Attitudes, Values, and Behaviour: Pastoralists, land use and landscape art in Western New South Wales

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Statement of Authentication

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree in this or any other institution.

Guy Fitzhardinge
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Abstract

The proximate causes of many of the environmental issues facing residents of the Western Division are well known. Inappropriate land use practices (intensity, duration and timing of grazing), total grazing pressure, poor knowledge of ecosystem fragility and seasonal variation are some of the issues that contribute to an actual or perceived degradation of the landscape. Many of the current practices are seemingly at odds with the attitudes and values of the wider community and also those of the pastoralists who carry out these practices. This thesis seeks to explain this apparent contradiction.

The thesis is composed of four elements. The first element reviews historical (mostly European) thinking about nature, and the relationship between nature and society and traces how this thinking has changed through time. The second element is a review of the history of land settlement and land use in the division, and shows how the development of the division followed contemporary societal attitudes and values. The third element is an examination of the portrayal of landscape in a western visual art tradition and how this has the potential to be used to reflect contemporary social attitudes and values. The fourth element involves the use of three projects that used art and text as a basis for investigating the attitudes and values of people in the Western Division.

The findings of the research indicate that visual landscape has the potential to become an aid in the identification of community attitudes and values about the landscape in which they live. Further, this technique allows for the emergence of other factors such as individual identity and its accommodation within the behavioural framework.

In accommodating such factors as individual identity, individual and social attitudes and values toward the environment in any discussion of behaviour in relation to the landscape and its use, a better understanding of the motives underlying behaviour will be gained. In so doing better decisions can be made by both pastoralists and land administrators.
Further research is needed to verify the usefulness of these findings in both opening up a positive dialogue with landholders and administrators and in aligning pastoralists’ behaviour towards a more sustainable land use ethic.
Chapter One:

Introduction

The proximate causes of many of the environmental issues facing residents of the Western Division are well known. Inappropriate land use practices (intensity, duration and timing of grazing), total grazing pressure, poor knowledge of ecosystem fragility and seasonal variation are some of the issues that have led to an actual and perceived degradation of the landscape. Attempts to address the issue of land degradation in the past have typically been associated with addressing the cause of environmental problems, and regulations and activities that impact on or alter land use practices have been traditionally used.

The Western Division of New South Wales (NSW) provides an opportunity to study the relationship between society and landscape, as the Division has a well recorded history of occupation and its effects on natural systems. Through Government legislation occupancy was controlled, utilisation controlled and measured (through the stocking rate) and the environmental impacts of occupancy recorded (through confidential property reports). Social and environmental expectations created through the formation of the management authority (the Western Lands Board – created under the Western Lands Act) were made explicit. The Western Lands Act of 1902 was intended to address the social, ecological and economic issues facing tenants of Crown Land in the western half of the State of NSW. The Act provided the administrators of Crown Lands in the Division powers to regulate such factors as ownership, property size, land use, the duration of tenancy and land clearing. While many of these tools were used to address contemporary economic and social concerns, there was also a requirement to use them to address environmental concerns. However, more than a hundred years later many of the fundamental social, economic and environmental issues remain. Wider community perceptions of land use within the Division focus on inappropriate utilisation and the over-utilisation of a fragile resource.
It could be assumed that the actions of landowners in the region reflect personal attitudes toward nature and the environment. One of the features of programs such as Landcare is that there is an implicit assumption about the relationship between attitudes and changed behaviour. If landholders are provided incentives to act differently (to plant perennial pastures for example), then it is assumed that landholders will see the planting of perennial pastures as a good thing, and as a result attitudes and hence future behaviour will reflect this shift. However, as the research described in this thesis shows, it appears possible to hold attitudes that would appear inconsistent with behaviour in terms of the relationship between individual people and nature.

Having lived in this landscape as a pastoralist for a considerable period of time it has become clear to me that the reasons that people live in such a landscape are not just economic or social. In many cases generations of people have lived in the same locality, facing the same social and economic challenges over long periods of time. Many of these people had the ability to relocate to other areas offering a far better “quality of life” but did not do so. Through a long association with these people it became clear that many of them had special feelings about the landscape and place in which they lived. These personal values and feelings about place were strongly and intimately held.

When speaking with many landholders once a sense of trust had been established between them and myself, they became more forthcoming about their real feelings and attitudes toward the landscape in which they lived. Many had lived in the one location all their lives, or had some form of tangible connection with the landscape. For these people, returning to land that was previously held by the family or relatives was often associated with sentimental views of location or landscape. For others where there was no such connection there was often still an emotional or spiritual relationship with the landscape or parts of the landscape in which they lived. The nature of these feelings was often inconsistent with those attitudes projected through observed behaviour.
The activities and behaviour associated with traditional landuse practices in the region were linked with the attitudes and values that accompanied white settlement and subsequent land and social development. Understanding the derivation and the context in which landowner attitudes and values developed is important in understanding current social attitudes toward place and the natural world. While outwardly individuals may appear to conform to broader social values, it is clear that on an individual basis a range of other attitudes and values toward the natural world are also held.

How then is it possible to gain a greater understanding of these more intimate and personal attitudes and values of landowners in the Western Division towards nature and place in the area in which they live? And, having gained a greater understanding of these attitudes and values, can such knowledge be used as part of a possible strategy to initiate behavioural change in a way that is unavailable through work on a broader social level?

The thesis seeks to explore new ways of understanding current attitudes toward the natural world through examining how these attitudes are reflected through different means, in particular visual art and literature. In an attempt to better understand current attitudes and values toward the natural world the thesis traces the history of the association between people and the natural world and shows that current attitudes and values are not simply derived from current interactions, but are mixed with long held beliefs and norms regarding the place and role of people in nature. Any attempt to study existing attitudes must necessarily consider the context in which they are formed.

The thesis is made up of four elements. The first element reviews historical (mostly European) thinking about nature, and the relationship between nature and society and how this thinking has changed through time. The second element is a review of the history of land settlement and land use in the division, and shows how the development of the division followed contemporary societal attitudes and values. The third element is an examination of the portrayal of landscape in a western visual art tradition and how this has the potential to be used to reflect contemporary social attitudes and values. The
fourth element involves the use of three projects that used art and text as a basis for investigating the attitudes and values of individual people in the Western Division.

This thesis contends that individual behaviour is not a simple reflection of attitudes and values in relation to landscape. Observable behaviour is frequently the result of the interaction of many factors, some of which may appear in apparent conflict. Individual and social attitudes are especially important, and behaviour may be in conflict with at least some of these factors but still be consistent within the mind of the individual. In understanding the context, a more complete understanding and appreciation is required of the basic attitudes and values held by society in regard to its relationship with natural systems. Secondly, by recognising and identifying these values, programs and projects can be developed that incorporate and build on those values and as a result increase the likelihood of success and speed of change.

There is often a difference between the “espoused” system of values and actual behaviour (Argyris and Schon 1975). In understanding individual beliefs and behaviour, it is important to distinguish between those practices and behaviours that might reflect social norms and values and those that might reflect more individual and personal attitudes and values. For this reason Part One of the thesis looks at the evolution of social attitudes and values toward the natural world from a “Eurocentric” standpoint. Often, such factors as fundamental religious beliefs shape social and individual attitudes and values in a way that is unquestioned.

Attitudes are learned through the process of socialisation, and in isolated rural communities there is a considerable social pressure to conform. Where individuals have to rely on the community for social and physical support to the extent that they do in isolated communities, there is an increased pressure to conform to social attitudes, values and beliefs.

Current attitudes about the relationship between people and landscape are a product of the contemporary relationship and legacy of an historical relationship between people and
nature. Many attempts to change attitudes and values have focussed on the contemporary relationship alone, and failed to recognise the traditional or historic aspects of such a relationship. Attitudes and values about nature and landscape have evolved over many generations, and many of the current attitudes are a legacy of previous relationships between social systems and natural systems. The historic development of attitudes and values toward the natural world needs to consider the massive shift in the impact society has had on nature in the last 300 years. This relatively recent historical change has been accompanied by the development of mechanised and industrialised agriculture. This, coupled with scientific advances in crop, pasture and animal production, has dramatically altered the relationship between rural communities and the landscapes in which they live.

Following the industrial revolution in Europe the connectivity between society and nature changed. Where the landscape could have once have been seen as “mother earth” it is now seen by some as just another factor of production in an increasingly cost driven industry.

This thesis looks at the history of settlement of Western NSW, and shows how the system of land allocation and the resulting controls over use emanate from a particular cultural perspective on landscape and landscape ownership. The cultural orientation of settlement defined the path that the relationship between community and nature was to take for the next 150 years. It locked thinking into a particular paradigm. To this extent it is an important factor when looking at how people and communities see their current relationship with the landscape, and how it has affected attitudes and values.

According to Macadam (1997) and Bawden (1992), agriculture in Australia has already passed through two stages – the production and productivity stages – and is now in a third stage where there is an increasing emphasis on sustainability. The initial stage, the production stage, saw the clearing and development of the agricultural landscape. In the second stage features such as more productive pastures, genetic improvements in livestock and more efficient and effective transport systems were initiated. The third stage, and the decline of the two former stages, was marked by an increasing
understanding that natural resource systems could not be modified for production and productivity requirements alone, and that greater emphasis had to be placed on the long term sustainability of such systems. While the production and productivity stages still continue to a lesser and limited extent there is currently a growing recognition of the need for increased sustainability.

In addressing the issues of sustainability, reforms to date have been slow in terms of seeing the required changes on the ground. As stated above, the current approach to introducing more sustainable land use and management practices has focused on changing practice, assuming that changed behaviour will generate changed attitudes. However, as this thesis will demonstrate, this assumption has not always proved correct. In a review of behaviour theory in Chapter Three the link between beliefs and actions is examined, especially in relation to behaviour that may be seemingly at odds with personal beliefs and values.

How individuals or societies behave in regard to the environment in which they live reflects in part their attitudes and values toward the natural world. An understanding of behaviour in this regard therefore requires an understanding of both social and individual attitudes and values, and it is in this context that an understanding of the derivation of these attitudes and values is important. Inherited beliefs or understandings about nature and the relationship between people and nature, often based on religious doctrines or scientific rationalism, can provide the foundation for contemporary attitudes and values. This thesis argues that many of the attitudes and values that are currently held relating to people and landscape do not necessarily have their origins in the contemporary coevolution between the ecosystem and the social system, but in historical beliefs and attitudes. Many of these beliefs relate to a different time period, ecological context and a time when people’s ability to modify or change the landscape in which they lived was limited.

What is clear from this research is that the correlation between behaviour and attitudes in the area of the environment is not necessarily simple, and behaviour that is often
seemingly at odds with attitudes and values, can in fact be easily rationalised by the individual.

Through a series of projects carried out by the author in the Western Division and areas in close proximity, it became clear that many people had attitudes and values toward nature and their place within it that were not reflected in actions. However, for a number of reasons, these attitudes and values were hard to enunciate. In some cases these attitudes are passionately and privately held.

This thesis proposes that the use of visual landscape art can be used as a tool to discover and explore contemporary individual attitudes and values about the natural world. Further, this methodology could potentially be used as a process by which to challenge or question a range of current personal attitudes and beliefs in a manner that is non-threatening. It is argued that there is potential to change behaviour through the discovery and exploration of personal beliefs and attitudes, and the reinforcement of those that coincide with good natural resource management practices. Likewise, through visual landscape representation, beliefs and attitudes can be challenged in a way that is non-threatening and prevents a polarisation of these values.

The thesis uses current understandings of behavioural theory to show that through the use of individual attitudes and values there is a potential to initiate changes in behaviour at a level that is currently untouched.

1.1 Background to the research and the evolution of personal interest

Impetus for this thesis comes from twenty years of living in the Western Division of NSW on a property called Wapweelah, situated 150 kilometres north-west of Bourke and approximately 60 kilometers west of Enngonia. Though I originated from a farming background in the east of the State, becoming part of a community with such a significant social and ecological history in the far west of the State has been an informative process.
While both communities are farming communities, there are significant differences between them in terms of how they see their place within the natural world. Historically, the process of land settlement in the Western Division was significantly different from the remainder of the State. While the history of the Division is relatively short – just over 150 years – it is a rich history in both social and cultural terms. Further, because of the landscape in which this history took place, the environmental legacy of early behaviour still affects current occupation. In this way the community is inseparably linked to its history in more than just an academic sense.

As a participant observer in the Western Division community it has become clear to me that the historical context in which individuals and local communities find themselves is highly significant in relation to how they see their relationship with the natural world and the sort of behaviour exhibited. While to a greater or lesser degree this is the case in all communities, as a member of two rural communities this relationship appeared significantly more important in this “outback” community.

Figure 1.1: Location of the Western Division of NSW
Source: NSW Department of Infrastructure, Planning and Natural Resources, Dubbo, NSW
On October 23, 2002, a large dust storm passed over eastern Australia. The storm, at its peak, stretched from Longreach in central Queensland to Orange in NSW, some 1500 kilometres long. It reached three kilometres in height and was approximately 300 kilometres in width. This storm was the largest dust storm since the widely publicised dust storm that hit Melbourne in 1982, bringing tons of red dust to that city. The dust storm of October 23 was estimated to be carrying approximately 10 million tons of soil out to sea (McTanish et al 2005). This is a significant figure considering that, for example, the Brisbane River discharges 100,000 tons of silt into the sea a year. The soil carried in this dust storm was basically topsoil, high in nutrients and essential minerals.

Following the dust storm, several days later, a Canberra academic on the ABC Country Hour program suggested that farmers should be sued for the extra costs that the rest of the community had to bear as a result of the dust. Cars needed washing, he said, and dust had to be removed from many places. One large Government institution, having just cleaned all the windows in its building, would now have to clean them again. The dust, the academic said, was avoidable, and the product of poor land management techniques. CSIRO was quoted as saying that 90% of the dust was avoidable, leaving only 10% as a result of an “act of nature” (presumably meaning a “natural process”). The academic argued that, just as he was able to sue his neighbour for activities undertaken by the neighbour that had caused him expense, so he or the wider community should be able to seek financial redress against farmers in this instance.

The inference was that such dust storms are essentially man made and avoidable. It was argued that dust storms have negative impacts on both society and the landscape, and that those who live in the landscape and use the landscape have a responsibility to manage and preserve the landscape in a manner the rest of society approves of. The fact that dust storms can be a natural process was never mentioned. Likewise, the beneficial aspect of such storms was ignored. The fact that essential elements, especially iron, deposited by such storms in the southern oceans for millennia past, are essential for phytoplankton and are a powerful driver of the whole food chain in the southern oceans was not considered.
The dust storm and the response it drew illustrated a growing rift in understanding between people and the landscape in which they live. It was clear that this dust storm was contributed to by an inappropriate use of the landscape to the extent it was laid bare to the ravages of the wind. This dust storm was portrayed as accompanying increasing salinity, soil acidity, fragmentation of ecosystems, and loss of biodiversity, as just another example of agriculture’s perceived failure to come to terms with natural systems. The response also represented the voice of a more extreme point of view, a point of view that sees nature in a single desirable state, and essentially as a state devoid of change. Dust storms are a natural process to the extent that wind erosion has been one of the key development processes in shaping the continent as we know it. While this storm might have been severe, the critical point appears to be that it inconvenienced a great number of people who otherwise are relatively sheltered from natural events. In any case, the key issue is that the response reacted to the symptoms, rather than examining the real underlying problem of landuse approaches.

A second point is that the historical context of this response is important. A hundred years or even fifty years ago the dust storm would have been far more likely to generate a more sympathetic response to the plight of the rural community. Certainly the massive drought in the Western Division between 1888 and 1901 drew a completely different response, one that was more understanding, compassionate and sympathetic. Instead, in this case, the comments put one section of the community (the urban) against another section (the rural). While the intent of the comments may have been different, for most the common message was a simplistic one about good and bad, right and wrong, us and them and about our ability as a community to control and manipulate nature.

In a wider context, positive cultural attitudes towards pastoralism have increasingly come under question in the last fifty years. While problems in the Western Division were well recognised long before recent times, the social and cultural values of pastoralism were seldom challenged. Implicated in the debates over the cultural and environmental value and impact of pastoralism has also been the mythology of the “outback” and the part that
it plays in the Australian psyche. By the creation or destruction of mythologies, secular interest groups may either benefit or be disadvantaged. An impact of the altered mythology about pastoralism in the rangelands is the denial of the connection between people and landscape associated with pastoralism in these areas.

As a reaction to the increasing criticism being levelled against the pastoral industry in general, and about land use in the Western Division of NSW, I decided I wanted to better understand the problem. I needed to understand not only the issues, but to understand why, if the issues were so clear to many of the detractors of contemporary land management practices, they were not clear to those actually engaged in pastoral pursuits. Further, if there was at least some knowledge of what was going on, why then did those who were clearly in a position to do so, not make the decision to change aspects of their behaviour?

I have lived in and on the land all my life apart from time away at boarding school and at University. My very earliest years of schooling were by correspondence, being taught by my mother, and one could literally slip away from ancient battles in medieval Europe with knights and crusaders to the real world outside, and do battle with sheep and horses in a completely different world. The lack of connectivity between my education and my experience was to prove an ongoing issue for me. My “formal” education was completed with a degree in agricultural economics and Master of Applied Science, and in terms of formal education, these studies provided me with the best understanding so far of the questions I was seeking to answer. Everything, I realised, was based on dollars, and actions and activities could be explained in terms of the market; in terms of demand and supply, market information and knowledge, comparative advantage and the like. The market was the ideal forum to assign value, to assign cost and to correctly appropriate reward. Failures in the market system were reflections of a less than perfect world, and the fact that people appeared to perform actions that were contrary to theoretical expectations (like continue farming in the face of continuously diminishing returns) either reflected irrational behaviour or a lack of knowledge.
Growing up under the conditions I did had another fundamental impact that was only to become apparent later. Throughout these adolescent years my attitudes towards nature and landscape were set. The moral rights by which we as individuals and as a community occupied and used the landscape and its resources were set. I never questioned the right to use and modify nature, and the values I grew up with were the values of my parents. The fact that my parents were first generation farmers was probably significant as in our family in my later life, alternative views were tolerated, and even encouraged.

After completing my undergraduate degree in 1970, I returned to farming, working for my father running a number of properties in central NSW. My father was an enlightened farmer, and was continually questioning attitudes and practices. He asked, for example, “why had the land been so heavily cleared in the past?” In some places he said “there was neither rhyme nor reason for killing the trees”. The stark evidence of the contract clearing in the 1890s took the form of hundreds of dead trees left standing over most of the country. Trees of all ages, but mainly young ones, all cleared until few remained. My father’s voice of disapproval was rare in those days, days when another property we bought was advertised as “with clearing, 95% arable”. The ability to farm (crop, or utilise for agricultural production) the whole property was seen in those days as desirable.

One important question for me, however, remained unanswered. If my father was so concerned about the over-clearing why had he never done anything about it? He continually pointed out that the trees left were usually the largest trees as they cleared, and no doubt the oldest. It was only natural that these would die eventually, and not be replaced. “The shame”, he said “was that there would eventually be no trees”

In 1983 I bought a large property in the Western Division of NSW, essentially moved out to live 154 kilometres north-west of Bourke in the far west of the State. The move represented a shift from a mixed farming area in central NSW in a largely modified landscape to an extensive grazing enterprise in a less obviously (as it appeared to me then) modified ecosystem. The condition of the ecosystems is largely a matter of degree, but I felt as though I had left a system of high input farming to a system more reliant on
harvesting, with no inputs and little management, in which people felt they had little control over the environment in which they lived.

Following my move the same questions of landuse still troubled me, however, and with the benefit of hindsight they all had something to do with the nature of the relationship between people and landscape, and how we saw our place within it. There appeared to be a continuing conflict between expectations and sustainable capability in terms of production potential. In the more intensive areas of central NSW where I came from, these deficiencies were masked to some extent by technology. Where the soils were deficient in essential elements such as phosphate or sulphur, they could be added. New and more productive pasture species (always introduced species) were constantly available. However, in the west, scale and distance allowed limited application of any of these developments. In a sense, one was closer to the “front line”.

