (1979).

4/ (See Challenger, 1974, 1978, 1979a,b, 1983, 1989; Aitken, 1975; Taylor, 1978, for the development of Amenity Horticulture). Landscape gardening and landscape artist were referred to in the First NZ Town Planning Conference (1919), and the nurseryman A.W. Buxton offered the services of a 'landscape architect' during this period (Tipples, 1989).

O'Reilly, for example, reviewing early work by Toss Woollaston, referred to 'landscape' as a painting, "a series of studies in oil, both of figures and of landscape" (1948:209).[5]

The period 1900-1960 therefore saw the establishment of new physical meanings of 'landscape' - as the surface of the land, as the overall character of natural vegetation, and as the character of a region. At the same time, it was also used to refer to natural beauty, the improvement and layout of gardens and parks, and to paintings. The range of meanings therefore increased, but the new usages were tied closely to particular groups of authors.

D. CONCERN FOR THE COUNTRYSIDE (1960-1970)

The 1960s were characterised by increasing concern for 'the New Zealand countryside'. They opened with the first Manapouri petition to Parliament, and closed with the Save Manapouri Campaign (Cleveland, 1972). I found evidence that several new 'landscape' usages emerged during this period. J.T. Salmon forged an important link in Heritage Destroyed: the crisis in scenery preservation in New Zealand, when he argued that development, particularly of roads and powerlines, was devastating "a vast landscape of great natural beauty" (1960:37). He believed this was due to the failure to take account of 'landscape architecture', "which involves the blending of roadworking into the landscape so that the road and the landscape are part of the same scene" (1960:21). 'Landscape' therefore became the subject of scenic preservation, and landscape architecture, that had hitherto been associated largely with urban parks and gardens, became acknowledged as an activity that blended rural development with nature.

By the middle of the 1960s, Salmon's challenge was taken up by the engineering profession, and there were a number of references to 'landscape' treatment, and 'landscaping' in their Journal.[6] Landscape architects from overseas also began to promote their role of 'fitting' development into the 'natural landscape'. (Oldham, 1966). In 1968, the New Zealand Institution of Engineers

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5/ However, the author Mulgan (1946), writing in the New Zealand Geographer, referred to 'landscape' as the appearance of land, apparently adapting his concept to the geographical audience.

6/ NZE (Editorial, 1965:119); Suggate (1966).

organised the Countryside in 1980 Conference, "a study conference to bring together all those with a responsibility and concern for the future landscape". (Allen, 1968:2). Speakers used a range of existing meanings[7] , and Thom introduced a new interpretation, of 'landscape' as a 'resource'.[8] Despite these extensions in the concept of landscape in regard to development, I found little evidence that the term was used to any extent in the natural sciences, or in rural land management.[9] However, there were two examples of plurality of usage when contributing authors to Hayward (1967) and Knox (1969) included several different meanings of 'landscape'.[10]

E.   PROFESSIONAL EXTENSION (1970-1985)

There were major extensions of 'landscape' usage during the period 1970-1985. I deal with these under three headings - science, conservation and land use policy; statutory planning; and the landscape architecture profession.

1.   Science, conservation and land use policy

In the earth sciences I found that 'landscape' continued to mean land surface.[11] There were also two developments in meaning. First, it was linked to the systematic study of soils in 'soil

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7/   Including "the pattern of the New Zealand landscape", "changes in the landscape", "landscaping at the very initial site stages".

8/   "The ultimate resource of landscape beauty" (Thom, 1967:22).

9/   Thus Atkinson (1961), despite prefiguring important later developments in the conceptual use of 'landscape' in the theory of biological conservation, referred explicitly only once to 'landscape' as appearance. Burrows (1962) and Wraight (1966) did not make any references to 'landscape' in their reviews of vegetation in the Waimakariri Basin. Molloy (1963, 1964) referred only once to 'landscape', in association with a photographic illustration of vegetation. In forestry, no reference is made in McKelvey (1960), Poole (1965), McCracken (1967), Benecke (1967) or Holloway (1969, 1970). Only Holloway (1964) made reference to 'landscape' as surface. Similarly, after Taylor and Pohlen (1962) there are few references in earth sciences or in soil conservation literature.