When I settled in the Western Division, I was familiar with its history and was therefore determined to put in place sustainable landuse practices, even though at that stage I was not quite sure of what these practices might be. Six years after I arrived, in 1989, the “Decade of Landcare” was announced, with a promised one billion dollars of funding over ten years to initiate sustainable land use practices. At the time we had formed a local group, the Ford’s Bridge Woody Weed Group, to look at the management of woody weeds. Woody weeds are various native species of shrub that were slowly taking over good grazing country. They are largely inedible, and out compete grass species for light and available moisture. These weeds were seen to be “invading”, and certainly their extent and density was increasing. The absence of fire and lack of competition at a seedling stage due to grazing were seen to be major contributing factors to the spread of the shrubs. The Ford’s Bridge Woody Weeds group became the Fords Bridge Landcare Group (we were told that we had to have the word Landcare in the name to get funding!) and this small outback community became one of the first Landcare groups in Australia.

My work with Landcare led to my participation in the formation of another two Landcare groups. I was also acting in a higher role, that of a committee member of the Western
Catchment Management Committee, the committee charged with the management of the Landcare groups in the area (initially 49% of the State) and promotion of the concept of Landcare. For the next ten years I was involved in Landcare in one way or another, and as a result I developed a good understanding of what it could and what it could not do. I began asking the questions: Had Landcare achieved what it set out to do? Were we, as a community, now living in a more harmonious and sustainable relationship with the ecosystem?

Challenged by these thoughts I enrolled in a master’s degree in Agriculture and Rural Development at the University of Western Sydney, Hawkesbury, in 1992. This university was particularly appealing for me, as the “Hawkesbury Approach” as it was referred to then, combined theory and practice to form a critical learning system. The Hawkesbury Approach relied on the belief that “education in agricultural science which failed to recognise agriculture as the interface between people and their environment would not prepare its graduates adequately to deal with complexity and change in agriculture” (Sriskandarajah 1991). Reductionist thinking reduces a problem to its component parts and attempts to answer questions such as “why does this phenomena behave as it does?” or “how can a particular action/activity be made more efficient or effective”. This method of enquiry is ideally suited to situations where the problem can be broken into discrete component parts that have low interactivity. However, it is not suited to complex inter-relationships especially where the entity is greater than the sum of the component parts.

For complex problems a holistic approach to problem solving was seen by the university to be more useful. In this approach, the individual components of the problem were looked at as an integrated whole, rather than as discrete units. To this end, students were encouraged in the first stages of problem solving to gain an understanding of the rich picture and the context of the situation they were addressing. Social systems and people were a necessary part of this consideration. The next stage in problem solving was to identify patterns and themes, thus developing further insights into the problem, and in this way constructing generalisations and possible solutions. Solutions were tested in the
next stage, but importantly tested within the context of the problem. The results of this then inform the next stage, which is to examine the results and modify actions in a way that leads to continuous improvement.

Thus in the Hawkesbury Approach (Bawden 1996), there is a continuous cycle of action learning. The first phase entails understanding the problem issues and context in terms of both social systems and natural systems. The second is a more abstract approach where, based on the knowledge developed in the first phase the researcher reflects, hypotheses and draws out concepts. In the third phase the researcher, using the results of the previous phase, takes action and evaluates the result of these actions. Finally after observing the effects of the action, the researcher repeats the steps again. The process is a continuous and iterative process of action learning, or learning by doing. The key concepts of the Hawkesbury Approach are therefore the acceptance of a systems approach to understanding problems, and a participative, iterative process of action learning.

One further important aspect of the Approach was that the researcher was placed in the position of being part of the research, so that action research and action learning by doing was being carried out rather than isolated examination (for a further discussion of the merits of this approach see Ison and Russell 2000). There were good reasons for this approach. The assumption that one research paradigm fits all research topics is questionable, as the type of knowledge obtained through research will depend on the research paradigm used (Domholdt 1993, Guba and Lincoln 1998, Guba and Lincoln 1994). As Cant (1997, p13) suggests: “the question of why do quantitative research is bound up with another set of questions about legitimate sources of knowledge, questions about the nature of human beings and questions of which social policies will maximise human wellbeing”. In the Hawkesbury Approach the crucial intersection is the intersection between ideas and experience, where a constantly evolving dynamic led to continuous improvement in theory (Bawden 1992). This approach was particularly appealing to me as research was seen as a process of continuous improvement in knowledge through the establishment of an hypothesis, testing, observation, feedback and
then re-evaluation and modification. The Hawkesbury approach encouraged a multi-
disciplinary approach to learning, and for me this approach to research made sense. As a
result of my time in the Western Division I could see that the context constituted a
mixture of historical, social ecological and agricultural issues, all of which were inter-
related.

As a result of my interests in sustainable land management, in 1993 I applied for and was
awarded a Churchill Fellowship to look at extension practices in the semi arid rangelands
of Argentina and the United State of America (USA). There were a number of
unresolved questions in my mind: Was inappropriate land management just a result of
ignorance, or was it a mixture of ignorance and stubbornness? So much of extension at
the time appeared to be based on the premise that what was needed was “education”, and
that ignorance lay at the heart of most land management problems. Were we in Australia
so different to other rangeland areas in the world in the standard of extension? Could
improved extension solve the land use problems that we as a community were currently
facing? My study revealed similar land management problems in both Argentina and
southern USA. The extent of the problem was directly related to the attitudes toward
landuse of the wider community. Extension practices in Australia appeared to be no
better and no worse than those elsewhere – everyone was struggling with what was seen
to be “ineffective extension practices”.

But how ineffective were these practices? Certainly there were some pretty clear
examples where there was an obvious failure (for example, the adoption of recommended
grazing practices which were theoretically correct but unachievable in practice).
However, there were also many examples where new technology had been rapidly
assimilated. Examples are the use of the motorbike, the UHF radio and hydraulic wool
presses. In a short period of time these technologies were almost universally taken up.
Properties that had used horses to muster now used motor bikes resulting in faster and

\[1\] In relation to this award I am sincerely indebted to Swire Group, and in particular Clyde Agriculture, who
made my travels possible.
more efficient movement of stock. Hydraulic wool presses were faster and easier to use, and resulted in savings in time and labour. They also pressed to a consistent weight resulting in savings in transport and handling. So why was it then that there seemed to be such a big difference with technology relating to natural resource management and technology that related to more efficient production and productivity? Through my involvement with Landcare I had attended numerous meetings where landholders stated that they felt that they were custodians of the land for future generations, and yet many of the land management practices were clearly unsustainable. As I struggled to reconcile the differences, I at least had the advantage of being part of the problem. Along with looking at others, I needed to examine my own motives and actions, for I was not separate from those I was studying.

From this process it became clear that I needed to deconstruct a lot of the assumptions that I had formally held. I needed to rethink the question from its very foundations. I needed to question the value-laden language being used, and translate it into value free terms. For example, a lot of European words with European meanings had subconsciously spilled over into common usage especially mine. Words like “drought”, “desert”, “timber” are clear enough, and their inappropriateness in the Australian context obvious because of their historical and cultural meaning. More complex are issues such as the evaluation of land as good or bad, solely dependent on the basis of its agricultural potential. Such words as these, when used imply a historical value that may or may not be appropriate in a new environmental context. For example, the word “river” as defined by the Concise Oxford English Dictionary (1978) means “a copious stream of water flowing in a channel to (the) sea, lake or marsh, or another river”. Inland rivers in Australia seldom act in this manner. They are seldom copious, seldom run between banks, and do not always flow to the sea. More often they are high in turbidity, alternate between being in flood and completely dry, and in many cases have poorly defined banks. As Sturt said “in any other country I should have followed such a water course, in hopes of it leading to some reservoir, but here I could encourage no such favourable anticipation” (Sturt 1834, p74).
In terms of environmental health, the former traditional definition is deficient. When we speak of rivers, what is the conception of what the word means? The language in this sense was providing a barrier to a closer relationship with the landscape. Words that were in general use to describe features of the landscape often contained values, meanings or associations that were incompatible or inappropriate in the quest to gain a greater understanding of the natural systems.

There were other anomalies too that led me to question how people saw their place in the landscape. One of the ways one’s social standing was enhanced was to be regarded as a “good stockman”. Coming from another farming area I was aware that the credentials for the title of a “good stockman” were not necessarily transferable. In other words, a good stockman/person in one locality was not necessarily one in another. I made it my job to find out what the criteria were, and it is not surprising that many were the same. For example, a good stock sense (in the animal behavioural context) was one. Another was to be a good “bushman” in that you could track and find your way around. The ability to track was highly regarded, as an ability to track meant a shorter time spent mustering and a better (more complete) muster. However, there was one key defining criterion that seemed to be more important than any other, and there were countless stories about people who had failed in this aspect. If one sheep perished through a lack of water (ie. thirst), then it was a clear indication that the person was a very poor stockperson. However, if one perished stock because of a lack of feed, then this was seen as quite acceptable, and just bad luck. This subtle difference is important, as it indicates how people saw the environment and their relationship with it. The provision of water was seen as being within someone’s control. You provided bores, or bore drains or shifted the stock to where there was water. However, feed or grass was a product of rain, over which one had no control at all. Supporting this approach were the multitude of stories of people who had left stock to survive as “best they could” and been rewarded with a fall of rain that made the stock more valuable than those sold by a prudent neighbour (say) before they died. In all my time I never heard one similar story that supported leaving stock to fend for themselves without water. The contradiction here was that there were a range of skills (like knowing the country, understanding animal behaviour and the ability
to track), that required knowledge of the natural environment and that had value, while another set of skills (the understanding of seasonal variability) was seen to have little value as seasonality was something pastoralists were subject to and could not control.

There are at least two other relevant examples of landscapes being settled by people originating from Europe in relatively recent times. The first is the USA, and in particular the short grass and long grass prairie in the American mid-west. The second is the Republic of South Africa where in a timeframe very similar to Australia, British and Dutch settlers deposed traditional landholders and established different land use regimes. The Australian experience is therefore not unique, and not surprisingly, the issues of land use are similar.

The solution to the problems of sustainability advocated during my time in the Western Division was to develop farming and grazing practices that were more in tune with the needs of the natural environment. As such the embracing of Landcare, essentially about dealing with many issues related to sustainability, was a natural move and after fifteen years the issue of natural resource management has certainly reached a higher profile. However, a major shortcoming to all the changes remained as in many ways the actions taken were aimed at the effects and the application of farming practices, rather than at the practices themselves. For example, there has been considerable work (with some success) on redesigning points on tillage equipment to enable more appropriate tillage practices. The more fundamental question of whether cropping is an appropriate land use practice in that locality, however, has never been addressed. Similarly, there has been a lot of money and effort put into erosion reparation, with little attempt to address the practices that cause it. While this may be harsh criticism, and is open to challenge as all such generalisations are, to a greater or lesser extent it does demonstrate an underlying truth. This truth is that there is an underlying social belief that the landscape is there for the use of society, whether it be for farming, to build cities on or even to create national parks on. This “right” is not questioned, and as a result the philosophy of “conquering nature” in its many manifestations, represents an underlying “given” in social attitudes towards landscape.
By 1902 the Western Division of NSW arguably did not reach a state of collapse before the alarm bells rang, and the Royal Commission of enquiry was established. Evidence given at the time demonstrated that there was a good understanding of the issues that affected productivity and sustainability even at that time. It is debatable as to whether the enormity of the effects of the changes in the landscape were fully understood, and similarly the difficulty of reining in the decline of ecosystem function.

Given this, and the fact that the occupants at that time would appear to be very similar to those that are there now in terms of what they were doing and the problems they faced, why is it that it has been so hard to change practices so as they align more closely with ecological needs? Few farmers deliberately degrade their environment, and in fact most are there because of a love of it.

The traditional attitudes and values of colonial occupation viewed natural systems as a factor of production, and an essential element in the creation of wealth partly for the individual, but more especially for the nation as a whole. The language of landscape reflected its potential use. For example, trees were timber, land was good or bad depending on productivity, grasses were sweet or sour and so on. Cultural preconditioning had defined attitudes and values in this way and as a result provides a causal link with behaviour. However, personal experience gained interacting with local communities and people would indicate that the strength of the relationship between attitudes and behaviour may not be as strong as first thought. The nature of this relationship is examined in this thesis.

1.2 Methodology

The methodology used in this thesis attempts to better understand landholder’s attitudes and values by exploring their historical basis in the context of the wider community and then the local community or sub culture. This process attempts to link more closely attitudes and values with the experiential learning and behaviour that led to their
generation. As many of the attitudes and values toward landscape are not verbally expressed or quantitatively measurable and involve feelings and emotion, visual art was used as a medium through which to explore these feelings and as such derive an integrated expression of belief. As researcher and participant observer the author was able to provide another layer of meaning and understanding through not only being part of the local community, but also being seen as inquisitive but non threatening.

As a result, the thesis methodology has four elements that are dealt with separately initially and then combined to attempt to provide an integrated but layered level of understanding.

Being the owner and manager of a sheep property in the area meant becoming a member of, and integrating into, the local community. Unlike an urban community where it is possible to live within the community and not be a part of it, in isolated rural communities such as those in Western NSW, there is a need to rely on community members for support, and as a result it is hard to live outside the community.

This thesis is written from the position not of an outsider, but as a member of the community that I am studying, and as a result claims of “experimenter bias” could be raised. The nature of this potential bias has been well explored by authors such as Friedman (1967), Rosenthal (1966) and Rosenthal and Rosnow (1969). Such potential bias in the research, questioning or interview process can be in the form of giving leads, cues or hints, or holding expectations about behaviour. Even just a physical presence can have an effect on the eventual outcome. However, where there are potential problems from being part of the group being studied, there are also benefits. Being part of the group is important in understanding the context in which activities take place. When viewed from the outside, actions and activities can be observed, but the underlying reasons for these actions or activities cannot be fully understood without an intimate knowledge of the social context in which they take place. For example, the apparent acceptance of the practice of allowing of livestock to perish through a lack of feed as opposed to the social condemnation of allowing them to perish through a lack of water.
cannot be fully understood without knowledge of social attitudes, something that it is hard to understand from the position of an outside observer.

Being part of the community under study had a range of other advantages. Probably the greatest is the sense of acceptance that is generated by being part of the community. People speak more freely knowing that the respondent is accepting of their values and understandings. In a sense they are speaking to one of their own, and as such do not need to be defensive, wary, cautious or pretend that things are other than they are. Having suffered considerable criticism in the past, either direct or implied, about land condition and usage (the effects and implications of dust storms, woody weeds, loss of productivity etc), communities in the area are somewhat reluctant to speak frankly on such matters. My judgement was that these communities were cautious and wary of researchers and tailored their responses with a regard to the wider audience.

Being seen as part of the community meant that people spoke more freely, frankly and without fear. They spoke knowing that the language used was common to both parties in terms of meaning and nuances, and that the potential for confusion in what was actually said or meant was minimal.

Much of the interpretation of the participant observation is retrospective in the sense that it occurred before the formal research process commenced. Two sets of observations arose; one from being part of the community looking out, and the second being outside the community looking in. The blending of these two perspectives contributed to insight and understanding of the issues.

The second element of the research methodology was the use of historical research supplemented by participant observation. The use of primary sources and other evidence to better understand the historical context is standard historical method. There are a number of significant time periods in the history of the Western Division of NSW that shaped subsequent thinking about the place of people in that landscape, and it is these events that have been examined in greater detail.
Similarly historical research was used to understand the changes to the thinking of the relationship between people and the natural world over time. This provided documentary evidence of shifts in understanding of the relationship between society and nature. These shifts are also reflected in slow changes in community attitudes and values, as evidenced currently by such values as sustainable production and the maintenance of biodiversity.

The third element was the interpretation and analysis of visual art (and literature).

Writers such as Boime (1991) have maintained that some visual landscape imagery can be interpreted to project contemporary community attitudes and values of landscape and its use. Visual landscape art was used as a means of interpreting and reflecting social and individual attitudes and values toward the natural world. All visual landscapes are constructed in some way, and the construction invariably reflects social and cultural attitudes toward the natural world. Many depictions are allegorical in nature, and contain cues that enable the viewer to “read” the image. Popular images can often reflect popular cultural attitudes or beliefs. Visual landscapes can be used as a medium through which individuals are able to reflect their own attitudes and values while maintaining a certain detachment from them.

The ability of visual art to become a medium through which individuals are able to express their own attitudes and values was explored in the final element of the methodology. This involved the use of qualitative methods such as informal interviews and participant observation to obtain the reaction of Western Division residents to three collaborative projects that were run in Western NSW and Southwest Queensland and in which the author was a participant. Each project contained the work of an artist and a number of writers whose material sought to identify, reinforce and celebrate individual attitudes and values relating to landscape as well as to raise issues about sustainability in a non-threatening manner and allow participants to “discover” issues for themselves. The projects also attempted to facilitate thought and discussion about the relevant natural resource issues on a community and individual level. The projects were developed as
travelling exhibitions, and exhibited in regional art galleries, some of which were as close as possible to the locality where the work was produced. In other cases the work was exhibited in regional centres including Canberra and Wagga. All three projects were produced in booklet form with both images and text, and these publications were widely distributed.

In section 8.2 the role of the author in the development and execution of the projects will be detailed.

Using the projects, and inviting pastoralists to identify locations of special significance to them personally and engaging them in discussions about the locations selected provided insights into personal attitudes and values that may not have been otherwise discovered. Similarly the images developed during the course of the projects served as a point of reference and discussion with local pastoralists. Through this means the attitudes and values held by pastoralists toward the landscape in which they lived was explored.

### 1.3 Thesis structure

This thesis attempts to draw together a number of streams of understanding that relate to the interaction between social systems and natural systems in the Western Division of NSW.

Part One of this thesis traces the evolution and changes in the understanding of the relationship between people and nature in the Western world and explores the theoretical relationship between attitudes, values and behaviour. The move from theological understandings of the relationship to that of a more interdependent and equal relationship occurred at a time when the Western Division was being settled. Chapter Two traces the changes in thinking of the forefathers of the early white settlers in Australia, regarding their relationship with the natural world. This chapter also details changes in thought that led to more contemporary understandings of the relationship between man and the natural world. Chapter Three discusses the development of individual attitudes, values and
behaviour, and the relationship between attitudes and behaviour, with a close examination of theory relating to these topics.

Part Two of the thesis, comprised of Chapters Four, Five and Six, looks at the historical and geographical context of the pastoralists of the Western Division. Chapter Four looks at the assumptions and understandings that lead early explorers and colonists to misread the Australian landscape. Chapter Five traces the history of settlement of the Western Division from the standpoint of how it affected pastoralists. It also deals with a number of the significant events and time periods, and discusses in some detail the Royal Commission report into the condition of Crown tenants in 1901, and three subsequent investigations in the last twenty five years. Chapter Six examines the environmental context in which pastoralists in the Division have operated, and how this has changed through time.

Part Three, comprised of Chapters Seven, Eight and Nine, seeks to explore how community and individual attitudes and values toward landuse and the natural world can be understood through examining contemporary writing and landscape portrayal in visual art. Chapter Seven looks at the concept of “landscape”, its construction, and what this means in terms of social and individual connections with the landscape. Prose and verse are used as examples of media through which social and individual attitudes toward the natural world may be reflected. This chapter also shows how community attitudes and values can be reinforced by the nature of the depiction of landscape in visual art. Chapter Eight examines the development and application of three art and text projects in western New South Wales and southern Queensland designed to raise awareness of environmental issues and encourage discussion and an exploration of individual attitudes and values. Chapter Nine looks at the results and responses to these projects and contains a discussion of the results and outcomes of the projects.

Part Four (Chapter Ten) draws the threads of understanding explored in Parts One, Two and Three together and enters into a discussion of how an improved understanding of the historical context of land settlement and the evolution of thought about the relationship
between people and nature can help in understanding attitudes and values towards nature and landscape in the Western Division of New South Wales.
Part 1

Thinking about Nature

The two chapters in this section deal with aspects of the relationship between people and nature. Though disparate, the chapters are related in so much as they all deal with issues that affect the behaviour of individuals and societies in their relationship with the natural world.

Chapter Two deals with the importance of religious beliefs to our understanding of, or our relationship with, the natural world. It traces the history of ecological thought and shows how there has been a shift in thinking away from seeing the natural world as being a resource for the use of people to seeing it as an entity of value in its own right. The shift in thinking along the axis of nature coming to terms with people and people coming to terms with nature has increased in speed as the ability of societies to irrevocably change nature becomes more apparent.

Chapter Three deals with the behavioural relationship between people and nature as understood through behavioural science. The importance of understanding this relationship is indicated by the observation that an individual can have attitudes and values that apparently conflict with behaviour, or that they can have attitudes and values that appear to be in conflict depending on the situation. The chapter also looks at attitudes, values and behaviour as it relates to individuals, and the relationship between these features. Social attitudes and values may be modified in the individual context according to experience an individual values, and behaviour may or may not appear consistent with this.
This chapter provides the foundation for Part Three of the thesis where a process that seeks to identify individual attitudes and values that are apparently at odds with observed behaviour, but reflect the positive feelings about the sort of behavioural activities that accompany sustainable land management.
Chapter Two:
Thinking about Nature

And heir of her ancestral fame
Though far away my birth,
Thee too, I love my forest land
The joy of all the earth;
For thine my mother’s voice shall be
And here - where God is king
With English Chimes from Christian spires
The wilderness shall ring.

Eliza Currie

The quotation from Currie above illustrates one aspect of the relationship between people and the natural world: the fact that this relationship is culturally generated. Currie’s relationship with the natural world is one of familiarity, of conquest and the imposition of a set of values and beliefs generated in a far off land. Religion and spirituality impact on how societies see their interaction with the natural world as much as economic reality.

The ancestral notion of the first settlers to Australia concerning the relationship between people and nature was largely based on religious beliefs and teachings. It was only in the mid nineteenth century that the ideals of this relationship as laid down by religious beliefs were questioned. The discovery and settlement of the “New World” (North America) raised issues that had not been faced previously. The outcomes that resulted from “civilizing” the wilderness led some, such as George Perkins Marsh (1864), to question the nature of the traditional relationship society had with nature. It is appropriate to examine the nature of trends in ecological thinking in the US in the 1800s, as alternative

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2 “The Chimes of the Motherland” Currie papers, A2887, item 2, p79. Eliza Currie was married to the harbour master of the Swan River Colony, and was a keen gardener.
paradigms developed there that subsequently informed thought and discussion in Australia.

This chapter describes the historical development of ecological thought in the West leading up to the settlement of the Western Division and the influence religious beliefs had on thinking about the relationships between humans and nature. In particular it traces the idea that humans were above nature and the emergence of ecological thinking which placed humans as a part of nature. This is part of the intellectual context in which the Western Division was settled.

The Chapter examines a number of streams of intellectual thought that have contributed to current attitudes, shaping the relationship people have with the natural world today. What is clear is that there has been a considerable evolution in thought in the past 250 years that has greatly changed the way certain communities think about their relationship with the natural world in which they live. While the thinkers mentioned in this Chapter are not exhaustive, they do represent key developers of thought in this area, and their ideas have gradually infiltrated thinking in the wider community. The effects of this are seen not only indirectly, in changes to individual attitudes and values, but also in the terms and conditions of legislation impacting upon land use.

Much has been said about the “Eurocentric attitudes” brought to Australia by early settlers. However, the simplicity of the statement masks the complexity of underlying related issues. On one level, and the level most commonly used, the concept of Eurocentric attitudes is used to refer to such features as the readings of landscape, of landscape function, seasonality and more importantly the assessment of the value of natural resources in terms of their productive capacity (to man). This chapter deals with deeper cultural attitudes and values that have their roots in perceptions about mankind’s place in nature, and the relationship between mankind and nature.

The importance of understanding this historical relationship between mankind and nature is fundamental to any subsequent understanding of the interrelationship between early
settlers and nature. How this affects behaviour is no more clearly illustrated than in the comparison between how indigenous people and subsequent settlers viewed their relationship with nature. Australian indigenous people saw themselves as “part” of the natural world, with no special relationships that made them (as a species) superior or inferior to other species. They were subject to the same forces that directed natural events as all other living creatures. In other words they were simply one component of the natural system, and this perceived relationship directed attitudes, values and behaviour. Europeans arriving in Australia, on the other hand, did so with a legacy of theological conditioning that highlighted the differences between man and nature, and the uneasy relationship between the two. This chapter seeks to explore these issues, and demonstrate how the development of modern sensibilities in the two centuries preceding the settlement of Australia influenced attitudes to landscape and its use in Australia.

The concept of culture is defined by Rose (2005, p26) as “a system of knowledge more or less shared by members of a society”. A more rigorous definition of culture provided by Seymour-Smith (1992, p65) suggests that “culture is composed of patterned and interrelated traditions, which are transmitted over time and space by non biological mechanisms based on man’s uniquely developed linguistic and non linguistic symbolizing capacity.” In the context of this thesis the word “culture” is used to mean a system of values, ideas and behaviours associated with a particular group of people. These groups of people can exist either national or local scale, and where a subset or smaller group of people do not share exactly the same values, ideas and behaviours as the larger group, this subset is referred to as a sub-culture.

The fact that the wider society is now more concerned with things such as sustainability and biodiversity than it did 150 years ago indicates a shift of cultural values. Where once the natural systems of Western NSW were seen as something to be conquered and tamed for the use of society, social attitudes have changed. Now phenomena such as droughts, floods, and a fickle and fragile environment are seen “natural” and the emphasis has shifted from conquering to “learning to live with”. Many ecosystems are now seen to have value in their own right, and there has been an emphasis placed on the importance of
preserving them in their natural state.

There are few places on earth where the environment or ecosystem has not been modified in some way by humans. The implication of this is that most “natural” environments are in reality “cultural” environments, and have been formed through, or reflect, interaction with humans.

Pyne argues in *A Fire History of Australia* (1991) that the landscape Australians see today is the product of an inter-relationship with indigenous peoples in which the use of fire played an important part. Fire, Pyne argues, determined the look of the landscape and the species and species composition. The use of fire by indigenous Australians demonstrates how humans manipulate the landscape to their own advantage: burning, grazing, clearing and sowing wherever possible. The response to such activities from natural systems establishes a dynamic relationship between people and the land in which they live.

It was earlier stated that most landscapes could now be considered as cultural landscapes rather than natural landscapes due to the process of modification caused by human interaction. This is an especially important point in the context of this thesis. White settlers arrived with an already advanced culture, following thousands of years interaction with another (different) natural world. They came with expectations, attitudes, values, myths and above all, a level of technology that enabled them to have an enormous impact on the natural world. White settlers in the Western Division never had to fully come to terms with a “natural environment”. This is because it was never “natural”, and was in fact a culturally crafted environment, albeit crafted by a different culture. There were initially many limitations imposed by the natural environment, such as distance, drought, floods, heat and a host of other features that impacted on the social interaction with the environment. However, through time many of these impediments were overcome. Factors such as distance have been modified by radio, telephone, satellites, trains and motor transport, to name a few. The problems of climatic variation have been addressed by better forecasting, better (introduced) plant species, water storage, livestock transport,
vegetation response modelling and many other responses. As a result of an already advanced culture, settlers were never faced with a truly “raw” interaction with natural systems. The same of course could be said for indigenous society, as it is almost inconceivable that they did not bring some vestiges of a previous culture with them when they came to Australia over 60,000 years ago.

2.1 Concept of human uniqueness

While the theologians of the seventeenth and eighteenth centuries interpreted the teachings of the scriptures as giving man a special place in nature, it was obvious that there were fundamental differences between mankind and other forms of life. Judaeo-Christian teachings built on this difference to elevate man to a status “half way between beasts and the angels” (Thomas 1983, p31). Justification for this was in the Bible, which stated that man had been made in the image of God (Genesis i. 27) Further it was apparent even to the very early philosophers that there were fundamental differences between the nature of man and other living creatures. Aristotle said that there were three elements to the soul: the nutritive soul, the sensitive soul and the rational soul. While Man shared the first element with plants, and the second with animals, the third element was peculiar to man alone.

Thomas (1983, p31) lists a number of differences proposed in pursuit of the illusive characteristic defining where the difference between mankind and other life forms lay. Thus man could variously be defined as a “political animal”, a “laughing animal”, a “tool making animal”, a “religious animal” and a “cooking animal”. A further difference between man and animal, was that man possessed speech, and through speech the ability to transmit experience and so enhance prosperity. Darwin’s theory would later change this viewpoint. Reason was said to be another essential difference, in which it was thought one could separate the animal world into two classes: rational and irrational with only man appearing in the rational class. Finally, moral responsibility was seen as the third defining category, with only man having the power of morality.
The above is a brief and incomplete summary of a question that had vexed mankind for centuries. The important point is that throughout this debate the polarity between man and the rest of nature became sharper and more defined. That man was different was beyond debate regardless of the reasons. The other outcome was the elevation of mankind to a superior position in respect to other species. Mankind had qualities that not only set it apart from other species, but also these qualities “elevated” the human race to a position of superiority. Unlike indigenous Australians who had totemic equals in the natural world, Judaeo-Christianity placed mankind above all else and with no equals.

This attitude had important ramifications for the justification of attitudes and practice of interaction with nature. Descartes developed the position that while both man and animals were like automata in that they could perform unconscious complex functions (like digestion) only man had both mind and soul, and as a result combined matter with intellect (Harrison 1992). In other words, for Descartes, all behaviour exhibited by animals could be explained by natural impulse, and was devoid of reason and intellect. This mechanistic philosophy was appealing in an age when mechanisation (like clocks and watches) was the coming marvel, and it appeared to support the religious teachings that placed humankind above all other animals. Further, that the actions of animals were controlled by impulse alone meant that there was little room left for human guilt as a consequence of animals suffering, and there was no question that God could be implicated in such miseries.

The separation of mankind from nature was confirmation of the superiority of the species and underlined the role of nature as a resource to be used for the betterment of mankind. However, about the time the first settlers were arriving in Australia, there was a reconsideration of the relationship between society and the natural world.

2.2 The subjugation of nature

In general terms, the development of early civilisation has been almost synonymous with the conquest of nature. The two were seen to be related, in that the “civilising” of nature
was the precursor to the development of a civilised society. “Man’s relation to the
economy of nature was”, says Worster (1994, p72) “at the very heart of the law of
progress from savagery to civilisation”. Marsh (1864, p36) indicates how civilisation
believed that its existence depended on the continual conquest of nature. Ecological
conquest was believed to be a natural process. The Darwinist theory of evolution
provided further motivation. Although Darwin explicitly placed humans as a part of the
natural world, for many people the competitive struggle for existence and the survival of
the fittest helped rationalise mankind’s conquest of nature.

In addressing civilisation’s primary needs, that of food and shelter, the use of the plants
and animals provided by nature in the satisfaction of these demands was obvious. The
greater control over these resources a civilisation had, then the more resilient it became
and the greater the quality of life for its members. In short, the whole of nature was daily
and confidently asserted to be ultimately intended for the peculiar convenience of
mankind.

The use of domesticated animals, such as dogs for hunting and the ox and the horse as
beasts of burden, was similarly important. As Thomas (1983, p25) says “it has been
estimated that the use of animals for draught and burden gave the 15th century European a
motor power five times that of his Chinese counterpart”. It was considered that without
the camel the deserts of Africa and Arabia would have been inaccessible, that the
Americas (both north and south) could not have been conquered without the horse and
that Lapland would have been impenetrable without the reindeer. As such, “our toil is
lessened and our wealth is increased by our domination over the useful animals” (Gibbon
1983, p315). Similarly, the domestication of plants was of great interest, a gardener
declaring in 1734 that man now “had the power to govern the vegetable world to a much
greater improvement, satisfaction and pleasure than ever was known in the former ages of
the world” (Thomas 1983, p28).

2.3 Theological preconditions
The understanding of the relationship between people and nature has been strongly influenced by religious beliefs in Judeo-Christian societies. Social attitudes toward nature can bear the remnants of religious philosophies, and while the importance of the Christian religion is declining in the lives of many people, the fundamental assumptions on which many of the current attitudes are based remain.

The relationship between society and nature in the eighteenth and nineteenth century was one of utilisation. However, there were strong theological considerations underpinning the relationship, and in a sense the utilitarian approach was very much a product of the theological standpoint. Any justification for the utilitarian approach could be readily found in the Bible and other Biblical teachings. For example “All that moveth upon the earth, and upon all the fishes of the sea; into your hand they are delivered” (Genesis, ix 2-3).

It was clear then that from a theological point of view, an attitude that saw nature as a resource for the needs of the human race, to be utilised and exploited, to be tamed and domesticated for the service of mankind, was eminently justifiable.

The Garden of Eden had been described as a paradise prepared for man by God, in which man had dominance over all living things (Genesis i, 28). With the fall from grace of Adam (and Eve) this relationship changed, and man forfeited his dominance over the species. Moreover, nature had been “turned against” man. “Thorns and thistles grew where there had only been fruits and flowers (Genesis iii. 18), “the fear of you and the dread of you shall be on every beast of the earth and fowl of the air” (Genesis ix, 2) and “cursed is the ground for thy sake” (Genesis iii, 17). It is clear then that man had lost the ascendancy over nature, though his right to rule remained intact. The ascendancy was not completely lost as it was observed that there was still a natural instinct toward obedience and a willingness to be subject to man’s rule in some animals. Jeremiah Burroughes observed in 1643 “you may see a little child driving before him a hundred head of oxen or kine this way or that as he pleaseth; it showeth that God hath preserved somewhat of man’s domination over the creatures” (quoted in Thomas 1983, p18).
Further evidence of God’s purpose was the fact that specialist animals appeared to have been allocated to places where their specialties were of most use. Thus, camels had been assigned to the desert areas where there was no water, and savage beasts to areas where there were few humans and where the damage they could cause was lessened. Savage beasts also came out at night, when the chances of human encounter were reduced. There are many contemporary references to demonstrate the prevailing belief that animals and plants had been put upon the earth for man’s benefit.

In the early eighteenth century arguments supporting the concept of a benevolent design reached their peak. Thomas (1983, p21) lists a number of quotations typical of this point of view: while the butchering of animals for meat might appear at first glance cruel, the reality was it proved “a kindness rather than a cruelty”. They (the animals) had “no conception of the future, and lost nothing by being deprived of life”, and they also had “no right or property in anything”.

Thus ascendancy of man over nature became the underpinning goal of human endeavour throughout the period between the late seventeenth century and early eighteenth century in Britain. Further, the veneration of nature that was so much a part of many Eastern religions held no sway with the clerics and philosophers of the time, and was seen as a “discouraging impediment” to man’s rightful domination over nature.

In 1967 an American historian Lynn White Jr ascribed blame for modern pollution and the exploitation of nature on the doctrine of the medieval church (White 1967, p155). White maintained that in Christianity and Judaism there was a dichotomy between people and nature. According to the Old Testament (for example, Genesis 1:26-28), man was created in the likeness of God, possessed a soul, and believed in the expectation of salvation. Further, God commands man to fill the earth and subdue it, to have dominion over the fish of the sea, the birds of the air and every living creature. In both Judaism and Christianity, mankind was the master and not a part of the natural world. White went on to say that a more sustainable relationship between people and nature would not occur
until the Christian axiom that nature existed only to serve Man was rejected. White also pointed out the fact that Christianity rejected the notion of animism. Many cultures predating Christianity ascribed Gods to various natural features such as the sea or thunder. The lack of such beliefs, according to White, preconditioned attitudes toward the natural world, and did so in a way that eroded reverence and respect and allowed exploitation free of the shackles of morality.

Nash (1990) also states that there are two additional effects of traditional Judeo-Christian teachings. The first is the effect of the traditional view of “wilderness” being a cursed land, and the anthesis of paradise (Nash 1990, p91). The appropriate Christian response to wilderness (and wild people) was conquest and “civilisation” which in reality amounted to subjugation. The second effect was the response to the concept of the Day of Judgement and the fact that as Christians people were only “passing through” the natural world and their souls would eventually find paradise and rest in another world. The implications of these two concepts led to a reinforcement of the morality that allowed the consumptive use of natural resources.

Lynn White’s thesis aroused much debate, especially as he maintained “religious values are fundamental to the dynamics of social and cultural change” (Nash 1990, p92). Ecotheology became a growing discipline that attempted to solve a range of issues. What religious values were needed to help the West develop a more environmental ethic? Could such values be found within Christianity, or was there a need to look outside the traditional doctrines?

St Francis of Assisi (1182-1226) challenged Christian anthropocentricism with his sense of spiritual egalitarianism and his view that all creatures were created equal. He referred to “Mother” earth. The Vatican demonstrated recognition of the role St Francis played when it announced in 1980 that St Francis was to be the patron saint of ecologists.

One further effect of the Christian religion (and many major religions) was that it emotionally severed people from nature (Woster 1994, p28). The legacy of this is part of
the subject of this thesis, but in addition to the consequences of this detachment, there was also an unusual positive side as well. By being detached from nature, man was able to view nature with the degree of objectivity required by the newly developing methods of science. Modern science required the suppression of subjectivity, and truth was only gained through objective observation. Nature was, and could be studied as, purely a “mechanistic contrivance” (Woster 1994, p29). While the medieval church had a some defining role in determining the beliefs concerning the relationship between humans and nature in a European context, it was by no means the only factor.

Mary Gilmore in her book *Old Days: Old Way*” written in 1934 reminisces about the settlement of NSW, particularly the central and south west. She says she was told “God made everything for some useful purpose … and though we may not know what purpose that is, it is still there” (Gilmore 1934, p79). She further says, in relation to her family, that “… it pleased God that His creatures should be cared for out of the increased plenty that man had been enabled through the gift of reason to take from the earth, which once theirs, had fed its wild children” (Gilmore 1934, p79). She then infers that this position was not the general one and that as soon as animals and birds (either native or introduced) became pests in terms of affecting production, they were destroyed. Religion played an important part in determining how people saw their relationship with nature, but the underlying belief was that nature was there for the use of society, and the effects of this use could be justified in terms of this belief.

### 2.4 The return to nature

In Britain toward the middle of the eighteenth and early nineteenth centuries there developed a movement that saw a veneration of the natural landscape in comparison to the city landscape. Previously the “city” landscape had a symbolic and apparent appeal for its display of “civilisation” of the natural elements. The town was the “home of learning, manners, taste and sophistication” (Thomas 1983, p243). At the beginning of the eighteenth century in Britain, three quarters of the population lived in the countryside, with only 13% living in towns with populations in excess of 5,000 people. A hundred
years later this percentage had risen to 25% and another fifty years later (ie. by 1850) over 50% of the population lived in towns of over 5,000 people.

Mass migration to the cities was a result of the industrial revolution. The revolution also led to a rise in pollution, largely through the use of coal for industrial and domestic purposes. There was twice as much sulphur in the coal used at that time as coal used today (Thomas 1983, p244), and as a result smoke darkened the air, killed trees and plants, and corroded buildings and statues. Further pollution was added by the numerous industrial discharges of noxious fumes and other waste in both the air and water.

The development of a sharp perceptual divide between town and country resulted. The countryside became idealised, with city dwellers “longing for the rural pleasures and the idealization of the spiritual and aesthetic charms of the countryside” (Thomas 1983, p250.) The country itself offered a refuge from the dirt, smoke and noise of the city. The harsh realities of country life faded in the nostalgia and longing of city dwellers to escape from the city. The “summer house”, fitted out with luxuries rare or unfamiliar in “traditional” country houses, became increasingly popular. So did the concept of spending the weekend in the country as occasional refreshment. Religion often consolidated these sentiments, portraying rural arcadia as the product of the hand of god, whereas cities were the product of the hand of man. This sentiment has had a long life, and continued with D H Lawrence saying in 1928 “the country is so lovely, the man made England is so vile” (Lawrence 1950, originally published 1928, p119).

The thinking that there is an essential difference between town and country, and that the foundation of this difference lies in the values ascribed to “natural” creation and “man made creation” will be returned to later. However, the importance of the growing recognition of the differentiation between “natural” and “man made” at such an early stage is important.

The promotion of the virtues of the countryside created a tension between “man made” and “natural”, between town and country, and led to the start of a fabricated notion of a
rural arcadia. Writers, poets and artists who fed the new rural longings refrained from mentioning the harsh realities of country life. Books such as Izaak Walton’s *The Complete Angler* (first published in 1655), Gilbert White’s *The Natural History of Selborne*, (first published in 1788, the year the first fleet sailed to Australia), Flora Thompson’s *Lark Rise to Candleford* and *A Shepherd’s Life* by William Henry Hudson, all reinforced the idyllic nature of country life. However, as Turner (1979) says, all mention of activities that are seen as other than idyllic are excluded and this includes almost all fields of human rural activity.

Other issues emerged within the context of the sentimentality towards nature. As early as 1681 John Houghton, (a prominent English thinker writing in *A Collection of Letters for the Improvement of Husbandry and Trade*) described Hampstead Heath as a “barren wilderness” in need of urgent cultivation (Thomas 1983, p254). There were those who saw uncultivated or unmanaged land as a disgrace, and cultivation a symbol of civilisation over the deformed chaos that was nature. A first step in this process was the “enclosure” of the land, and as Arthur Young (a keen observer and promoter of agriculture, 1741-1820) laments “it is a scandal to national policy that Otmoor should remain unenclosed” (Thomas 1983, p255). There were many like Houghton and Young who saw the stamp of agriculture on the landscape as the mark of progress, the stamp of civilisation and order in an otherwise chaotic world.