10/   Of 'landscape' as land surface, appearance of vegetation and scenic beauty, within the same text.

11/   For example, Stevens (1974); Suggate (1978); Soons and Selby (1982).

landscape' models and 'soil landscape systems' (Burns and Tonkin, 1982; Lynn and Tonkin, 1985). Secondly, it was used to refer to more general physical systems (Mosley, 1978; Nordmeyer, 1978; Davies, 1982).

I noted two significant aspects of 'landscape' use in the broader field of high country land use and conservation. First, the overall level of usage of 'landscape' was initially low but it increased markedly during the later part of the 1970s;[12] and second, although the emphasis was typically visual, there was an increasing plurality of meaning, and an association of 'landscape' with natural order, variety and representativeness.[13] By the early 1980s, several closely associated science and conservation writers were using 'landscape' to refer to the patterns and complexity of the biophysical and cultural environment.[14]

There were two further developments in the 1980s that emphasised the use of 'landscape' as a synthesis of natural and cultural attributes. Simpson's Ecological Districts and Regions of New Zealand (1982) incorporated 'perceptual' dimensions of landscape to delineate 'ecological districts', on the basis of perceived unity of biophysical character. At a larger scale, O'Connor (1984) used a conceptual framework of the space time dynamics of ecosystems to link natural and cultural processes within an overarching concept of "mountain landscape systems".

This increased usage appeared to bring with it increased ambiguity in meaning, as the visual emphasis of 'landscape' as scenery became confused with the systematic scientific meanings. For example, although the 1979 Government Statement on High Mountain Policy adopted largely

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12/ The conference on the Conservation of High Mountain Resources (Lincoln College, 1977) included a number of speakers who used 'landscape' in diverse ways (Boffa, 1978; Lister, 1978; Molloy, B.J.F., 1978; O'Connor, 1978; Wardle, 1978)

13/ For example, Pinney (1972); Hayward and Boffa (1972) used the sort of visual meanings that were still dominant at the end of the decade (for example, Lister, 1978; Boffa, 1978). However, O'Connor prefigured a new interpretation when he wrote, "on a landscape that order in variety which is the essence of beauty" (O'Connor, 1970:118) a position echoed by Kelly (1972) and Jackman (1974). This concern for the organisation of 'landscape' became incorporated in the Reserves Act 1977: "the preservation of representative samples of all classes of natural ecosystems and landscape which in the aggregate originally gave New Zealand its recognisable character". 'Landscape' was further linked to biological character, complexity and variety by O'Connor (1978), Molloy (1978); O'Connor and Molloy (1979), and Molloy L.F. et al (1980).

14/ O'Connor (1978); Wardle (1978); Mark (1980, 1985); McSweeney (1983); McSweeney and Molloy (1984); Wardle, (1985).

visual meanings (derived from the 1977 conference discussed above), as did the Land Settlement Board in 1980, a dual emphasis appeared in the Draft NZ Conservation Strategy (Hughes, 1981).[15]

O'Connor (1978) prefigured another emerging use, the association of 'landscape' with 'values': "What has been valued implicitly may not necessarily be the best attributes of our landscape or way of life" (1977:104). L.F. Molloy (1979) made this explicit when he referred to "... the scenic, scientific and recreation values of the New Zealand landscape..." (1979:105).[16]

In summary, 'landscape' usage within science, conservation and high country policy increased only gradually in the mid 1970s. However, its meaning and use was extended dramatically in the period 1977-1985, with the development of systematic concepts of 'landscape' in the ecological sciences, and with the idea of 'landscape values' in relation to more general conservation policy.

Usage within forestry and agriculture during this period remained low. References within the New Zealand Journal of Agriculture were almost entirely related to garden design, or farm improvement through amenity tree planting.[17] There were occasional 'landscape' references in forestry articles related to the high country during the 1970s, when 'landscape' referred to physical concepts of surface, to systems[18] and to visual appearance and improvement.[19] But it is not widely used - no mention was made, for example, in the 1977 Indigenous Forest Policy (NZFS, 1977), or in the 300 pages of material on mountainland forestry edited by Benecke and

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15/ Most references are in the chapter "Provision for non-material needs" promoting "The aesthetic appeal of landscapes, plants and animals..." (Hughes, 1981:17) but 'landscape' also appears under "Genetic Diversity", as "Native vegetation... is an integral part of the physical landscape environment". (1981:14).