Thus it was that enclosure and symmetry became valued. In a landscape characterised by apparent chaos and disorder, mankind imposed symmetry. Fences and hedgerows divided the civilized from the un-civilised, and indicated ownership. The straight lines of the furrow were pleasing to the eye and imposed a certain order. Essential qualities of good husbandry were symmetry and regularity and these were much admired. A legacy of this is the ploughing competitions that are still held to this day, in which, as William Cobbett (1930, p623) observes, the “visual pleasure of a furrow a quarter of a mile long and as straight as if it had been laid with a level” can be found.

During the eighteenth century in Britain, a further 2 million acres of land were brought
into production, and between 1760 and 1820 the parliament had enclosed 2.5 million acres of traditional common fields into regular fields. Not all approved of this relentless march of agriculture with its symmetry and regulation. Some, like William Gilpin found it “disgusting in a high degree” (Thomas 1983, p262.) George Darley said in 1846 “give me wild barren, haggard mountain scenes, in preference to all those close well-cultivated messuages\[3\] and manors” (Abbott 1967, p267). In Britain the enclosure of land by hedgerows and hedges appeared earlier and took place faster than any other country in Europe. Thus the distinction between the cultivated and the wild; the civilised and the uncivilised and perceptions of the aesthetic and the non-aesthetic emerged sooner than in Europe. The aesthetic opposition to agriculture with its straight lines and symmetry, and the return to the “wild” and unkempt became expressed in more than just rhetoric.

Typically English gardens had been laid out on a symmetrical basis, and were cultivated and manicured to the extent that they were examples of “a mastery over nature”. It was these qualities of structure, order, enclosure and management that provided pleasure to the observer. However, in the mid 1800s gardens became less formal as a response to the belief that there were aesthetic qualities associated with “naturalness”. It is not surprising then that at the frontiers of agriculture where people were still carving out a living from a relatively untamed landscape, that the new mystical attitudes toward landscape were far from universally accepted. Further, those whose interaction with the landscape constituted brief visits rather than a continuous occupation were more inclined to take on the new romanticism of landscape. After all, a perceived freedom from nature gave one the ability to see it in a different light, to appreciate its romanticism and not just its function. The qualities of landscape could be defined in terms other than its potential use for agricultural production; its ability to be tamed and captured and the degree to which man could subjugate it to his control.

To fully appreciate the qualities of the mid nineteenth century garden, one had to be familiar with the new sensibilities and romantic artists such as Claude, Poussin and

\[3\] A portion of land assigned for a dwelling and the land associated with the dwelling
Salvador Rosa (see Chapter Seven). For appreciation of the traditional garden and its visual references, one required a more classical knowledge of literature and history.

2.5 The building of ecological thought

A number of key thinkers illustrate the building of ecological thought.

2.5.1 Linnaeus

A moulding of Arcadian “Christian” philosophy of nature and scientific or imperial philosophy – is provided by Linnaeus (1701-1778) in his essay The Oeconomy of Nature where he attempts to discover the nature of God’s hand in natural systems. Linnaeus sees the connectedness and interdependence of species, and that there is a cyclical pattern that once disturbed returns to a natural state. Linnaeus saw these cycles all through nature, and attributes the phenomena to the hand of God, created by God for the purpose of rational order and harmony. Linneaus maintained that the principle driver of natural cycles was hydrologically based, found in the water cycle of evaporation, rain, swamps, river systems and eventually marine systems that fed evaporation. Thus the perpetual circulation of water was the cycle that underlay all other cycles. Man, according to Linnaeus, had been accorded a special place in the hierarchy of things, and it was the role of mankind to utilise what God had made available to him to his best advantage.

2.5.2 Gilbert White

In 1788 Gilbert White published what is now seen as a definitive work, The Natural History of Selbourne. White died in 1793 and never lived to see the success of his book, which has been reprinted many times since. In 1784 White was appointed curate of Selbourne, and his letters, perhaps the most important segment of the book, originate from his rides around Hampshire visiting his parishioners. That White’s writings pay a deep reverence to divine Providence reflects his religious background. White’s writings have several important elements. The first is that they illustrate the deep
interconnectivity of living creatures, and that the various species of living forms depend on other species for their existence and wellbeing. One example used by White was cattle standing in a pool in the summertime cooling off, which provide for insects by their droppings, and these insects in turn provide food for fish. White showed that nature was not just a collection of individual species, but an integrated and interdependent web of life where everything had a function and purpose.

White’s appeal was such that the Selbourne Society was established at the end of the nineteenth century, and his philosophy took on almost mystical properties. For example, an anonymous American writer referred to the “new gospel of nature” that sought to regain “a personal relation of every man to the world around him, and through that world to God” (quoted in Worster 1994, p16). It is not surprising then that this theme was echoed in some of the landscape painting of that period, where significant topographical features such as dusky crags or snow capped mountain peaks surrounded by “wilderness” were designed to be read as semi religious paintings.

2.5.3 George Perkins Marsh

Experience in the New World gave reason to question traditional thinking about the relationship between man and nature. In 1864 and at a time when America was supremely confident about the inexhaustibility of its resources, George Perkins Marsh published *Man and Nature*. As Lowenthal (1995, p.viii) says, “few books have had more impact on the way men view and use the land”. The book was intended to be a small volume that showed how man had made the earth rather than how the earth had made man (the earth implying “God”, the commonly believed view based on religious teachings). Marsh (1864, p43) says that human activities “would reduce it [the earth] to such a condition of impoverished productiveness, of shattered surface, of climatic excess, as to threaten the deprivation, barbarism, and perhaps even the extinction of the species”. Marsh based his arguments on two beliefs: the first was that without the impact of humanity, nature was in balance or harmony, and that the effects of human interaction were to disrupt this harmony. His second belief was that humanity had developed
enormous powers to change and alter the natural world, and that this and the effects of this went unrecognised. Such a power created change that could not be reversed. At the time of Marsh’s writing few people worried about the impact the activities of humanity had on the natural world. Many of the issues that Marsh raised are pertinent today. One was the issue that nature, once dominated and damaged by man, did not automatically heal itself. Another issue was that it was not humanity’s power to change nature that was the problem, but that the extent and effects of this power were largely unrecognised. Marsh was instrumental in changing the course of forest management in the US and to a lesser extent in France and Italy (Lowenthal 1995, p.xxii).

A German traveller, travelling through the USA in the 1830s is quoted as saying “The Americans love their country, not, indeed, as it is, but as it will be. They do not love the land of their fathers, but are secretly attached to that land their children are destined to inherit” (Lowenthal 1995, p.xxvii). George Perkins Marsh would have agreed with this sentiment, as he believed that unless mankind mastered nature, mankind would be forever its servant. While Marsh had a strong belief in the power of science and its ability to break the shackles of the master-servant relationship in regard to nature, he was fully aware of the impact mankind had on nature. Marsh saw man as not being part of nature, but as “a free moral agent working independently of nature” (Lowenthal 1995, p.xxiv), and in this way was able to separate man and nature. Conforming to the common belief at the time, Marsh saw nature as being essentially static, and that the impact of man was to destabilise this state, often to the detriment of both man and nature. There was a natural tendency, Marsh thought, for nature to return to a static state, which when left alone would provide for the greatest amount of what we now know as biological diversity, and which in turn tempered the inorganic extremes. While Marsh conformed to the thinking at the time about the stable “state concept” of nature, he differed from the current thinking that the impact of man on nature was negligible. It was clear to Marsh that such thinking was totally inaccurate when the impacts of colonisation in the New World were considered. While in Europe change progressed slowly, this was not the case in the New World where in one lifetime the land could be discovered, cleared and cultivated. It was almost as if these new settlers were on a crusade, intent on doing the
Lords work, and as Lowenthal (1995, p.xxiv) says

Even when Man’s power to transform nature was recognised, few took alarm; man was improving his earthly home in accordance with divine intent, and the bounty that followed forest clearing and swamp draining was evidence of God’s approval. Especially successful in turning nature to their own account, Americans considered themselves a chosen people – they were not mere servants, but junior partners in God’s great enterprise.

Marsh saw it differently, and while he agreed with the special powers given to man, he saw these powers as being for the sustainable use of and not the consumptive use of all that surrounded him. There was a duty of care entrusted upon mankind in his interaction with nature.

In a letter to botanist Asa Gray (May 9, 1849), Marsh (quoted in Lowenthal 1995, p.xvii) wrote:

I spent my early life almost literally in the woods; a large proportion of the territory of Vermont was, within my recollection, covered with the natural forest; and having been personally engaged to a considerable extent in clearing lands, and manufacturing, and dealing in lumber, I have had occasion both to observe and to feel the effects resulting from the injudicious system of managing woodlands and the products of the forest.

Marsh felt that informed self-interest was sufficient to solve the problem of the destructive and wasteful use of natural resources. Mankind depends on soil, water, plants and animals for its survival, Marsh maintained, and therefore it was in the interests of mankind to understand the impact it had on nature not just for the survival of nature, but also for the survival of mankind. *Man and Nature* provided lessons from the past and the present in an attempt to better inform people about the impacts of their interaction with nature. As Marsh (1864, p3) said in the preface of *Man and Nature*:

The object of the present volume is: to indicate the character and, approximately, the extent of the changes produced by human action in the physical conditions of the globe we inhabit; to point out the dangers of imprudence and the necessity of caution in all operations which, on a large scale, interfere with the spontaneous arrangements of the organic or inorganic world …to illustrate the doctrine, that man is, in both kind and degree, a power of a higher order than any of the other forms of animated life, which, like him, are nourished at the table of bounteous nature.
According to Lowenthal (1995, pxxii), Marsh’s work initially had a greater impact outside the US than within the US. It was several decades before the US forestry industry made changes along the lines Marsh had suggested, and the book received a rebirth in the 1930s when it was acknowledged by the then Secretary of the Interior, Udall as being the “beginning of land wisdom in this country” (Lowenthal 1995, p.xxii).

While Marsh specifically dealt with new ideas about the interaction between man and nature, he accepted the prevailing doctrine about nature, that being that it constantly tended toward a stable state.

2.5.4 Henry David Thoreau

Henry David Thoreau’s *Walden* (first published in 1853), is relevant to this thesis in two important areas. Firstly, Thoreau studied the effect that people had on nature. Concord had only been settled for approximately 150 years, and Thoreau attempted to plot the changes in the environment during that time and by so doing gain an understanding of the effect of colonial settlement. Secondly, Thoreau’s interests lay in silviculture, and he observed what had happened when forests were cut down, and the species that emerged as a result. Forests of oak did not immediately return to oak, but passed through a succession of other species. The reasons for this were to be discovered later (Thoreau incorrectly speculated on some of the reasons), but what is important here is that he was the first to identify that there were a succession of different states until the final (climax) state was reached. For Thoreau it was the oak forests that were, he believed, in a steady state (or “primitive state” to use his words) before the arrival of the first colonists.

The tension between the mechanistic view of nature with the “life force” view of nature was dealt with by Thoreau. In essence this debate was spirituality versus science. Could science and mechanics explain all of nature, or was there something inherent in nature that could not be explained by such an approach – a life force that could not be measured by science? Thoreau believed that nature should be treated with respect, if not reverence, and for Thoreau it seemed that science valued things more when they were dead (as part
of collections and objects of research) than when they were alive. “The gathering of objects for study and display was seen as a refined and educated form of hunting, but it was no less imperial” (Griffiths 1996, p19). The romantic, biocentric approach to nature is more a reality of the past than the present, but the lack of respect, reverence, or belief that nature is something more than a factor of production or an aid to mankind’s pleasure, is a lingering sentiment that remains today.

2.5.5 Charles Darwin

Charles Darwin’s contribution to ecological thought through the publication of *The Origin of the Species* in 1859 was profound in that he laid out a number of logical steps on which he built his thesis, and these steps provided an advance in the understanding of ecosystems. While the material in these steps was not necessarily new, the way that they were put together was.

The first step was to see nature as more than just a collection of species, but an interrelated web in which no single species could survive on its own. Thus the removal of one species affected the whole system in some way. Not only were various species dependent on one another, there was also fierce competition within the system for things such as place and food. The idyllic notion of peace and harmony between all species as White had presented, was not the reality.

The second of Darwin’s conceptual platforms was that various species occupied specific places in nature that were determined by function rather than by species. Thus the grasslands provided a “place” for herbivores, but did not determine what species those herbivores should be. Kangaroos in Australia played the same role as bison in the United States. Thus the distribution of species was based on function rather than the discretion of God.
Darwin’s third platform related to the concept of change, how it was endemic to natural systems and how the idealist world of the romantics was in fact a highly competitive world of life and death.

As detailed above, the concept of change was not a new one in the growing field of ecology. Thoreau, who saw change in an ordered sense, replaced White’s static view of nature. Darwin saw change as ongoing and thought it could take place in two ways.

The first way was his basic theory of evolution in which species evolved through time and through a process of competition for place which led to the more efficient species replacing the less efficient ones. The other way change could occur was when adaptation or evolution allowed a species to fill a niche in nature that had not previously been filled. This second idea was essentially the idea of divergence, where species gained prominence through using unfilled niches in nature rather than out-competing other species for existing places. Thus either being an effective competitor or being different (individual variation) was an important pre-requisite for establishing a place in nature.

Darwin’s ideas of survival of the fittest fitted well with Victorian ideas of ascendancy and superiority. Marsh, writing in 1860, had linked the notion of civilisation with ascendancy over nature where the difference between savagery and civilisation is reflected in mastery over nature, and where an individual’s development in a civilised society was original and self determined. This was opposed to development in an uncivilised society which was seen to be determined by the peculiarities of place of birth and natural causes (Marsh 1860)

One of the characteristics of a civilised society was a control over the natural world, and Darwin’s thoughts in no way detracted from this belief. In the highly competitive world of nature, mankind had a right to fight for survival and become dominant. Strength and power were after all indicators of superiority, and in the shift from savagery to civilisation, dominance over nature was a natural outcome. This view of the interaction between man and nature was further fuelled by the obvious implication of Darwin’s
work, ie. that mankind was just another form of natural species, and the special hand of God had not formed mankind. Mankind was not separate to all other species, but had evolved along with other species from very humble beginnings. To dominate nature was, for mankind, just a progression of the process of evolution.

This rationalising of the dominance of man over nature did not fit comfortably with everyone. While few doubted the dominance and what that meant, the reasons for it were still questioned. Was mankind part of, or separate from, the rest of nature? Thomas Huxley for example, in his *Evolution and Ethics* lecture in 1893, argued strongly that it was mankind’s moral capacity that set man apart from other species (Huxley 1905). Because mankind could be dominant over nature, did that necessarily mean that it should dominate? The degree of domination is still a matter for debate even today, with questions being asked about the extent of modification to natural systems that is acceptable. However, in today’s debate the issue is more than just ethics – it relates to sustainability issues for both natural systems and human systems.

2.5.6 Fredrick Clements

There is one final step in the development of ecological thought that is important in relation to this thesis. That is the concept of climax theory. Early geographers such as Alexander von Humboldt had a romantic approach to phytogeography, asserting that plants were social creatures and grouped together in communities with the nature of the various communities reflecting the dominant species. Followers of Humboldt were not totally satisfied with this approach to phytogeography, and suggested that rather than just the social solution to community composition, there were three principal factors that played a part in determining the plant community. These were the adaptive form or structure of plant species, the social community and climate. In this later stage of thinking climate had taken the place of hydrology in earlier thinking, and climate more often than not translated into broad belts of latitude graduating north and south from the equator. Darwin discounted the importance of climate as an element in the determination
of species composition, and it was later shown by Warming (1977)\textsuperscript{4} that plants that were genetically different reacted to the same environment in similar ways. A major influence on the progress of ecological thought was Warming’s belief that communities do not remain the same, and that within one habitat it is possible for communities to change from one state to another. This principle ran counter to the belief that species composition was as a result of the hand of God, and was more in line with the beliefs of Thoreau when he talked about forest succession in Concord, USA. Warming sowed the seeds for the idea of a “climax” community, or the final community composition to which a community is drawn.

The idea that communities were not stable or fixed and that they progressed toward a final or “climax” stage was pursued by Fredrick Clements (1916) an American ecologist in the early part of the 20\textsuperscript{th} century. Clements described the system of progression from an unstable and primitive state to a stable complex equilibrium as a “sere”, and he said that any destabilisation from the general trend line of progression would only be temporary, and in the long term a community would progress toward its climax state. Clements saw the development of communities as similar to the growth of a plant or animal, where there were certain set stages that the community went through on their way to an eventual predetermined end. Impediments to growth were caused by local conditions, and these may have been minor temporary impediments, or may have some more lasting effect that prohibits the final climactic state. Clements’ work was based primarily on his knowledge and understanding of the American short grass and long grass prairie, and it was his belief that this “biome” (mixture of plants and animals) was the climax stage, given the prevailing conditions of variable and limited rainfall, and high evaporation rates. Clements merged animals and plants in his biome, thus joining the two principal strands of ecology that had until then been largely separate. Clements saw the American prairie as a landscape in a “virginal” state, and a balanced (and therefore not

\textsuperscript{4} In 1909 (republished in 1977) Eugenius Warming published The Oecology of Plants: An Introduction to the Study of Plant Communities in which he reviewed his study into the effects of habitat factors on plant growth. Warming pursued the concept of mutualism to the extremes of parasitism and symbiosis as concepts in the understanding of how plant communities function.
(dynamic) “climax” ecology. The fauna including large animals and Indians lived in stable harmony with the remainder of the biotic community, and when European settlers came, Clements saw them as outsiders, and outside the ecological system. The role of people then was ambiguous, and whereas indigenous people were seen as part of nature and the natural system, European settlers were not.

In Clements’s view of the climax state there could only be one climax state for each situation. As Woster (1994, p391) put it:

If the sequence began on bare rock, the pattern of succession was called “primary”; when the vegetation had been disturbed but the soil not destroyed, as when a fire swept across the prairie or a hurricane levelled the wood, ecologists spoke of a “secondary” succession. Either variety was supposed to reach a final resting point. Succession marched down a straight and narrow road to equilibrium, also called the climax or homeostatic stage.

The questions still remained. Was this final state truly stable state or not, and was there by definition only one climax state? As early as 1926, Clements had been challenged by Henry Gleason (1926), when he argued that rather than a community of species living together in harmony and altruism, the reality was a community that was in a constant state of flux, with each species fiercely competing against others for survival. In the late 1970s this idea was again rediscovered by two American biologists Connell and Slatyer (1977) with the emphasis now being put on “disturbance” (either man made or natural) as the key driver of heterogeneity. With a better knowledge of the changes in climate through lake sedimentation and palynology, scientists were able to build a more accurate “history” of change, and the disturbing role played by climate. There were other disturbances as well and much has been made, for example, of the role of fire, especially in the Australian context (eg. Pyne 1991). More generally though, thinking moved away from the steady state climax theory to a more general acceptance that the nature of the biomas was shaped by intensive competition between species and was in constant evolution. Attention was increasingly paid to the interaction and interdependence of species and symbiosis between species, and the nature of an ecological community as being more that just a collection of independent species. Out of this has come recent thinking about the importance of biodiversity, the maintenance of species diversity and
the relationship with ecosystem function. While this move is in part driven by commercial reality (and the loss of potentially commercial species), it is in large part driven by the recognition that species loss compromises community integrity and function, and often in ways currently unrecognised.

Discussion of Clements has relevance to the Western Division of NSW. Recent landscape ecological thought (eg Ludwig et al 1997) in the Western Division of NSW sees these landscapes as inherently patchy and non homogeneous. They are very functional in the sense that landscape structures conserve water and scarce nutrients. Ludwig et al (1997) maintain that a loss of patchiness leads to a loss of landscape function, and that proper landscape management relies on maintaining this patchiness. While the Clementsian framework holds well for rangeland systems where “successional stages are clearly defined ...(and) where climatic cycles are quite regular and where livestock grazing systems are highly seasonal” (Ludwig et al 1997, p9), the Clementsian theory fails to deal adequately with special interaction or landscape structures. Ludwig and Tongway (1997, p51) liken a functioning landscape to one that is capturing resources, and a dysfunctional landscape as a landscape that is leaky and allowing resources (such as water and nutrients) to leak into other systems. They see a continuum of landscape function ranging from fully functional (a “conserving” landscape) to a dysfunctional one (a “leaky” landscape), and the point on that continuum at which the landscape actually is as being a value judgement on the part of those who inhabit or manage the landscape. Biodiversity is now seen as part of a properly functioning landscape, and is also dependent on a properly functioning landscape for its survival. The management of such landscapes is seen as a continuous trade off between off take and returns to the landscape, and the maintenance of landscape function.

2.6 Conclusion

Consistent with the ideas of the “New Ecology” eg Botkin (1992) there is an emerging recognition that the natural state of the ecology of the Western Division is a continual state of flux rather than equilibrium.
In the 140 years of settlement of the Western Division, attitudes and beliefs about the role of man in nature were changing. In many respects the attitudes and beliefs of those on the land reflected the more traditional ways of thinking about the relationship between man and nature, and these more traditional views were strengthened by financial and administration systems that were the product of earlier attitudes. It is important therefore in any study of attitudes towards change in Western NSW to fully understand the philosophical context in which this change was to take place.

In today’s context, it is easy to look back to earlier relationships between people and the natural world in the Western Division and be critical. We now understand more clearly the effects of certain land use practices, and the sort of time frames in which these effects are likely to take place. The interaction of Europeans and the natural world of the Division has led not only changes in nature, but also changes in the attitudes and values of those who occupied it. Rather than seeing drought and floods as the enemy, they are now seen as natural and normal. People have learnt to appreciate the aesthetic beauty of the landscape for its own sake, and no longer strive to recreate past homelands. However, a legacy of the past remains in the rhetoric of the occupants: sentimentality surrounding place and landscape is not seen publicly as a positive attribute, such feelings being kept privately.

Looking back, given current attitudes and values toward landscape, it is hard to understand how the negative changes in the semi arid landscape of NSW could have been allowed to continue for so long. Judging by today’s standards, we are hasty in our condemnation of our forbears. The current thinking on the relationship between mankind and nature has been derived by encounters such as those that occurred in the Western Division of NSW. Contemporary religious thinking at the time of settlement provided the imprimatur for consumptive resource use. Not only did mankind have a right to use natural resources in any way for the betterment of mankind, it was almost an obligation. Following that was the thinking that the gradient from primitive to civilised in society was reflected in the control that a society had over nature. Primitive societies were those
that had least control over the natural elements. Civilised ones were believed to be those that exerted the most control over nature, and were able to “bend” nature for the purposes of mankind. Prevailing views of indigenous people in Australia regarded them as “primitive”, reflecting, no doubt, their perceived inability to alter nature to their own advantage. Contemporary thinking had blinkered European settlers from seeing the true nature of the indigenous relationship with the natural world – ironically a relationship of which current generations are only now appreciating the significance.

White’s Arcadian bliss of Selbourne was shattered by the advent of the mechanised world of farming, and the realisation that all species were not living in a peaceful coexistence, an illusion created through the experience of living in highly modified and relatively stable ecosystems. The advent of the mechanical age put new stresses and challenges on social systems, and changed traditional structures through the creation of non-traditional pathways to wealth and power. Industrialisation challenged traditional values and created nostalgia for the past, especially past relationships with the natural world. The role of agriculture in European society still reflects some of these values. Religious values gave comfort to a mistaken understanding of the functioning of natural systems and the relationship that mankind had with these systems. This prevailing view continued to the early to mid nineteenth century when the work of Darwin and others challenged conventional thinking of the functioning of natural systems. The effect was to de-spiritualise and de-mystify much of the thinking about nature, and this resulted in a reaction that reinforced the religious and spiritual connotations of natural systems. At about the same time the effects of mechanical farming were becoming more obvious, as mankind’s potential ability to alter the nature of the landscape increased exponentially with the advent of mechanical aids. Nowhere were the effects of this clearer than in the new colonies of Australia and especially America. Naturally forest systems were the first to show the effects as change was rapid following the felling of trees and clearing of the landscape. Agricultural land was next, partly as it was settled somewhat later (being drier), and partly as the changes were not so immediately obvious. The full effects of inappropriate land use in the American mid west were not felt until the 1930s.
The change in pasturelands was slower and harder to recognise in a highly variable climate like western NSW, but none the less significant. Not only was it initially hard to work out what was a good year and what was a bad year (was drought the norm or the exception?) but change was slow, and in terms of animal production, not always in ways that were entirely negative. Just as the landscape changed through the presence of livestock and changed management practices, knowledge of landscape function changed and developed. The idea that human intervention caused no response in landscape function changed to a passive response and then to climax theory, where disturbance would only delay progress toward the ultimate state. It is only relatively recently that there has been a general acceptance that the process of change can be permanent, and lead not to one state, but to a range of potential states that are again subject to change through disturbance. Recent attention has shifted from the process of change to the concept of “intactness” of ecosystems and the maintenance of biodiversity.

It is clear that the approach of the traditional scientific paradigm of reducing and isolating phenomena is making way for a more holistic or “ecological” approach. The conservation of landscape (and hence all landscape values) is a social, scientific and economic question. Technology is not necessarily the solution to all social and ecological problems. This means that the conventional homocentric approach that studied natural systems in relation to man should be replaced by an approach that saw man as part of such systems and not adjunct to them. It is clear that a functional understanding of ecology relates not just to the study of a single blade of grass, but it also operates on the scale of the river valley, the mountain range, and the hydrosphere, not merely codifying but also emphasizing the desirable.

Throughout the time of settlement of the Western Division there was no clear ideology about the relationship between mankind and nature. Even the discipline of ecology was only slowly emerging, with no clear conceptual framework until at least 100 years after settlement. The two points that emerge from this are that firstly, the change in the nature or the composition of the biomas throughout early settlement was sanctioned by an underlying set of attitudes or beliefs that saw nature as a resource for the use of mankind.
Emerging science (plant breeding, animal genetics and agronomy) together with the use of mechanisation, increased the rate of utilisation and modification of the landscape. While concern was raised early on about the effects of overstocking, drought and rabbits (by the Royal Commission 1901), the major thrust of these concerns was based on the loss of productivity and profitability, rather than on any permanent deterioration of the ecosystem. Ecological thinking in these early years (as shown in the preceding discussion) centred on the steady state or climax concept whereby ecosystem function meant the return to a steady or preordained state following disturbance. The natural world was seen as being in a steady state, and the idea that it could have been an inter-related system was not to come until later. The supposition (as reflected by some of the green groups currently) was that the steady state was the condition of the landscape as early settlers saw it. The abundance of grass and depth of organic litter reflected under utilisation rather than any essential condition. The concept of fire as a management tool was completely alien to thinking at the time, and to a certain extent still is to landholders. Fire was simply seen as a waste of grass that could otherwise be used by domestic stock.

An emergent understanding of the way the ecosystem functioned appeared late in the history of European settlement, and for many emerged after significant change had already occurred. One side of science and technology held out the promise that settlers could “have their cake and eat it too”, while another side pointed to the irrevocable consequences of change. As time progressed it became clear that “mankind” was not the master of nature, and that the pastoral community had to live within the parameters presented by nature. The evolution of interaction between pastoralists and the environment progressed with an increased knowledge of how the environment functioned, a change in that attitude toward the nature of the interaction and an increased knowledge of the consequences or outcomes of the interaction.

In this chapter the history of thought on how society related to the natural world in which it found itself has been traced. The development of this wider social understanding was reflected in changes to individual attitudes and values as well. Ways in which attitudes and values relate to and affect behaviour is discussed in the following section.
Chapter Three: 
Attitudes, Values and Behaviour

As there appears to be a contradiction between the land use practices of pastoralists in the Western Division and their individual attitudes and values (based on my experience prior to commencing this research and confirmed during the research), it is important to understand the psychological literature on the relationships between attitudes, values and behaviour. That is the objective of this chapter.

Able et al (1996) state that traditional models of behavioural change in agriculture have concentrated on changing attitudes and values with the belief that appropriate changes in behaviour would follow. However, the relationship between behaviour and attitudes and values is not necessarily simple. Do changes in behaviour lead to changes in attitude, or do changes in attitude lead to changes in behaviour? Given that an individual can hold contradictory attitudes, how and under what circumstances are these expressed? Do such things as context, the age of the individual, perceived ability to be effective, and experience make a difference in the relationship between attitudes and behaviour? The answer would appear to be in the affirmative, and while there is some understanding of the relationship there remain many grey areas.

The distinction between the attitudes and values of a society and the attitudes and values on any particular individual within that society is blurred. Basic values are learned socially, and they may or may not be modified by the individual. Social values and individual values may or may not be consistent, as individual attitudes and values may reflect a different hierarchy of values to that of society.

Attitudes and values embedded within a particular culture provide the wider context in which the individual operates. Understanding this context is important as to a large extent it provides boundaries to the range of potential actions or activities of an
individual. For example, it would be very difficult for an Australian pastoralist to become a “nomadic” livestock herder. Firstly, the laws and regulations of our society would make this kind of activity almost impossible. Secondly, the prevailing cultural norms would mean that any individual who attempted this sort of activity would become ostracised from the group.

There are three important components of culture which are said to influence observed behaviour: beliefs, attitudes and norms (Ajzen 2001, Wood 2000). Beliefs, attitudes and norms have been described by the Dictionary of Anthropology (Seymour Smith 1992) to be as follows:

Beliefs are statements held by individuals about what is perceived or known to be reality and they are understood to be true by those who hold them. Shared beliefs help define a culture and group perspectives. It is quite possible for an individual to hold a belief that is totally invalid. For example, some pastoralists may hold a belief that the landscape of the Western Division is little changed from when it was first settled and as a result current landuse systems are appropriate for sustainable use. However, evidence does not support such a belief.

Attitudes are held by individuals and relate to feelings such as respect, hostility, affection and familiarity. Attitudes manifest themselves in certain patterns of behaviour. Attitudes are commonly used to describe feelings that influence behaviour in a wider context. Attitudes therefore relate to a way of behaving.

Norms define acceptable types of behaviour and are symbolic expectations of behaviour. Within a culture, they define the limits of acceptable behaviour. Some confusion in the definition of norms arises through confusion between expected behaviour and common behaviour. The sense of a moral commitment to norms makes no allowance for pragmatism. Symbolic statements that relate to what is right or wrong, or good or bad are described as values. Values are qualities that are regarded by individuals or groups as important or desirable, and can be used to set standards of principles. They underpin
attitudes and are culturally determined, and influence individual and group behaviour.

3.1 Attitudes

The concept of attitudes is used extensively throughout this thesis and it is important to re-emphasise why the concept of attitudes is so important. In looking at the relationship between people and landscape in the Western Division of NSW it is tempting to identify attitudes through observing behaviour. Thus the observation of certain practices or patterns of behaviour would lead to certain conclusions being made. The absence of behaviour could also be taken to mean the absence of predisposing attitudes. However, as will be shown in this thesis, this may not necessarily be the reality. Attitudes are only intervening variables in the determination of behaviour, and by their nature cannot be observed directly. Attitudes are not the sole determinants of behaviour, and it is important to outline the complexity of the relationship. By better understanding the relationship between attitudes and behaviour, and through a better appreciation of the possible intervening factors, it is easier to explain the apparent dichotomy between behaviour and attitudes of pastoralists in the Division.

Throughout this thesis the terms attitudes and values are used, and so it is important to explore the meaning of these concepts, and their relationship to behaviour. This relationship is still controversial, though the general weight of opinion is now that there is a low correlation between measured attitudes and behaviour. While this does not say that there is no relationship between attitudes and behaviour, one explanation for the low correlation is that there are other factors besides attitudes that have a greater effect on behaviour. An attitude has been defined as the residue from a past experience retained by the individual that defines or influences a response (Jaspers 1986, p275). As a result there is an understanding that attitudes have an affective or dynamic quality. Values are seen to be evaluative components of attitudes, or attitudes on the broader scale that lack the dynamic action oriented qualities of attitudes.

Following is a brief literature review of the current ideas surrounding the relationship
between attitudes and values and their interaction with behaviour. The two key references were Wood (2000) and Ajzen (2001) and many of the ideas discussed below are credited to them.

In Wood’s (2000) literature review three basic factors that promoted change or resistance to attitudes were identified. These were considerations of self interest in relation to the individual, the relationship between the individual and others in terms of rewards/punishment, and beliefs about reality.

Attitudes can also be seen as intervening variables in the determination of behaviour, but by their nature cannot be observed directly. The concept of attitude is understood to be one of the key concepts of social psychology, but it initially suffered from a range of different meanings. Allport’s classic definition of attitudes is that they are “a mental or neutral state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related” (Allport 1935, p810). This original definition was a catch-all definition attempting to bring the various “types” of attitude (such as mental attitude, moral attitude and even the meaning of the word as used in art) under a common definition. According to Jaspers (1986, p256), this definition fails in several important areas. The first is that it provides no account of the durability of the disposition, nor does it accommodate other drivers such as instincts and habits. Secondly, it fails to handle the issue of a common or collective response to certain stimuli. Attitudes must necessarily be individually held, but somehow arise from group dynamics, and it is not clear how this definition handles this given the close association between attitudes and experience. Thirdly, there are a number of other stimuli that are not covered by the concept of attitudes. How, for example, are factors like courage, generosity, humility, generosity and love accommodated?

Campbell (1963) referred to attitudes as being an “acquired disposition” and in this way accommodated many of the criticisms levelled against Allport’s definition. As attitudes by definition are not directly observable, they presented a problem for behaviourists whose study of behaviour was strictly related to observable activities. The way around
this fundamental problem for behaviourists lay in the way attitudes were measured. By asking for a verbal response from people to various stimuli, researchers were able to state that attitudes were “a type of verbal response by which a person describes himself” (Jaspers 1986, p256). It would seem that most psychologists now agree that attitudes are more than a simple and observable response, and attitudes are variables within an intervening process. This view is supported by Eagly et al (1996, p155) who stated “attitudes may be viewed as having various motivational functions, among which are knowledge, instrumentality, ego-defence, value expression consistency and uniqueness” and by Ajzen (2001, p3) who indicated:

Attitudes provide a frame of reference for organising information about the world (knowledge function), attaining rewards and avoiding punishment (instrumentality or utilitarian function), managing emotional conflicts (ego defence function) expressing one’s sense of self, personal values or identity, (value expressive function), viewing oneself as being consistent (consistency function) and distinguishing oneself from other people in a social group (uniqueness function)

Given that attitudes have an effect on the orientation of behaviour (and acknowledging other variables such as social and private norms also have an effect) what form does this take? Do attitudes prescribe specific responses, or do they act as a boundary in which it is possible for a range of actions to take place? Learning theorists would say that attitudes define particular actions or responses given particular situations. Cognitive theorists would, on the other hand, say that attitudes act more like a template through which reality is seen. These two approaches illustrate a fundamental difference in approach to attitudes (Jaspers 1973). Are attitudes an automatic response to stimuli (motor attitudes) or are they a learned response? The consequences of the difference are important. If attitudes prescribe a specific response, then this implies that they are not enduring. Attitudes in this concept have nothing to do with the evaluation of incoming stimulus, and therefore would be challenged by cognitive theorists who see cognition and the evaluation of stimuli important in determining behaviour.

Attitudes were long regarded as having three component parts (Jaspers 1973, p263): cognitive, affective and conative. This component separation relates to the distinctions
made above. The conative part was defined as being the action or response part, and for the learning theorists represented the dominant part. The cognitive part was for the theorists the recognition and understanding component, and in this way provided a range of possible outcomes. The affective component referred to a person’s emotional feelings about the worth of an object in the sense of liking or disliking it. Work by Campbell (1963) and Vidulich and Krevanick (1966) show that, not surprisingly, there is a positive correlation between the cognitive and affective components. Hence there is a potential to change the way people feel about things by providing more or different information about the subject.5

Others (for example Fishbein 1963, Jones and Gerard 1967) have included the concept of value or expectations in relation to the object. Thus the perceived instrumentality or usefulness of a subject are subconsciously evaluated against the person’s goals or objectives and in this way affect attitudes. For example, a person’s attitude toward land clearing may be affected by the belief that “people with properties that are well cleared make more money”, and therefore as a person who wants to make money, that person might hold a more positive attitude toward land clearing.

The foregoing discussion has centred on the nature of attitudes in an attempt to understand better the relationship between attitudes and behaviour. Landcare has funded many activities (such as tree planting, the reclamation of eroded gullies etc) by investing in a large number of small community projects and hoping through this process to change attitudes and therefore subsequent actions, although, as stated earlier, Able et al (1996) report that most efforts at changing agricultural behaviour start with the aim of changing attitudes first. Wicker (1969) shows that little or no correlation exists between attitudes and behaviour and this brings into question the assumed relationship between attitudes and behaviour that underpins such strategies. This is not to say that there is no relationship, but it is just saying that in the expression of other factors is more dominant.

5 The reverse has also been shown to hold, where a person’s feelings about something were changed through hypnotic suggestion, and this in turn changed the person’s beliefs (cognitions) about the subject (Rosenberg 1960)
Wicker goes on to list a series of possible factors, which he breaks down into two groups; personal and situational.

In the context of personal factors, Wicker listed other attitudes, competing motives, verbal, intellectual and social abilities and finally activity levels. Situational factors were seen to include the actual or considered presence of certain people, nominative prescriptions of proper behaviour, alternatives available, specificity of attitude objects, unforeseen extraneous events, and the expected and/or actual consequences of various events.

In relation to environmental matters, traditional theory appears to present a dilemma in that pro-environmental attitudes can often be at odds with direct individual benefit in the sense that the benefits of certain actions are shared by the whole of the community (socialised) but the costs are usually born by the individual. For example, recycling represents an increased workload and associated loss of time and amenity for the individual but is a direct benefit for the wider community in that it has the potential to reduce resource wastage and energy consumption. However, there are people who are prepared to make these sacrifices, and the question is what motivates people to undertake these kinds of actions.

Much research has been undertaken in the area of attitude theory; how attitudes are formed and activated and the relationship between attitudes. There is general agreement that attitudes are a summation of feelings such as good/bad, pleasant/unpleasant, likable/unlikeable in relation to a certain object or situation (Ajzen and Fishbein 2000). However, it has been shown that there is the possibility of holding dual attitudes about a certain situation or condition (Wilson et al 2000) and this can occur when attitudes are changed. New attitudes do not entirely replace the old and as a result one attitude is implicit or habitual and the other is explicit. According to this theory, motivation is required to revert from the implicit attitude to the explicit one. The implication of this is that the apparent discrepancy between attitudes and behaviour in certain contexts can sometimes be explained by this dual attitude approach, and that the particular actions
exhibited are related to and dependent on context and relevance.

3.2 The evaluation of outcomes: the expectancy-value model

According to Thurstone’s (1931) early definition of attitudes, attitudes reflect a disposition toward a particular psychological object, and in this sense reflect a disposition to evaluate the object in a particular way. The implication is that there is only one attitude (disposition) toward any one object.

This model of dual attitudes holds that where there is a duality of attitudes in relation to a particular object, one attitude will be explicit and one, the dominant one, implicit. To retrieve the explicit attitude according to this theory requires motivation and capacity (Wilson et al 2000).

The research of McConnell et al (1997) showed that the correlation between behaviour and attitudes was poor in situations that were context dependent, and that clearly there were other factors within the decision making process that were not being accommodated. This encouraged the development of the expectancy value model. The expectancy-value model states that “behaviour is affected by the values of the possible outcomes weighted by the estimated probabilities of those outcomes” (Colman 2006). In other words, overall attitudes toward an object were a combination of overall attitudes toward the object modified by subjective values and the strength of associations (Higgins 1996, p133-168).

The expectancy value model has been the foundation for the development of thinking about attitude formation in recent years. However, the model is not so easily applied due to a number of considerations, which are discussed below.

Evaluation is an important element in the assignment of cognitive meaning. In the expectancy-value model, beliefs about the subjective value of outcomes from a certain course of action (or object) are used in an evaluation process from which attitudes are
derived. This assessment is said to occur spontaneously (Ajzen and Fishbein 2000). Similarly, the attributes of an object are associated with a belief and the subjective values of these associations and the strength of these associations are those that cumulatively influence attitude. It is important to recognise that the strength and value of these associations can change through time, and as a result attitudes are temporally based.

A recent review (Ajzen 2001) of the literature surrounding the expectancy-value model has shown that there continue to be issues with this model. One issue is the equal weighing of all beliefs. Another concern is the relationship between beliefs and evaluation and their role in attitude formation. It is assumed that this is the only cognitive process involved in the formulation of attitudes, and there is some concern that this may not fully represent the cognitive processes involved.