16/ This was a phrase subsequently adopted extensively by the Land Settlement Board. Its 1983 revision of high country policy defined "landscape character (as) common landscape features or characteristics which occur generally over a wide area... landscape values refer to environmental, visual and open space values... landscape preservation... the preserving of any landscape of aesthetic, cultural, recreational, scenic, scientific or social interest" (L.S.B., 1983). Other parts of the policy introduced notions of landscape quality, and community identity.

17/ Boffa (1972); McArthur, (1985). 'Landscaping' is the prevalent form (Crooks, 1979; Holmes, 1981;).

18/ See Gresham (1981); Pearce and Gage (1977); Nordmeyer (1978); Ledgard and Miller (1980).

19/ See Challenger (1970); Stockley (1973); Bannister (1973); Cooper (1976); Newell (1977).

Davies (1980). During the early 1980s 'landscape' entered the discourse on mountainlands forestry more frequently, predominantly in terms of visual appearance and improvement.[20] Typically, though, the number of references in any article remained very low, and the range of authors using the concept was limited. As in the nature conservation literature, they were frequently close associates of each other.

2. Statutory planning

The period 1970-85 was marked by a significant expansion of statutory planning, and the emergence of resource management, stimulated in part by environmental concerns and a series of conferences (O'Riordan, 1971). In town and country planning 'landscape' usage continued the main trends of the 1960s. It occurred only occasionally in the literature, with plural meanings of 'natural landscape', scenery, and 'landscaping'.[21] The plural meanings were reproduced in the land use statutes.[22]

In a second expanding area of development planning, that of environmental assessment, 'landscape' was conspicuous by its absence. There were no references to it in the Environmental Protection and Enhancement Procedures (Commission for the Environment, 1973, 1981). Assessment reports contained occasional reference to 'landscape' by consultants, but the concept did not figure in the 1983 review of Audits and Approaches (Speden, 1983).

20/ See Ledgard and Belton (1984, 1985), Hunter and Douglas (1984), Richardson (1985), Rennie (1985).

21/ For example, Patterson (1970); Duder (1970); Bush (1977); Ackley (1979); Gale (1981).

22/ "the preservation of the natural landscape, trees, or areas of trees or bush..." (Municipal Corporations Act, 1974 Amendment); "The identification, preservation and development of the region's natural resources, including water, soil, air and other natural systems, farmlands, forests, fisheries, minerals... and areas of value for the enjoyment of nature and landscape". (Town & Country Planning Act, 1977 Regulations, 1st Schedule); "the excavation and containing of ground, the provision of landscaping, fences, walls or barriers" (Town & Country Planning Act 1977, Regulations, 2nd Schedule). This plural usage surely provides one source of much current ambiguity about 'landscape'.

During the 1970s, 'landscape' usage was also minimal in the emerging discipline of resource management.[23] However, the Labour Party Environmental Policy in 1981, a forerunner of later reforms, included 'landscape' explicitly under its countryside policy - "New Zealand's beautiful landscape must be protected from abuse" (Moore, 1981:93). By the 1984 election this had expanded to "(ensuring that) our remaining endangered species and ecosystems and representative examples of a full range of plants and animals and landscapes are protected" (MFE, 1984:10). The 1984 discussion document "Environmental Administration in New Zealand" (MFE, 1984) also contained a number of other references to 'landscape qualities', 'landscape information', 'landscape type', and 'natural landscapes'. Thus after being largely absent during the 1970s, 'landscape' appeared to enter the discourse of resource management in the early 1980s.

3.   The landscape architecture profession

My reviews of 'landscape' usage since 1960 reveal an increasing number of references to landscape architecture. One outcome of the New Zealand Physical Environment Conference (1972) was an increased awareness of the profession (Thom, 1981). In 1969 Lincoln College introduced postgraduate vocational teaching in the subject. By 1973, numbers of graduates were sufficient for the academic staff and new graduates to form the New Zealand Institute of Landscape Architects.