Another feature of the expectancy-value model is that evaluations are made spontaneously, and there has been much research to underpin this assertion (Fazio et al 1986). Subject to an initial stimulus, attitudes were generated automatically and subconsciously. The implication was that there were “strong, chronically accessible attitudes amenable to immediate automatic evaluation” (Ajzen 2001, p32). Subsequent research (Bargh et al 1996, Bargh and Chartrand 1999) indicates that rather than evaluation being triggered by a stimulus, automatic evaluation occurs or can occur regardless of the need to make judgements. Familiarity may mitigate against this process to the extent that attitudes to familiar stimuli may relate more to past understandings than to contemporary evaluation.

It has been assumed that the expectancy-value model is underpinned by a cognitive process that evaluates the interaction of beliefs and values. However, there is an alternative paradigm that links feelings as knowledge and as a result such feelings have a place to play in the process (Winkielman et al 1997). This has led to a modification of the traditional model of expectancy-value that accommodates both affect and cognition in the process of developing attitudes. It is now generally accepted that where beliefs and feelings differ, then feelings tend to predominate, and that this predominance of either
attitudes or cognition was dependent upon the subject, or, dependent on the predisposition of the individual to being seen as either a thinker or as someone who was strongly influenced by feelings. The model further assumes that those beliefs that are most readily accessible are those that lay the foundation for current fundamental or foundation attitudes, and that these are only affected by temporary contextual factors. This assumption has been put into question by research by Liberman and Trope (1998) that showed that positive attitudes or beliefs about a goal are more readily attained for goals that were in the distant future than for goals that required decisions in the short term. Other work (for example Wojciszke et al 1998) found that personality traits (kind, generous etc) were more readily accessible than competency (clever, diligent etc) traits in establishing attitudes about people.

3.3 Attitude change: persuasion and social influence

Attitudes can be changed through two sources of external social influence. Social influence usually consists of information about the source’s position, delivered in complex social settings that often include interaction amongst the participants. In other words, veracity comes from the position of the person making the statement as opposed to the factual correctness of the statement itself. Alternatively, changes in attitude through persuasion rely on detailed information presented to the recipients with minimal social interaction. In this approach it is the content of the message that does the influencing, rather than the person or persons delivering it.

Early work suggested that there were basically two motives for agreeing with others. The first was an informal influence where information from others was accepted as reality. The second was a normative influence where conformity was established through a need to meet the expectations of other people (or groups). However, more recent work (for example, Cialdini and Trost 1998) has slightly redefined the motivation for changing behaviour to (a) managing the self concept (b) building and maintaining relationships and (c) acting effectively. The first point relates to feelings about the self, and maintaining a coherent and favourable evaluation. The second point refers to the maintenance and
building of relationships with others and the third point refers to the validity of information for functional operation.

A slightly different way of looking at attitude and social influence is stated by Wood (2000, p541) in a review of recent research where she says “…attitude effects emerged in part because of accuracy motives generated by relatively open minded processing orientation, impression motives generated an agreeable orientation, and defence motives generated protective orientation that maintained existing judgements”. Wood found that recent research showed attitudes that were produced by impression-related normative motives were as fixed as those attitudes generated by information seeking. This contradicted previous beliefs that attitudes formed by impressions were less fixed than those created by accurate information.

There is often a difference in attitudes expressed in public and those held in private. This has been particularly apparent in meetings I have attended with Landcare. Some people take a harder and more defensive line in public than they do in private when looking at the effects of agriculture and the environment. While some of this is undoubtedly defensive (“we have a right to …”), some of it also is an attempt to conform to social norms and expectations. Yet in private softer opinions are often held, and although specifically stated, it is clear that such personal views are not deemed appropriate for public occasions. Wood (2000, pg 542) suggests that attitudes and views that are consistent in both public and private contexts result from “thoughtful processing associated with accuracy motives, whereas attitudes that are expressed in public and not in private reflect normative pressures such as acceptance from the source or group”. More contemporary understandings of attitude expression show that social motives for agreement can affect public and also private contexts. Privately held judgements may be influenced by how people feel in public contexts and are not held necessarily a result of the internalised belief of facts (Chen et al 1996, Lundgren and Prislin 1998). Given that the distinction is rather blurred between attitude expression in public and private contexts, more work is needed to establish what features of social pressure are stable across all settings, and what features are inconsistent, or in what settings are they inconsistent.
Strong attitudes have been tacitly assumed to remain relatively constant through life, with increasing inflexibility accompanied by older age. However, Visser and Krosnick (1998) find that attitude inflexibility increases toward middle age, and from that point on declines. This puts under the question the traditional assumption that it is harder to change the attitudes of people of older age. Features such as certainty and quality of knowledge were more important in influencing attitude formation in those of middle age than they were in those in early or later stages of life. Likewise, attitude strength has been found not to be a unitary construct as assumed, and has been found to relate differently to such things as gender, education and race. As Ajzen (2001, p39) says, research has revealed only weak relations between the various dimensions of attitude strength, and many measures tend to produce conflicting research findings. One area for research is that of attitude ambivalence, or where a person can hold conflicting feelings towards an object, and it is hoped that research in this area can help throw light on attitude structure and the processing of attitude relevant information.

Social identity theories identify the importance and role of ingroup and outgroup definitions in the aligning of attitudes by individuals. Shared beliefs and knowledge provide validation, and the attitudes of members seen to be “cognitively central” or prototypic members of the group are most active in influencing the majority. Social identity theory understands that a group’s attitudes and identity are central to the formulation of individual attitude issues, and group beliefs providing superficial validity to information and ideas. Attitude change motivated by group identity comes about through the aligning of personal attitudes to conform with those positively valued by groups, and in this way a favourable self view is developed. If group harmony is highly valued, then there is added emphasis on this alignment.

3.4 Attitude change: rationalising behaviour

Inconsistency between linked cognitions was traditionally seen as a motivation for attitudinal change. Motivational theory has long held that attitudes are changed to
maintain cognitive consistency, whether it is from differing cognitions or inconsistency in reward from differing behaviour. Cooper and Fazio (1984) maintain that the inconsistency arises from the negative consequences of chosen behaviour as opposed to the maintenance of psychological consistency. A more recent hypothesis (Joule and Beauvois 1998) attributes changed attitudes to rationalising behaviour as opposed to achieving psychological consistency, while another approach has been to link behaviours that are inconsistent with some highly held self standard. Further, it is believed that dissonance can also arise in situations where there are no negative consequences.

Self-affirming behaviour that re-establishes personal integrity is only one way that dissonance can be reduced. For example, other ways are to change attitudes and subsequently behaviour (Stone et al 1997), or to modify cognitions (Gibbons et al 1997). As yet, the means by which personal integrity is restored in cases of cognitive dissonance is not fully understood, but what is certain is that it varies between individuals and contexts. How people rationalise behaviour in situations of cognitive dissonance is an important area for research, for embedded within it may lie clues to the altering of seemingly contradictory behaviour in relation to people’s response to the environment.

Complicating this issue is the emergence of the understanding that people can hold multiple attitudes in a given situation. In the past the assumption has been that attitudes are stable across time, context and form assessment. However, it is now believed that some attitudes may be stable in time and context and others inconsistent. Explanations of this divergence have included motivation, cognitive processes and judgements that are explicit and conscious as opposed to those that are implicitly held.

Issue framing is a strategy used to capitalise on multiple attitudes where the benefits are strongly emphasised over the potential consequences. The difference between issue framing and message based persuasion paradigms is that issue framing places an issue or subject within the context of already held attitudes and goals, and highlights existing knowledge and value systems. While this approach has been and continues to be used by both sides of the environmental debate, the reality is that attitude changes achieved
through this method can still be accommodated within the expectancy-value model.

Dual mode processing theories designed to explain attitude change have attracted a lot of recent attention (Wood 2000, p551), and these models seek to explain attitude change in terms of people's motivation and ability to process information. When an individual has low motivation (in other words when they are not particularly interested in the issue or it will have little impact on them) or when they have a low ability, attitudes then will be based on the easily accessible attributes of the issue or situation. When people are motivated and have the ability, then attitudes are based on a more systematic and thoughtful appraisal of the situation or issue. Factors can influence the message and the desired level of confidence, relevance, the use of token phrases that appeal to common values (such as “sustainable agriculture”) have all been found to increase the potential for change.

One final point needs to be made in relation to attitude change. The use of fear is often favoured as a means of changing attitudes (especially in the area of health). The AIDS campaign is a classic example. However, the use of fear to change attitudes may have the reverse of the desired effect. Research (Witte 1998) would indicate that if the threat posed is believed to be greater than the perceived ability to cope, then the response is to dismiss the fear. Low levels of fear (coupled with a high ability to cope) would appear to promote increased information processing, but high levels of fear appear to have the reverse effect.

So far the discussion of attitude change has examined the relationship between the individual and the issue or subject. The expectancy-value model provides a good basis for understanding how changes in attitudes and intended behaviour come about. The effectiveness of actions in changing attitudes can be increased by strategies such as issue framing, making the issue more relevant, the use of phrases or words that are loaded with accessible values and delivering issues in a way that align to individual values and goals. However, it should not be forgotten that attitudes are a social phenomena, and that they are part of, and emerge from, social interaction. Added to this is the recognition of the
importance of specific cultural issues.

3.5 The prediction of intended actions

The use of attitudes to enable the prediction of intended actions has been a major focus of research. The Theory of Reasoned Action (Ajzen and Fishbein 1980) assumes that people consider the implications of their actions and make systematic use of the information available to them. In so doing, the behavioural decisions they make will be determined by the strength of their intention to perform the behaviour which is in itself a function of their attitudes toward the behaviour and their subjective norms. In this theory the proximal cause of behaviour is seen as the intention to behave in a particular way. These intentions are in turn influenced by subjective norms (in accordance with the perceptions of significant others - should they behave in a particular way?) and attitudes.

The Theory of Planned Behaviour, which has to some extent taken over from the theory of reasoned action, says that people “act in accordance with their intentions and perceptions of control … while intentions in turn are influenced by attitudes … subjective norms and perceptions of control” (Ajzen 1991). This theory is also compatible with the expectancy-value formulation. Although there have been other models developed that depend on content for their predictability, most have only performed with limited value when compared to the content free model of planned behaviour.

The Theory of Planned Behaviour (TPB) has at its heart the assumption that intention is the best predictor of actual behaviour and that intention is governed by three components: (a) a person’s attitude toward or evaluation of, the particular situation, (b) social pressure to conform or not conform and (c) the ability to perform the action (depending on knowledge, skills and resources). Research by Ajzen (1991, p189) reviewed 16 studies regarding all intentions and found “personal considerations tend to overshadow the influence of perceived social pressure”. More recent work carried out by Harland et al (1999) sought to understand why the attitudinal component of personal norms could contribute to the explanation of intended behaviour in addition to the TPB model.
Initially the TPB model included the use of personal norms together with subjective norms. However, in the early 1970s the concept of personal norms and normative beliefs were dropped from the model as they had been shown to explain little more about intended behaviour than attitudes. The reasoning was that a person’s disposition to comply with the social and personal normative component did not improve predictions of intention.

In relation to environmental decisions, the decision context may not be so simple, and Harland et al (1999) argue that personal norms may play a more significant role in predicting behaviour. Norm activation theory states that norms are activated when (a) someone is aware of the consequences of one’s behaviour for the welfare of others and (b) one ascribes at least some responsibility for these consequences to oneself. Once these criteria have been met personal norms are activated and a sense of obligation that guides behaviour is developed. In this treatment norms are different from intentions, and their effect, if activated, predates intentions. An example of this is where the individual denies the negative effects or consequences of a proposed action, or does not link the consequences of an intended action to themselves, and thus personal norms are not triggered.

Personal norms impact through the evaluation of potential actions in terms of “a moral worth to self” (Harland et al 1999, p2508). They reflect perceptions and desires about individual morality and in this sense are clearly different from behavioural attitudes. They can also be seen as internalised social norms, though they are different from social norms in that where social norms reflect the collective beliefs of society; personal norms reflect feelings about individual or personal morality. For example, society in general may have norms about behaviour relating to the environment, but individuals governed by individual norms may take this further and engage in actions (like recycling, taking public transport etc).
Some researchers (Dunlap 1991, Dunlap, Gallup and Gallup 1993) have found a weak relationship between environmentally positive behaviour and positive individual attitudes in respect to the environment. It seems clear that the relationship between social attitudes and behaviour in terms of the environment fail to explain individual behaviour sufficiently.

The weak correlation between attitudes and behaviour in relation to the environment led to the inclusion of personal identity into the model of predicted behaviour. “Identity” is a set of meanings that are associated with an individual that provide a reference to behaviour in certain situations. The perceived identity or self meanings individuals attach to themselves depends on the situation they are in (Stets and Bourke 2002), and as individuals have multiple roles in society, so they have multiple identities.

Stets and Biga (2003) show that as people act in ways that satisfy their identity meanings, personal identity is an important motivator for behaviour. The inclusion of personal identities accommodates the fact that an individual has multiple identities that relate to the various positions an individual holds in a complex society. In comparison to attitudes alone, the inclusion of identity factors provides greater power in the prediction of behaviour.

Identity theory is derived from an assumption that an individual is embedded in a complex social structure where a particular behaviour is chosen from the competing demands of a range of individual social positions within society. Behaviour is not seen to be chosen on the basis of discrete personal decisions as in the TPB model.

3.6 The effect of norms

Personal norms would appear to be important in decisions about behaviour in relation to the environment (Vining & Ebro 1992), and further work by Thøgersen (1996) strengthens this view when he considers that environmental behaviour falls into the domain of morality as opposed to other drivers such as economic rationalisation.
these studies show that in relation to the environment, the inclusion of personal norms adds to the value of the TPB model, it is as yet not clear for what other range of behaviours it is applicable.

The work of Harland et al (1999) shows that in the environmental domain the inclusion of personal norms in the TPB model leads to predictions of greater accuracy regarding intended behaviour. In the study decisions to behave pro-environmentally were based partly on moral considerations. Most participants in the survey were familiar with the environmental consequences of behaviour and as such fulfilled the criteria for triggering personal norms. The study failed to identify the effect on personal norms of those who were less involved with the issues (in other words, failed to fulfil the triggering requirements for personal norms).

In terms of the environment and predicting behaviour, it would seem that the TPB model does not sufficiently capture the influence of moral considerations on intentions. Harland et al (1999) show that the inclusion of personal norms improves prediction. The complement to this is of course that it fails to account for the decrease in relevance of attitudes and subjective norms. The domination of attitudes over the normative component has been well recognised, especially in the case of the TPB model. There would appear to be a good case to re-examine this removal in cases such as those that deal with the environment.

Given that personal norms are important contributors to predictions of planned behaviour in the environmental context, how can they be mobilised? In the past attempts to change environmental behaviour have been initiated through outside communication. Such phrases like “we need to act in an environmentally sustainable way” and “we need to farm in a more sustainable way” are all messages about social norms. Given that social norms can become private norms by internalisation, it is possible that this method can have an effect, but it is a cumbersome way of inducing behaviour change.

There is always a risk that even if there are pre-existing norms that influence behaviour in
a certain way, people may not act in that way. As stated earlier, personal norms or moral norms are only one of a number of factors that influence behaviour. One way of achieving outcomes that are more consistent with personal norms is to increase awareness of the consequences and make a closer connection between the individual and the consequences. Finally, it is important to recognise that the personal norm activation process is internalised, and that stimulation must come from within. As stated above, outside stimulation merely represents the intervention of social norms.

3.7 Conclusion

Recent research on the nature of attitudes and how they operate has enriched the wealth of knowledge in the area rather than moved it forward in a significantly new direction. The importance of conscious and subconscious evaluative reactions and the ensuing automatic process of attitude formation are shown by the expectancy value model. The relationship between attitudes and behaviour is as yet not fully understood, and as Wood (2000, p48) says “the largest number of studies on any topic had to do with the attitude behaviour relation”.

Attitudes are formed and activated continuously throughout daily activities and situations, and are not necessarily part of a considered reaction. It is clear that the strength of attitudes vary over life, and that assumption that the greatest rigidity occurs in later life is incorrect. In fact, it is in mid life that attitudes are strongest and less easy to change. The differences between the perceived degree of control an individual has and the difficulty of performing certain behaviours or actions has been well recognised as being important. However, the perceived difficulty of performing actions would appear to be a more important determinant of eventual behaviour. Attitudes are generally agreed to be an important part in determining social behaviour, but there are many factors that modify the effect of attitudes and intentions over behaviour.

The attitude-behaviour relationship continues to attract much attention in research (Wood 2000), and it is recognised that while attitudes are relevant in predicting and
understanding social behaviour, there are many factors moderating the effects of attitudes. Norms and habit (habitual aspects) also modify behaviour. While social norms appear to have a relatively consistent effect in determining planned behaviour, it appears that personal morals are more or less relevant depending on the situation.

In regard to environmental behaviour, the TPB model is considerably strengthened by the addition of personal norms. However, these norms may or may not be activated. Schwartz’s (1997) personal norm construct still appears to have relevance. As personal norms do influence planned behaviour in the environmental arena, it is important to make appeals to these norms and strengthen the potential for activation as they act as an internalised obligation for certain behaviour. Activation is said to occur when a person is aware of the consequences of their behaviour on others and when a personal responsibility for the actions is felt.

It has been shown that it is possible for an individual to hold attitudes and values that are apparently in conflict with observed behaviour. Further, an individual can hold opposing attitudes and values concurrently. Also, the correlation between behaviour and attitudes and values has to be tempered by a range of other influencing factors. The assumption that observable behaviour directly reflects an individual’s attitudes and values therefore needs to be taken with caution. As the research conducted in this thesis will demonstrate, there is frequently a dichotomy between observable behaviour and attitudes and values.

Temporal construct theory would indicate that there is a challenge in the time periods involved, as the feelings that relate to longer term decisions are harder to access than feelings that relate to shorter term decisions. Further, it is easier to change attitudes (and thus influence behaviour) for situations that are more immediate than those in the distant future. Attitude change is more likely where the person feels directly in control of, and responsible for, the outcome. Where the issue is generic and relates to (say) society in general, then individual responses are muted.

Many attempts at natural resource management in the Western Division such as Landcare
and West 2000 have as a long term goal the changing of individual and community attitudes towards land management. “Seed money” is dispensed for various projects with the intention that the practices or projects funded will be co-funded by landholders and that eventually the work will continue without community funding and by other community members. The “seed money” is an incentive designed to encourage behaviour or actions that otherwise may not have taken place. Underlying this is the hope that other producers will see the effects, and initiate similar changes themselves.

This approach has ignored the potential for building onto desirable attitudes and values that pastoralists may already have, but for some reason are not expressed in behaviour.

The expectancy-value model was assumed to be the most satisfactory working model of attitude change, but there needed to be adjustments. The tacit assumption that all beliefs are treated equally in the formation of attitudes is clearly incorrect in practice.

Ajzen (2001, p32) has detailed research that indicates evaluations can be made both spontaneously and subconsciously when triggered by stimuli. Attitudes can be formed subconsciously and in situations that may not be directly related to the subject matter. An implication of this is that attitudes about landscape and landscape interaction may not necessarily be developed by a direct interaction with the subject. Direct exposure to (say) overgrazing may not be the only process by which attitudes about land use are formulated. There are indirect and subconscious situations whereby attitudes are reinforced, questioned or modified.

Contrary to the popular belief that attitudes are harder to change in older people, research indicates that attitudes are more generally fixed in middle age, and that the time periods before and after that are the periods where attitudes are more flexible. The average age of farmers across Australia is in the late fifties, an age assumed to prohibit significant attitude change, but the projects described in Chapters Nine and Ten were designed specifically to appeal to people of all ages, and not be restricted to people of younger (and supposedly more impressionable) ages.
Social identity is certainly important, especially in isolated communities, and underpins the notion of social capital (Coleman 1988). Petty and Smith (2003, p633) say “social capital lowers the cost of people working together” and make the point that there are four essential features of social capital: (1) relations and trust, (2) reciprocity and exchanges, (3) common rules, norms and sanctions and (4) connectedness and networks. Small communities need a sense of social identity to function, and the implication of this that members of that group, at least to some extent share, need to share common attitudes and norms.

Different attitudes are shaped by motivation, knowledge and judgements, and of course deeper down, through beliefs. Thus it is possible to influence attitudes in one context that may be incompatible to attitudes held in another context. Thøgersen’s (1996) work indicates that in relation to the environment personal norms appear to be important indicators of future behaviour. This would indicate that in matters related to the environment, the understanding personal norms and values would appear to aid the process of behavioural change.

The first part of this thesis has explored the relationship between society and the natural world in which it functions. In dealing with this the relationship between attitudes and values and behaviour has been explored. Humans are embedded in a complex social structure where decisions are based on the competing demands of the various positions assumed within that society and associated identity meanings.

Part 2 deals with the historical, geographical and political interaction between pastoralists and the landscape. It looks at this relationship not so much on an individual level, but on a community and national level.
Part 2

The Western Division: People and Place

Part Two looks at the historical relationship between settlers and the landscape in a particular locality – the Western Division of NSW, and how various social and economic imperatives affected that relationship. It also concentrates on the interaction of the wider society with landscape, and in so doing provides the context or foundation for understanding the development of individual attitudes and values.

Chapter Four shows how the beliefs and assumptions of the early European explorers and colonisers led to the misreading of the Australian landscape, especially in terms of the assumption that it was an untouched and previously unmanaged wilderness.

Chapter Five traces the history of settlement of the Division and shows how land administration and policy was determined largely by socio-economic considerations without sufficient recognition of the nature of the landscape.

Chapter Six explores the history of grazing in the Western Division, focusing on the way stocking levels reflected peoples’ understanding of land capability and seasonal variability.
Chapter Four:  
Background to Settlement: Misreading the Australian landscape

“Misreading” the landscape refers to making assumptions and holding beliefs about that landscape that are not in keeping with reality. The landscape in Australia has been misread with regard to occupancy, productivity and modes of management since European settlement. The implications of this misreading have been profound, not only in terms of the environment but also in lost opportunities to connect with indigenous knowledge and experience. Chapter Four discusses the ways in which the landscape has been misread.

4.1 Early settlement in Australia and the Western Division

The first European settlers into Western NSW came from a European background. If not born in Europe, then their parents almost certainly were. As such settlers’ understandings about farming, landscape function and even their attitudes towards their place within the natural world originated from the northern hemisphere.

The physical nature of the Western Division of NSW, with its harsh semi arid environments, its fragile and “brittle”\(^6\) nature, the extreme variation in rainfall and contrasting periods of boom and bust was at stark contrast to the sort of environment early settlers understood. Historically their concept of nature and their society’s relationship with nature originated from a far more forgiving landscape and a landscape that had been moulded over thousands of years of a special sort of cultural interaction

\(^6\) This word is first used by Allan Savory (Savory (1998) to describe a continuum (from non brittle to brittle) according to the decay and successional processes present and the way they respond to certain forces.
with people. European culture had moulded and been moulded itself by the landscape in which it existed.

History paints a picture of continuing land degradation in Western NSW, a picture of an inability or unwillingness to come to terms with an ecological reality; the fact that land use practices were unsustainable in the long term. The frequent changes in land tenure and administration that occurred before and after the establishment of the Western Lands Board would appear to have had only a marginal effect in ensuring sustainable land use.

To the outsider it would appear that the pastoralists in the Division had little regard for the long term future of their leases, and were intent on obtaining the maximum out of leases in economic terms regardless of the environmental cost. Images of starving sheep, sheep perished of thirst, dust storms and bare exposed ground are images that accompany thoughts of the west of NSW. To a degree the local community has capitalised on such images as they portray hardship and a relentless struggle with a hostile environment. However, the continued portrayal of such images doesn’t convey a sense that people are learning to live with the environment and that they have modified their practices to suit the environment. For an increasingly informed wider community the images reflect the relegation of environmental considerations to those of economic, and short term opportunism to longer term sustainability.

Early settlers in the Western Division found little of value in the natural world as they found it, except for the wide pastoral lands suitable for their imported sheep and cattle. In many ways the landscape was seen as alien and empty. Gill (2005, p46) speaks of “empty pastoral” landscapes and argues that:

Contemporary critiques of pastoralism arising from recent conflicts over land in the rangelands rely heavily on the notion of outback pastoral lands as empty in the sense that there is no settlement of great cultural value.

He goes on to say that “pastoral land use is seen as scarcely touching the land, and is ‘desultory at best’, and scarcely qualifies as inhabited, let alone as engendering a landscape of livelihood and home” (Gill 2005, p47). In Gill’s synopsis of current
thinking about pastoralism, ecology and the outback he makes the point that how one sees occupation of a landscape is underpinned by the political context at the time. One current argument is that pastoralism is characterised by wealthy pastoral companies (as opposed to battling families) who simply mine the resources for grazing purposes, and have little commitment to the preservation of the of the ecological integrity and function of the landscape. Implicit in this argument is that they are simply there for what they can get out of it, and have little spiritual or emotional attachment. As a result they are seen as having no place there, in “an immoral landscape of corporate wealth and avarice” (Gill 2005, p47).

The concept of an empty landscape is important as it underlies many attitudes towards landscape in Australia. The sense of the landscape being “pristine” belies its occupation by indigenous people for the last 50,000 years or more. In a supposedly empty landscape the previous social/ecological interaction lay unrecognised, thus obscuring the fragile nature of the ecosystem. The experiential knowledge built up over previous generations of original inhabitants was not recognised, thus leading to the misreading of such vital features as landscape capacity (in terms of its grazing potential), seasonal variation, availability of water and the necessity for active land management (burning for example).

**4.2 The empty landscape: early perceptions**

The concept of the “empty landscape” is important to this thesis as this notion has influenced the relationship between society and landscape since Australia was first settled. When the explorer Captain James Cook arrived in Australia, it suited ambitions and attitudes of the time to see the landscape as empty of people - a belief that shaped attitudes about the place of European settlers in the landscape for almost two centuries to follow. Although Captain Cook first sighted land on 19 April 1770, it was not until six days later that he sighted its inhabitants. He was hasty in his judgement of them, for without even seeing them he had “concluded not much in favour of our future friends” (quoted in Lines 1991, p22). Joseph Banks, the official botanist accompanying Cook, was similarly disapproving, not only about the inhabitants, but also about the land itself.
He saw it as barren, and unlikely to support cultivation. According to Lines, Cook’s orders were to take possession of *Terra Australis* if he found it unoccupied (or if occupied, to take possession with the consent of the indigenous peoples). On the assumption that it had never seen or been visited by a European, Cook considered that Australia was essentially unoccupied, and on 21 August 1770 Cook took possession of the new land for Britain, including all bays, harbours, rivers and islands. This was in spite of Banks’ view that the sandy and unproductive soils of the new land would make colonisation difficult.

When the first settlers arrived they found Australia very different from anything they had experienced before. This was demonstrated by two statements made at the time. The first by William Noah, an early settler in the colony (quoted in Martin 1993, p113):

[Quite] Opposite to England and Every thing in Nature plainly so even the Moon is Top side Turvy your Summer our Winter and no settled Weather fine with one hour and the next with Thunder and Lightning Shocking to Hear with Heavy Rains.

and another well used quote by John Martin (quoted in Powell 1976, p13-14), who, arriving in the colony in the 1830s, complained that:

…the trees retain their leaves and shed their bark instead, the swans were black, the eagles white, the bees were stingless, some mammals had pockets, others laid eggs, it was warmest on the hills and coolest in the valleys, [and] even the blackberries were red.

Although everyone saw something different, everyone felt that the new land was “different” to the one that they had left. The major task was the exploitation and development of the natural resources for the benefit not only of the colony, but also to create wealth for England. Thus the contemporary view of the environment held by early settlers was exploitative - possession entitled exploitation, with the indigenous inhabitants simple playing the part of a nuisance in the process.

That the indigenous people were considered as “absent”, although clearly they were not, was due to a number of factors. The first was that it suited the European migrants to have the country “empty”. In terms of Cook’s orders, and later proclamation, the most
The desirable outcome was to take possession of an empty land. Clearly the land was not empty and devoid of people, even though they were described by a French explorer as "the most miserable people in the world, and the human beings who approach closest to brute beasts" (quoted in Diamond 1998, p297). By relegating the indigenous people to such a base level they could be ignored as primitive savages with nothing to offer. So-called civilised peoples had managed and/or modified natural systems to their own benefit. The indigenous people the European settlers found neither farmed nor had domesticated animals, bows and arrows or substantial dwellings or settlements as seen in the conventional sense. They "were nomadic or semi nomadic hunter-gatherers, organised into bands, living in temporary shelters or huts, and still dependent on stone tools" (Diamond 1998, p297).

The common view of indigenous Australians is reflected in a statement made by David Collins in *An Account of the English Colony in New South Wales* (1804, p336) when he said "that they are ignorant savages cannot be disputed". The effect of this opinion was to relegate indigenous Australians to a rank where they were considered as scarcely human. The effect of this perception was twofold in terms of land management. The first was that new settlers felt they had nothing to learn from indigenous Australians in terms of land management. Indigenous Australians were seen simply to exist in the landscape, and apart from the continuous burning (which was seen as a process of hunting), as having very little impact on it (Lines 1991). The accumulated knowledge of, and skills associated with, the practice of burning went unnoticed. The fact that burning practices were strictly controlled, and were conducted by specified people within the tribe who had the special knowledge was also unrecognised. The explicit controls over hunting also went unnoticed. The accumulated knowledge of tens of thousands of years coexistence with the landscape went unrecognised, with the only advice sought of indigenous Australians being advice of a more fundamental nature, for example the position of permanent waters and the extent of inundation by floods (essential for locating homesteads etc).
The more important outcome from the failure to recognise Australia as a populated
continent in terms of land management stems from the fact that early settlers saw
Australia as a pristine or untouched landscape. For European eyes, the fact that the
countryside had not been cleared, that there had been no cultivation or grazing of
domesticated livestock indicated that this landscape was empty, or in later terminology, a
“wilderness”, and as such they were presented with a pristine environment, awaiting
taming and development to achieve its “full potential”. As a result a myth was created -
the myth of what is now referred to as *terra nullius*, or the empty land. The word
“wilderness” is often used in similar contexts, but care is needed in the use of this word
as its meaning reflects a romanticised notion of nature.

It suited early settlers and land administrators to see Australia as empty in just the same
way as it suited early explorers in Africa to see it as “Wild”. Adams and McShane (1996,
p9) argue that in the mid 1800s Africa was seen in a number of new ways, most
significantly as:

- a source of “legitimate” commerce,
- as a tropical paradise suitable for Utopian experiments,
- as fertile ground for spreading Christianity,
- and, eventually, as an open land ready for imperialist conquest.

### 4.3 Implications of misreading the landscape

The misreading of the landscape can have far reaching consequences in terms of
subsequent actions as studies in Guinea have shown (Fairhead and Leach 1996). Before
looking at the consequences, it is worth examining how misreading at this level can
occur. When the French first occupied Guinea in 1893, in the Kissidougou area they
found a mixed landscape, mainly savannah, but with patches of forest. The indigenous
inhabitants had a traditional practice of shifting agriculture and traditional burning in this
transitional zone, and it was initially assumed that these practices would lead to the
degradation of forests. Later with the major push for global environmental rehabilitation
of threatened ecosystems and the hydrological threats that the loss of forests poses, this
area became the focus of much international attention.
Forest areas around the villages were assumed to represent the remnants of a far more extensive forest system that had been eliminated over time by the agricultural practices of the indigenous peoples. The degradation of the savannah areas by the burning and inappropriate agricultural practices was considered the cause of the forest decline and authorities initiated actions to halt the decline. However, when the French first arrived, the forest areas were in fact increasing, rather than declining, due to the social practices (of shifting agriculture and burning), and if this had been recognised earlier, then a completely different series of questions would have been asked in relation to people and landscape.

As discussed earlier (Part One) ecologists in the first half of this century were intent on looking at natural factors as the drivers of change in ecological systems, and only considered the effect of the social system as a secondary or anthropic driver. The forest areas of Kissidougou were assumed to be the remnants of pristine areas of old forest, vegetative remnants of a former climax state, the remainder destroyed by human interaction. The effect of treating people and nature as separate does not prohibit speculation about the relationship between nature, society, culture and the environment, but what is does do is to “structure the ways that such relationships are theorised” (Fairhead and Leach 1996, p6). The separation of mankind from nature is typically a Western approach to thinking, as compared with indigenous Australians who see themselves as being inextricably linked with nature and natural systems. While the linkage through Western eyes is seen as more a functional relationship, indigenous people see the linkage as spiritual, practical, functional and intimate.

4.4. Indigenous understanding of landscape

For indigenous peoples, “knowledge” of the natural world is often incompatible with traditional scientific knowledge, and as such has been termed as “ethnoscience” (Fairhead and Leach 1996, p7). Ethnoscience can be broken down into two areas. The first is the examination of the validity of such knowledge (local knowledge) and assessing it against what are known “scientific” facts. The second area is to look at how concepts or
knowledge of the natural world fit within a socio-cultural framework. The lack of productivity of a crop, for example, could be accounted for by “past habitation, and of soil maturity or oiliness” (Fairhead and Leach 1996, p8). In linking human metaphors (such as tiredness) to natural system function, ecological representations are socialised, and the perceptual line between natural systems and social systems becomes blurred.

There was a move in the late 1950s to link myth and ritual to an unconscious social process that maintained an equilibrium or stability in natural systems. Subconsciously, societies performed a range of actions and activities that let to the maintenance of stability of the ecosystem in which they inhabited. In effect, there was no feedback loop recognised by the local community that informed them of the environmental impacts of their actions. There was an innate or unconscious driver in social systems that worked toward the maintenance of stability in the natural systems with which society interacted. This approach assumed that society is not aware or cognisant of its own destiny, and “robs society of its history” (Amanor 1994, p19). To deny that there is an interactive relationship and evolution between society and nature renders symbol, meaning, form etc lifeless, which is clearly not the case. Not only does this approach rob society of its history, it also robs society of the experiential learning process that derives from knowing or managed interaction with the environment. This view also neatly compliments a legislative approach to land management, which assumes that there is an incompatibility between the goals of local social systems and the broader environmental requirements that can only be addressed through legislation.

It is clear from research in Africa (Fairhead and Leach, 1996) and elsewhere that social practices condition resource use and management. In Africa where there was strong competition for scarce resources between indigenous peoples, institutions (such as land tenure, marriage labour etc) reflected power and influence, and in turn affected the relationship between people and landscape.

The work of Fairhead and Leach (1996) shows that there are a number of generalisations about people and landscape that are unhelpful. The concept of the tragedy of the
commons, as proposed by Hardin (1968) has been shown to not hold universally true in practice, however theoretically appealing it may be. Local institutions can and often do, regulate common property access and rights. The argument that poverty inevitably leads to land degradation and the subsequent adoption of short-term land degrading practices is also shown to be not helpful. Likewise the Malthusian notion of population increase inevitably exceeding the capacity of the land to support it fails to take into account technological innovation.

Fairhead and Leach (1996, p13) say that while there is evidence to support one or other of these theories in specific instances, they fail to fully “describe the change in people’s land relations”. The first reason is the general assumption that natural resources are being degraded, which is not necessarily true, as while particular practices may lead to degradation in one ecosystem, the same practices may lead to improvement in another.

The ability of communities to deal with the natural environment has been termed “cultural capital” (Berkes and Folke, 1994) and it is this capital that early settlers failed to make use of at the time, the problem now being that while such knowledge was appropriate in a specific time and ecological condition, now that the environment has changed (through the effect of settlement) such knowledge may no longer be appropriate.

The belief that a universal epistemology was represented by Western science went undisputed for many years, and only recently has it been shown that indigenous non-scientific knowledge can be fundamental for management (e.g. Johannes 1981). Such knowledge is often encoded in cultural practices, in some cases is encoded in religion and is frequently a mixture of superstitions, beliefs and myths. Such knowledge is also frequently contextually based, both in terms of time and place.

**4.5 Conclusion**
This chapter has dealt with early perceptions of the landscape and its occupation. Early perceptions are important as they laid the ground for future thinking and understandings of the landscape that was to underlie attitudes of the natural landscape into the future.

By seeing the landscape as “empty”, early settlers failed to recognise the fragile interaction of both indigenous people and animals. The rapid loss of a number of mammal species (such as betongs and bilbies) early in the history of settlement indicates the disturbance early settlers had with their livestock and domestic animals.

Seeing the landscape as empty meant that the landscape was seen as pristine rather than the product of an interaction with indigenous people, so that any traditional or ethnoscientific knowledge was ignored. One significant area to be ignored was the importance of fire and traditional burning practices. While wildfire played a part, fire management and selective burning practices played an important part in shaping the landscape in the image that early pastoralists saw. The importance of fire in ecological management fails to be fully recognised even today (Griffiths 2001a), and where fire was once a natural management practice, in many pastoral areas it is seen as a threat - a legacy of both the short term requirements of pastoralists and Eurocentric attitudes.

Early ecologists often looked for natural forces causing ecosystem change, and so the full impact of the pastoral presence was initially overlooked. It would be fair to say that the first 50 years of occupation by pastoralists caused substantial changes in species diversity, soil erosion and overall productivity in many parts of the Division.

Finally, while there was general recognition about how different the landscape was from that of a European landscape, there was not a similar recognition that a "new knowledge" would be needed to understand it. Misreading the landscape deprived early settlers of the sense of knowledge that is non scientific and experiential.

This chapter has dealt with the “misreading” of the landscape by the first early settlers. Importantly, the understanding that it was empty led to beliefs about the landscape that
were not based in fact. The experiential knowledge and understanding of indigenous people was lost; land capability was poorly understood and above all the variability in the climate and seasonal conditions was not recognised.

The following chapter traces the history of pastoral settlement where the implications of the failure to properly understand the landscape become readily apparent.
Chapter Five:  
The Settlement History of the Western Division

… our land title system has driven tremendous wealth creation and export performance in this country …

John Anderson, National Party MP

These words by a senior politician in 2004 reflect what has undoubtedly been the major driver behind land settlement policies in Australia for the last 100 years. While other factors such as environmental issues and soldier settlement policies following the wars have played a part the fundamental driver has been the creation of wealth for both individuals and society as a whole. When applied to the Western Division of NSW, it is clear that this wealth has come at a long-term environmental cost. This chapter explores the settlement of Western NSW, and the changes made to land settlement policies over time to meet short-term imperatives.

5.1 Historical context

In the early 1800s New South Wales was divided into three areas - the Eastern Division, which essentially was the part of the state east of the Great Dividing Range, the Central Division which encompassed the tablelands and slopes, and the Western Division. If a line is drawn from Walgett in the north to Balranald in the south, all the land to the west of this is referred to as the Western Division. The landscape is the most arid in NSW, and apart from small areas of irrigation, it is essentially used for large scale grazing operations. The area covered is almost 48% of NSW’s land area, and is almost all Crown

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Land, meaning that the land is owned by the Government and leased out to tenants, who were called Crown tenants.

**Figure 5.1: The Western Division of NSW**  
*Source: NSW Dept of Natural Resources*

The Western Division was one of the last areas to be settled in NSW, and its semi arid environment with highly variable rainfall, fragile soils and big distances proved a challenge for those who settled there. One of the most significant features of the settlement in the Western Division was the discovery of artesian water in 1889. Whereas once stock water was the limiting factor of production in dry times, the discovery of the artesian water meant there was sufficient water for stock and grass became the limiting factor of production.

In no other part of NSW did the Government take such a benevolent attitude towards its tenants. As a result of the plight of the Crown tenants caused by the drought of 1897-01
institutions were established to oversee the management of the Division with the objective being the welfare of the tenants and the environment.

The Western half of NSW represents an interesting case study in the settlement of NSW and ensuing land use. It remains Crown land, with leases and lease conditions administered by an authority set up some 50 years after the land was settled by white pastoralists. Since settlement almost 150 years ago, the type of land use has remained almost unchanged. With the exception of the irrigation areas along the major river systems, and the expansion of cropping on the eastern edge, land use has essentially been restricted to wool production and some beef production.

The Western Lands Commission was initiated in 1902 to oversee the Crown Lands of Western NSW, and in particular to take care of the interests of the Crown tenants. Included in the Commission’s charter was the requirement to ensure sustainable resource management and to look after the environment. Where much of the land in the remainder of NSW is freehold title and owners are able to do what they like on it within certain restraints, the leasehold land of Western NSW was and is managed by the Crown. In this context the Western Division presents a valuable exercise in the translation of social attitudes and values through administration to on ground activities through individuals and entities who sought to make their living from the leases.

In terms of the environment, the Western Division of NSW is a fragile semi arid landscape poorly suited to intensive livestock grazing. Initial over estimation of its potential, highly variable rainfall, rabbits and a poor understanding of the ecology resulted in a significant negative impact from grazing. While natural systems suffered, so did the pastoralists through poor prices or losses due to flood and droughts.