'Landscape' usage by the emergent profession was characterised by two basic features. First, 'landscape' was a biophysical reality and, second, access to this was primarily visual. Both facets were of concern to landscape architects.[24] During the first part of the decade, a significant proportion of the 'landscape' references in forestry, horticulture and agriculture journals were by landscape architects using 'landscape' in this way.[25]

23/   O'Riordan (1971) referred once to 'the New Zealand landscape'; the Environment 77 proceedings (Knox, 1977) contained an isolated reference to 'landscape architects', whilst others refer to 'landscape' only in quotes from statutes (Auburn, 1979; OECD, 1980). A review of New Zealand Engineering for the same period reveals occasional references to 'landscaping', but overall, the 'landscape' terminology of the 1960s debate on the countryside appears to be largely superseded by references to 'environment'. (See Chapter Nine).

24/   "The landscape architect is interested in the whole landscape - the appearance of the whole, and the interrelationships of all the things it contains..." (Challenger, 1969:41).

25/   Challenger (1969, 1970, 1974); Boffa (1970); Jackman (1974); Aitken (1975).

I believe there were four aspects of professional usage of particular note at this time. First, professional usage continued to express established meanings. Thus 'landscape' retained its links to landform, natural appearance and beauty (Jackman, 1974), and to gardening and visual improvement (Boffa, 1972). Second, by linking landscape architecture to both 'landscape' and to environment, 'landscape' became a metonym for environment (M. O'Connor, 1981).[26] Third, landscape was linked with open space (Boffa, 1976; Jackman, 1979; Rackham, 1979).[27] Finally, the "multiplicity of viewpoints" on 'landscape' (Challenger, 1970) stimulated the idea that 'landscape' holds within it physical and aesthetic values (Cole, 1977).

There were further developments in professional usage during the late seventies and early eighties. In 1978 the American Fabos introduced the concept of 'total' landscape (Fabos, 1978). He argued that landscape architects must adopt parametric[28] approaches in planning for the 'total landscape', which he conceived as "a homogeneous segment of the environment" (Buckland, 1978:6). This call was heeded in particular by Jackman (1980). He believed that landscape architecture ranged from policy and large scale landscape planning to site design, and that 'landscape values' could be assigned to all aspects of this 'total landscape'. Jackman argued for a comprehensive approach, in which the visual dimension was defined as "One parameter within the landscape assessment process" (1980:4). Jackman's concern for methodology and landscape valuation was also reflected in other contributions.[29] On his return from America in 1982 he extended and reformulated his ideas. He introduced concepts of human landscape ecology (Jackman, 1982); emphasised the role of computers (1984); and linked landscape ecology with agroforestry (Jackman and Treeby, 1984). Finally he extended the concept of 'landscape values'. In a collection of essays and presentations, culminating in the publication of Our National Landscapes (1986), Jackman presented a model of ecological, economic and ethical values within a comprehensive, multiple scale, parametric 'landscape information model'.

26/ This extract from a professional prospectus illustrates the usage: "The profession of landscape architecture is concerned with understanding and protecting the environment... the landscape architect looks at the environment as a whole... landscapes as total complexes of man-made and natural elements" (Boffa Jackman and Associates, undated c.1975).

27/ Initiated publicly at the 1975 NZILA Conference.

28/ By this he meant the separation out of different factors, such as soil, geology etc.

29/ Rackham (1980); Wilson (1980); Rackham and Darby (1981); Clayton (1982).

'Landscape' now embraced both nature and culture, material reality and human perception, and the valuation of all of these.[30]

There was one other significant development in professional usage. Anstey (1981) and Anstey, Nicholls and Thompson (1982a) developed the experiential dimensions of landscape, interpreting values not in parametric form, but as qualitative aspects of cultural and social processes.[31] This emphasis upon process was reflected in the NZILA Statement of Philosophy (1982). Aspects of cultural identity and meaning in 'landscape' were also developed by a number of guest speakers at the 1981 Conference "New Zealand Where are You?"[32] This emphasis upon the qualitative aspects of the cultural formation of 'landscape' echoes the earliest meanings of the word, and subsequently appeared more widely in the profession's discourse.[33]

I therefore believe that documentary evidence for the period 1970-85 reveals a number of major extensions in the meaning and use of the word 'landscape' in professional and scientific literature. Existing usage from earlier periods continued, but to it were added concepts of 'landscape' as patterns of biological character and complexity, as 'landscape systems', as 'landscape values', as

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30/ Jackman's influence is significant for a number of reasons: he was the first graduate of the Dip.L.A. at Lincoln, with Distinction; he was a senior lecturer at the University; was a co-partner of the most influential private practice; and subsequently was elected Fellow of the NZILA. "Our National Landscapes" was commissioned by the Biological Resources Centre of DSIR, and at the time was intended as a means to advocate the centrality of 'landscape' in the forthcoming reforms of public sector land management.

31/ "This it seems is the ultimate challenge: to define values in a way which gives them meaning, not as abstractions into dollars, art or religion, but as fundamental to sustainable and satisfying relationships between people and their landscapes. The quality of our landscapes is an expression of the values that operate in their processes. Ecological values are exclusive to nature, and social values are exclusive to society. Landscape values must be inclusive of both" (Anstey, Nichols, Thomson, 1982 (b)).

32/ "One can see too that landscape denotes a concept greater than the simple reference to the whole of our visual world. It is at once a cultural mirror and a mirror of nature" (Thom, 1981:2). "Not until we stop looking at ourselves and our land through the eyes of the Northern Hemisphere, will we begin to live in some kind of permanent harmony with our landscape" (Phillips, 1981:11). "I believe the New Zealand landscape is primarily the familiar land surrounding most New Zealanders" (Park, 1981:67). "Little landscapes for little communities of perception and familiarity... the destruction of landscape identity is an assured way to alienation, deracination, identity destruction of people" (Hayward and O'Connor, 1981:36).

33/ Themes of identity, process and value were expressed in different contexts and different scales - as principles of planting design (Lucas, 1983), as urban environments (Robinson, 1985; Swaffield, 1988) and in the high country (Darby, 1984; Swaffield and Lucas, 1985; Ashdown and Lucas, 1987).

'total landscape' and as cultural 'landscape identity'. However, increasing plurality of meaning was also matched by diversity in the extent and nature of use by different disciplines and interest groups.

F.   ADMINISTRATIVE REFORM (1985-1988)

This section brings my documentary review up to the time of the interviews. It identifies three main features of 'landscape' usage - a further extension of meaning; the development of a critique of 'landscape'; and a cycle of use and disuse within resource management law reform.

1.   Extension

Several authors increased the complexity of 'landscape' meaning still further. Park and Simpson described 'landscape' as "a broad perspective of land both in space and in time" and also as "the inner eye of the people, a whole reflection of conscious and subconscious realities" (1987:4), linking biophysical and perceptual elements. The links between landscape, place and identity were also elaborated.[34]   Swaffield and O'Connor (1986:17) noted the increasing ambiguity of 'landscape' usage: "In its very diversity there is a richness of meaning that suggests opportunity for more profound theoretical understandings, but in its apparent ambiguity and ambivalence lies the chance of dissent and confusion in practical application". Park was less reserved. After exploring links between landscape ecology, culture and identity, expressed as the 'spirit of place', 'mauri' and 'genius loci' (1987(a),(b),(c)), he elevated 'landscape' as part of a call for bioregionalism, drawing together Maori and Pakeha "in a new convenant, built on knowledge, creativity and care, with 'Te Whenua' that unites mythological, spiritual, scientific and ecological understandings of land by our different cultures" (1987(c):97).

34/   Lucas (1987) argued for the conservation of the 'national heritage' of the high country. "The interaction of the ecological, cultural, visual and economic together constitute total landscape values. These together create the character and identity of a place". (Lucas, 1987:8). The 'total' parametric 'landscape' of Fabos and Jackman is thus restated in the qualitative concept of place. Swaffield and O'Connor (1986) also explored this link with place and identity. Tracing the etymological origins of 'landscape,' which have resulted in plurality of meaning, and reveal underlying aspects of unity, they suggested opportunity for the reinstatement of the goal of landship, a concern similar to the call for stewardship of the 'landscape commons' by Piddington, Simpson and Hill (1985).

The symbolic dimension of 'landscape' was also made explicit by a Maori author, writing for an audience of landscape architects: "No landscape exists merely as an accumulation of physical facts. Simply by identifying it we embed in it character, meaning and symbolism beyond its intrinsic form and shape" (O'Regan 1988:5). Hence, "as tribal boundaries stabilised, the most prominent features on the landscape such as mountains, lakes and rivers came to be identified with the people as the enduring symbols of a tribe" (Walker, 1987:45). I noted in the preface that I have not attempted any bicultural interpretations, nor have I searched for cognate words for 'landscape' in Maori language. However, these two quotes suggest to me that some aspects of European usage ('landscape' as landform and symbol) are used by Maori authors.

2.   Continuity and critique

1985-89 was a period of continuity in usage in conservation literature.[35] Established meanings of 'landscape' also occasionally extended into new areas.[36] At the same time, it came under increasing academic scrutiny as a concept. Pound (1987), Wedde (1987) and Cooper (1988) each focused upon the material role of 'landscape' in the European settlement of New Zealand, portraying its role in painting and literature as a means of exercising and legitimising control over land. Swaffield and O'Connor (1986), O'Connor and Swaffield (1987) and Park (1987b) emphasised the interpretative role of 'landscape' as a means of understanding land and its interrelationships.[37]

35/ Newsome (1987) expressed 'landscape' as the appearance of land and vegetation. 'Landscape' as natural setting appears frequently in conservation publications (Salmon, 1985; Smith, 1988), and is referred to as a biophysical reality by Kelly and Park (1986), to be conserved within the Protected Natural Areas Programme.

36/ I found that the concept of 'landscape values' appeared within forestry publications (Mead, 1988; Ledgard, 1988), soil conservation (Blakeley and Mosley, 1987) and in statutory planning documents (Canterbury United Council Draft Recreation and Tourism Strategy, 1988)

37/ Thus Swaffield and Lucas (1985), Swaffield and O'Connor (1986), O'Connor and Swaffield (1987), Park (1987(b)), Pound (1987), Wedde (1987) and Cooper (1988) all undertook critical reviews of 'landscape' usage within New Zealand, highlighting its origins, presuppositions and assumptions. All agreed that it has ideological status, but diverged in the emphasis of the interpretations. Pound, Wedde and Cooper maintained that 'landscape' is a wholly specific cultural ideal, and therefore does not exist without the presence of Europeans (Pound, 1987). In contrast, the word 'land' appears to be assigned status as signifying a biophysical reality. Park adopted a middle position, defining 'landscape' as fundamentally a social concept, but one which is frequently useful when applied to biophysical reality (Park, 1987a). Swaffield and O'Connor, in tracing the etymological evolution of 'landscape', appeared to imply no such fundamental difference - all words are socially constructed -

3.   Usage in resource management law reform

The term 'landscape' had appeared in both the 1984 Labour Party policy and a 1984 Discussion
Paper on Environmental Administration (MFE, 1984). The discussion paper noted:
"Environment is a much debated term. It is seen by some to concentrate on the natural
environment, to others it includes human influence on physical characteristics (essentially the
landscape and surroundings), and yet to others it involves a number of complex ecological,
physical, biophysical, soil, cultural and economic systems..." (MFE, 1984:9). Thus 'landscape'
was associated with culturally modified environment. The definition in the subsequent
Environment Bill reads: "Environment means all natural and physical resources and the social,
economic and cultural conditions affected by changes to those resources" (MFE, 1986(c)).
'Landscape' therefore became subsumed within the expanding usage of 'environment' and
'resources'. It appeared only once in the remainder of the Draft Strategic Plan of the Ministry, in
reference to 'urban rural and coastal landscape values' (MFE, 1986(b):42).

The Environment Act 1986 only contained one reference to 'landscape' as an area,[38] but the
overall definition of 'environment' had been expanded to include 'aesthetic' conditions - clearly
the outcome of revisions during the committee stages. This prefigured further substitutions of
terms. In the following year, the published debate on the ethical and conceptual basis of reform,
Environment meets Economics (Environmental Council, 1987) contained no references to
'landscape'. In 1988, the Ministry published a further discussion document "Directions for
Change" (MFE, 1988(a)), preparing for the reform of the Town and Country Planning Act, and
associated statutes. The overall mission was renamed 'Resource Management'. Discussion of
definitions again acknowledged the diversity of interpretation of 'environment' but this in its turn
was subsumed within an overall conceptual framework of 'resources'. Thus the programme
prefigured by O'Riordan (1971), Meister (1977) and Auburn (1979) came to fruition. Land was
redefined as "a physical resource (with) diverse characteristics of slope, shape, aspect, structure,
soil type and geological composition. Land can also have cultural, historical and scenic values".

Continued from previous page
> land is no more privileged than 'landscape', and the meanings of both can legitimately change
> through usage.

38/   Section 17 states that regard should be had to: (a) the maintenance and restoration of ecosystems of
    importance... (b) areas, landscapes and structures of aesthetic, archaeological, cultural, historical,
    recreational, scenic and scientific value (Environment Act, 1986).

(MFE, 1988a:12). There were no references to 'landscape' in this document or in discussion documents on environmental assessment procedures (MFE, 1986, 1987). 'Landscape' appeared to lie entirely outside the published discourse of the new Ministry.[39]

A parallel process of reform was taking place in relation to conservation objectives. Here the influence of the prevailing forms of 'landscape' usage in the natural sciences appeared to dominate, as the 1987 Conservation Act included 'landscape' with landform in its definition of natural resources.

In summary, the period of administrative reform 1985-89 revealed divergent trends in 'landscape' usage. There was increasing recognition and consideration of its plural meanings, with several attempts to forge new syntheses. Usage within conservation sciences, by conservation groups, and in statutory planning at the local and regional level increased in frequency. At the same time, critics from the arts sought to 'debunk' the 'myths' of 'landscape'. Within environmental administration and resource management, the term appeared to fall out of use. It was neither universally accepted, nor central to the debate on environmental reform. 'Landscape' remained linked to particular groups and viewpoints.

G.   SUMMARY OF HISTORICAL PATTERNS

Table Twenty Seven (from Chapter Eight) illustrates the overall trends.

39/   It was not unaware of the term. Successive submissions by the New Zealand Institute of Landscape Architects during the consultation phases (in which I was involved) repeatedly referred to 'landscape'. The NZILA definition reflected the increasing complexity of meaning outlined above. Thus in 1986 the Institute emphasised the meaning of 'landscape' as "the environment we experience" (NZILA). These submissions were not entirely fruitless. In the next phase of reform (MFE, 1988b), the government's proposals included 'environmental quality' as an objective of legislation, and report amongst 'some suggestions for the purposes of the new resource management law' the idea of "4(J) Protecting rare and/or representative samples of the flora and fauna, natural communities, habitats, ecosystems, and the genetic diversity, landscapes and historic places which give New Zealand its recognisable character and value" (1988b:20).

Table 27: Conceptual meanings of 'landscape' in the historical record of my case study

Period	Major continuities of meaning	New meanings	Comment on usage
European Settlement 1777-1900	* panorama * picture * improved land * gardening	* appearance of natural vegetation	* low levels of usage overall
Twentieth Century NZ 1900-1960	* picture * appearance of natural vegetation * scenery * improved land	* landform * soil patterns * regional setting * natural beauty * urban improvement	* no references in scenic preservation debates * strongly sectoral uses in natural sciences, geography, art and garden design
Concern for the Countryside 1960-1970	* picture * scenery * appearance of land * improved land * landform * regional setting * urban improvement	* rural landscape architecture * scenic resource	* landscape, landscape architecture, and scenic preservation explicity linked * emerging plurality of use
Professional extension 1970-1985	* picture * scenery * appearance of land * improved land * landform * regional setting * urban improvement	* biophysical patterns and systems * landscape 'values' * environment * 'total' landscape * experience and identity	* overall usage still low * increased ambiguity in usage * major professional promotion * use in conservation policy
Administrative reform 1985-1988	* picture * scenery * appearance of land * improved land * landform * regional setting * urban improvement * biophysical patterns and systems * experience and identity * 'landscape' values * environment	* landscape as 'inscape' * ideology * symbol	* bicultural opportunities * materialist critique * removal from resource management * use in local planning * conceptual synthesis