The Western Division provides an opportunity to examine the relationship between individuals and nature, but also the relationship between the wider society, its institutions and nature. This is because the land tenure system allowed government institutions to have a say in matters such as who could lease the land, the amount of land a lessee could
lease, what they did on the lease and how long they could lease the land for. As well there were numerous restrictions or requirements in place concerning the maintenance of land condition.

The Crown tenants played a major role with the government in the development of policies for land use in the Division. As a result many of the land use policies reflected both community and individual values and aspirations. Land was heavily regulated by legislation.

Following is a list of some of the Acts that were in place and applicable to Crown tenants of the Western Division, until recently:

<table>
<thead>
<tr>
<th>Act</th>
<th>Year</th>
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<tbody>
<tr>
<td>Aboriginal Land Rights Act, 1983</td>
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<tr>
<td>Agricultural and Veterinary Chemical Act, 1994</td>
<td></td>
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<tr>
<td>Catchment Management Act, 1989</td>
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<tr>
<td>Clean Water Act, 1970</td>
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<td>Crown Lands Act, 1989</td>
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<td>Endangered Fauna Act, 1991</td>
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<td>Environmental Planning and Assessment Act, 1979</td>
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<td>Fisheries Management Act, 1994</td>
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<td>Forestry Act, 1916</td>
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<td>Heritage Act 1997, 1996</td>
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<td>Local Government Act 1993</td>
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<tr>
<td>Mining Act, 1992</td>
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<tr>
<td>Local Government Amendment (ESD) Act, 1997</td>
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<tr>
<td>National Parks and Wildlife Act, 1974</td>
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<tr>
<td>Native Title Act, 1994</td>
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<tr>
<td>Native Vegetation and Conservation Act, 1997</td>
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<tr>
<td>Rivers and Foreshores Improvement Act, 1948</td>
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<tr>
<td>Roads Act, 1993</td>
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<tr>
<td>Rural Fires Act, 1997</td>
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<tr>
<td>Soil Conservation Act, 1938</td>
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<tr>
<td>Threatened Species Conservation Act, 1995</td>
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<td>Water Act, 1912</td>
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<tr>
<td>Wilderness Act, 1987</td>
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</tbody>
</table>

**Figure 5.2: State Government Acts impacting on pastoralists in the Western Division of NSW**
These Acts illustrate an attempt by Government to prescribe behaviour through legislation. These Acts are not unique to the Western Division, and occupancy in the Division is controlled on another level by the terms and conditions of the particular lease.

5.2 Summary of the main periods in the history of the Western Division

The following is a list of significant historical events and periods that provides an insight into the social and administrative history of the Western Division. This list is not meant to be all inclusive, but rather to highlight events and time periods that have had a significant impact on the pursuit of pastoralism within the Division. It is based on the work of Hassall and Associates (1982).

1. Exploration occurred in 1817 and the process of settlement followed somewhat later.
2. By 1840s most of the river frontages were occupied with spasmodic occupation of the hinterland in wetter periods.
3. Characteristically early settlement was with sheep and cattle for meat, runs (properties) were unfenced. Stock sold in major urban markets.
4. In the 1870s and 1880s occupation spread more generally in the drier areas, with the development of sub-artesian bores and dam making. Good rains, higher wool prices and improved transport (rail and steamer) led to an increase in income and farm capitalisation. The late 1880s saw the first reports of the invasion of inedible shrubs. Wools scoured locally and sold in London.
5. 1884 Act: Promulgation of the Western Division. Start of closer settlement, with runs divided into short term leasehold areas and resumed areas of 10,240 acres for resettlement. Lease conditions applied, such as the requirement to fence, control rabbits and residence. Landholder equity diminishing.
6. 1880s-1900: Mining starts Broken Hill 1883, Cobar 1870 and Silverton 1876. White Cliffs and Lightning Ridge opal mines discovered 1890. Sheep population falls from fifteen million to five million due to drought, rabbits, erosion and
economic depression. Foreclosure and abandonment of stations common. Development of artesian water enables the watering of drier areas. Increased mining provides local markets for livestock.

7. 1902: Western Lands Act, which sees the introduction of separate administration for the Western Division. Local Land Boards abolished, rents lowered and lease terms extended. Wool sold greasy in State capitals.

8. 1912: Queensland/South Australia border dog fence erected.

9. 1918-1940: Soldier settlement initiated, but strong demand from soldiers led to conflict with larger land holders. Buttenshaw Act created new land administration which provided for further closer settlement, local lands boards reintroduced. Increased pressure for cropping licenses on the eastern margins of the Division.


11. 1940-1950: Myxamotosis reduces rabbit numbers. Heavy rain in the Cobar/Byrock/Bourke areas in 1939 and the 1940s leads to scrub invasion. Legislative amendments in 1942, 1945 and 1949 complete property break up initiated in 1884. Buoyant wool prices and good seasonal conditions see further development of watering points, fencing etc. 2,000 properties in the Western Division. Shires and pastoral inspectors introduced.


14. 1990-2000: Lease numbers fall to around 1300. Increased irrigation (cotton) on Darling, and shift to cattle production. Property sizes gradually increasing with amalgamation. West 2000 (regional reconstruction scheme) launched.

It is clear that while the environment and the changes made to it through human intervention have been recognised throughout the years of European settlement, social
issues (such as wealth and equity) always predominated, and in the end have determined the eventual effect on the landscape and environment. The environment was not seen to be separate, but rather as underpinning the attainment of the social imperatives. In other words, the environment was treated as a simple factor of production rather than a discrete objective in its own right.

The history of the settlement of the Western Division, as the western part of NSW became to be called, is well documented. Authors including Hardy (1969), King (1957), Heathcote (1965), Quinn (1995) and lately Condon (2002) have detailed the succession of Acts that finally culminated in the Royal Commission of Enquiry into the Crown Tenants in 1901, which in turn led to the Western Lands Act. These accounts trace the successive Acts relating to land tenure, and, overlaid with the economic and environmental conditions at the time, go some way to explaining the role of land administration in the history of settlement. Because this history has been well documented, this thesis will not repeat it at great length but will attempt to highlight the more important aspects in an attempt to demonstrate the regulations surrounding land settlement. While acknowledging the importance of attuning land management expectations to land capabilities (and especially with the establishment of the Western Lands Board), in reality land settlement regulations were designed to address a range of other social and economic issues that had little to do with sustainable use of the natural resource.

5.3 Land tenure in the Western Division

Before proceeding, it is useful to dwell briefly on the nature of land rights, possession and tenure, for these reflect cultural attitudes inherited by European settlers. Freehold tenure, now the most common tenure in NSW represents the most complete (though not absolute) transfer of ownership from the State. The justification for this is that the individual is the most important element in society and that the transfer of land to private ownership “contributes to the development of individual dignity and the maintenance of political freedom” (Quinn 1995, p33). The competitive market situation for natural resources that resulted from private ownership was seen as socially and economically
desirable in terms of the optimum allocation of resources. Private property was seen to be the basis of social freedom (Denman 1978, p22). In terms of occupation, the first possessor of the land has a stronger claim to the land than subsequent occupiers.

The ownership of land is a social institution, and as such reflects the culture of those who settle it. In this case it is a product of the concept of feudal tenure. Under English law, the Crown is the owner of the land, and it is only with formal authority from the Crown that individuals may possess it. Unlike America, in Australia an individual can only possess the surface of the land, and does not own the minerals below or the air space above the land. Further, the Crown does not relinquish all rights to the land, and in effect Freehold title only represents a “parcel” of rights and interests. Also flowing from feudal tenure was the concept that land should be used and possessed, and under common law, occupation could confer rights of title (Quinn 1995, p35). Such rights were called “prescriptive rights”, and could not be acquired if the use of the land was illegal, forceful or without the permission of the owner. Additionally, the use of the land had to be “appropriate” to the land type, and this point is important as it indicates a linkage, in perception at least, between land type and usage in community eyes and values.

The Crown (through the Western Lands Act 1901) in its role as administrator of the leasehold lands of the Western Division played a dual role in administrating the management of the land while developing its economic potential. Thus the Government’s role was a commitment to both private and public enterprise. On one hand there was a requirement to manage the land for the common good, to preserve its natural attributes and to administer the settlement in a socially responsible manner. On the other hand the Government was obliged to work with the private sector to increase productivity and develop the Division in an economic and productive sense.

The advent of the Western Lands Board in 1902 passed the administration of the responsibilities of land administration in the Division to the Board. The Board became the link between the public and the private sectors, and took on an authority of its own in regard to the role with which it was charged. While the Board was answerable to the
Parliament of NSW, Parliament's view of the Division was often a product of the view presented by the Board, rather than the reverse. Quinn (1995, p36) details the actions of a pragmatic Board whose influence extended throughout the community and to an extent influenced how others saw the Division.

The role of the Board and its freedom of operation had an important outcome in the drive for closer settlement. While originally established to look after the interests of the Crown tenants and the environment, the pressures of closer settlement tended to over-ride the natural resource considerations. Pressure for land intensification came from two sources. The first was the historical battle between the pastoralists and the workers, or the squatters and the free selectors. Pastoralists were seen to have wealth and power, and to dominate a resource that was the rightful property of all. Quinn (1995, p37) refers to the land as a resource that “promised spiritual as well as economic liberation” but the reality was that probably for most the ownership of land simply promised opportunity and independence. The second pressure to break up the larger holdings of the pastoralists came from the belief that they were “wasting” the land, and that by subdivision and improvement (the establishment of waters etc) the productive capacity could be increased. While addressing the issues raised by the Royal Commission of 1900, the Western Lands Board had to operate within this broader social context.

5.4 The process of settlement

White settlement in Western NSW was triggered by the explorer John Oxley in 1817, who, only two years after the crossing of the Blue Mountains in 1815, followed the Lachlan River south and then west to the junction of the Murrumbidgee River and beyond to the saltbush plains. His accounts of the land he found encouraged pastoralists to move west with their flocks. In 1819 Oxley, blocked from further progress to the west by low marshy country, wrote in his diary that his party appeared to be in the vicinity of an inland sea or lake which was gradually being filled up by the immense deposits from higher lands left by the waters that run into it (Oxley 1820, p.vii). So began the dream of an inland sea. In 1828 Captain Charles Sturt followed the Macquarie River to its junction
with the Darling River, and then turned upstream to the Bogan, and finally turned east
discovering the Castlereagh River. The following year he took a boat and proceeded
down the Murrumbidgee River to the Murray and down the Murray to its mouth at
Encounter Bay. As a result of this expedition a route was opened up between Sydney and
Adelaide overland past the Rufus River, important in that it allowed the movement of
stock from the eastern States to South Australia, and important also as the Rufus River
area became an important site for indigenous resistance to the development of
pastoralism.

Major Mitchell in 1835 mapped the Bogan River, and also the Darling River between
Bourke and Menindee. The following year he retraced Sturt’s steps down the Lachlan
and Murrumbidgee Rivers to the Darling, and then down through Victoria and his
“Australia Felix”.

In 1844-45 Sturt set out on his quest to discover the “inland sea”, following the Murray
and Darling Rivers to the present site of Menindee and from there up into the Barrier
Ranges and north to Depot Glen near what is now Milparinka. Fort Grey was his furthest
camp west, situated in the far northwest corner of NSW.

Sixteen years later, in 1861, Bourke and Wills passed through Menindee in their way to
the Gulf, and by this time Menindee was a small town. Much of the country in the far
north west of NSW was explored by the people who subsequently searched for Bourke
and Wills. Thus by the 1860s most of the Division had been explored, with some
scattered settlement such as the lease taken out on the Mt Arrowsmith Runs (land parcels)
1-4 in the northwest corner of the State in 1865 by FMC Cobham. Similarly there were
short-term leases on the 64,000 lots of Wanaminta (WH Wright of Bourke and Wills
fame), Yantara (Clark, Farquarson and Coy), Sturt’s Depot Glen (Henry Hopwood),

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8 As Major Mitchell travelled through the lush pastures of western Victoria in 1836, he used the phrase
“Australia Felix”, Latin for “fortunate Australia”
In an attempt to control the settlement of NSW, the government of the day restricted settlement to the nineteen counties, which was an area that extended from Moruya to the Manning River in the north and west to approximately Orange. Squatters were “discouraged” by local police from proceeding outside this area, but without much success. In recognition of the failure to restrict settlement to the nineteen counties, an Act was passed in 1838 that legalised squatting and for a £10 fee per year any “respectable” person could graze their stock on the land of their choice. This was in effect a “depasturing licence” that allowed pastoralists to graze stock on a virtually unlimited area.

The colonies at this stage were still governed from England, though there was increasing friction between those who implemented the laws (the Secretary of State for the Colonies, at this time Governor Darling) and those who made the laws. In England there was an increasing body of opinion that believed colonisation should be an outlet for the unemployed in England, who could be settled as yeomen farmers in the colonies. One of the leaders of this emigration scheme was Edward Gibbon Wakefield, and in response to his ideas of selling off Crown land and using the proceeds to finance immigration from the UK, in 1831 Governor Darling replied:

Nothing could be more unfortunate than the formation of a race of men, wandering with their cattle over the extensive regions of the interior, and losing, like the descendents of the Spaniards in the Pampas of South America, almost all traces of their original civilisation (quoted in Heathcote 1965, p35)

As a result of the 1847 Order-in-Council NSW was divided into three territorial Divisions - the settled, which included the nineteen counties, the intermediate, and the unsettled districts. The division of the State in this manner was essentially for administrative convenience, and it was not until the 1883 Report of Inquiry into the State of Public Lands that the 1884 Act established the Eastern, Central and Western Divisions. These were based on geographical characteristics, the Western Division later becoming the
basis for the Western Lands Act 1902. This Act came about through pressure from the British Government and set up a more rigid framework for pastoral occupation. Further, the Act stipulated the amount of land that could be held by an individual in the intermediate and unsettled districts. In the intermediate districts 16,000 acres (twenty five square miles) could be leased with the attached right to purchase 640 acres (one square mile). In the unsettled areas the area that could be leased was twice this size, 32,000 acres, the other difference being that these areas were put up for open tender, and were not restricted to the existing holder. Leases were granted for up to fourteen years on land units, or “runs”, capable of carrying at least 4,000 sheep (Heathcote 1965, p67). Until the early 1840s land in much of the unsettled areas was probably not under permanent occupation. The areas that were the exception was land along the southern end of the Darling River (where people were moving from the more settled areas in the south) and the tributaries in the north east of the catchment, where settlement was moving down the river system from the north.

5.5 The beginnings of responsible government

The 1850s marked an important watershed in the history of the land settlement. In 1856 New South Wales was granted responsible government, as was Queensland in 1859. The significance of this, as Heathcote (1965, p13) notes, was that this represented a shift from a colonial to an autonomous system of land settlement, in the sense that it represented a shift from the application of knowledge derived from foreign standards (colonial) and local knowledge derived from experience and occupation.

As a result of the 1846/47 Act (the Waste Lands Occupation Act), in the unsettled areas large areas of land were effectively locked up by run holders, and were not available for purchase except by the run holders themselves. Continued agitation led to the Minister for Lands at the time, Sir John Robinson, throwing open not only the lands contained in the unsettled area, but almost all lands for “free selection before survey”. This was the 1861 Act, and through this Act people could select land to suit themselves. This had several major impacts. The first was that land could be selected without regard to public
interest. The second was that people could select land in certain parts of the larger pastoral runs and hold the squatter (the original lessee) to ransom. City speculators could also take up land, simply by using the published maps of explorers as a reference. To combat this, the practice of “dummying” was employed by the squatters, where their employees dummyed land and held it on behalf of their employers. Another consequence of this Act was the demarcation of runs or leases on maps by straight lines, usually rectangular and where possible oriented toward the cardinal points. Corners and boundaries to leases were marked by blazes on trees with a broad arrow by Government surveyors to demarcate the location of each lease.

Lazarus (1973, p52) says:

The Robinson land Act of 1861 had been intended to break up the squatter’s hold on the land, and to throw the runs open for selection …it had failed in this purpose …The Act meant turmoil and warfare … between selectors … and squatters.

In this case the statements about what happened in the Riverina paralleled the remainder of the far west of NSW, where the Act failed to achieve the outcomes intended.

In 1883, James Farnell, the Minister for Lands, at the time, in his introduction of legislation to repeal the 1861 Act, stated that the Act was initiated in the best interests of the country, and had been framed for honest men, not rogues, with the assumption that every person taking up land would be a genuine occupier of it (Heathcote 1965, p43).

In the period 1861 to 1883 a series of other problems beset the Division. There were general droughts between 1865-70, 1875-78 and 1880-86. Further, the invasion of the rabbit led to complicating factors in land administration. At a conference called in 1886 a delegate from one of the Sheep Boards stated that “adjoining his own holding there were 500,000 acres of un-occupied Government land which to his knowledge, was thoroughly overrun with rabbits” (NSW Govt Printer, 1886, p38). In 1883 inspectors for rabbits were appointed for the Riverina, with the enabling enactment stating that all costs incurred in the eradication on the various leases would be born by the lessees, in effect, a charge upon the land. This was augmented later by a tax on all livestock owners in the
Division based upon the number of stock they owned. Both the control methods and the level of financing were inadequate, and the problem became so serious that in 1889 a Royal Commission of Enquiry was established that included NSW, Victoria, Queensland, Tasmania and the colony of New Zealand.

Following the separation of Queensland in 1859, NSW embarked on survey work detailing the pre-emptive leases and small freehold areas of land (towns, schools watering points etc). In particular they were to locate important landscape features such as watering points and pockets of superior country in preparation to its allotment for conditional purchase. However, the principle of selection before survey had enabled some private selectors to occupy or monopolise some of these strategic areas. The surveyors were also to establish a series of western watering points leading to the unwatered “back country” to prevent the denial of access by private interests.

The Lands Act of 1884 provided the impetus for the first major survey of the western part of NSW. All pastoral leases came under this act, and they were extensively surveyed with details such as terrain, soils, vegetation and water noted. These surveys provided the first detailed knowledge of the Western Division, its settlement to date, soil types, water and its potential. It also formed the basis of information provided to the New South Wales Royal Commission on Conservation of Water in 1885. Up to this time the pastoral settlement of the plains was operating efficiently, if inequitably. The problem was a continuing one of the competition between the squatter and the selector. When an inquiry was announced in 1883 into the State of the Public Lands, the Sydney Express stated:

> We have had 22 years experience in the working of a land policy …which has resulted in ignominious failure, so far as bone fide settlement. In other respects, its effect has been far worse (quoted in King 1957, p99)

The Sydney Express also referred to the fact that land laws set one class of society (the squatters) against another (the free selectors). The squatters were usually wealthy or well connected individuals, speculators from the city or speculators in land. The free selectors were seen as young people, battlers, or blue-collar workers seeking to make a life on the land. Implicit in this argument too was that the squatters were hindering development,
and thus stifling the growth of the nation. The Act also, according to the Sydney Express, encouraged dummying, blackmailing and perjury in the struggle to maintain vested interests.

The 1884 Act also saw the establishment of the Western Territorial Division, and was the forerunner of a movement for closer settlement in the Division. The consolidated runs or pastoral holdings were divided into two sections of approximate equal area, one called the Leasehold Area and the other the Resumed Area. A pastoral lease was issued for the leasehold area for fifteen years with the option for another five years extension and on the Resumed Area an Occupiers Lease was issued the tenure of which was to be renewed annually. People were granted permission to select Homestead Leases in the resumed areas, provided they did not exceed 10,240 acres with a similar term to Pastoral Leases. Central to the Lands Act of 1889 was an attempt to end the conflict associated with the continuing settlement of the west. This was done through two means: one was limiting free selection and the other providing security for the pastoralist. Pastoralism was still the backbone of the economy, and therefore it was sensible to afford protection.

In summary, the period from the mid 1800s to 1883 saw the settlement of the western plains almost complete following a fitful start. A large portion of what is now the Western Division was effectively occupied through deliberate land policies. Settlement consisted of a few large pastoral holdings, and this had not been the intent of the legislation. As has been shown, toward the end of this period there was significant discontent fuelled by the locking up of large areas of land, and problems associated with feral animals and rabbits in particular. As a result of this agitation, the period between 1884 and 1901 was effectively a period of transition toward a greater intensification of settlement. Agricultural settlement was not encouraged after 1884, and in most cases new leases were offered either to encourage capital investment or to control noxious plants or animals. Roberts (1924, p292) commenting on the 1884 Act says “Its introduction coincided with a period of stress, due to drought, the delay [of remedial legislation], low prices, rabbit plague, and the spread of scrub”.
The period was also a period of involvement of the large pastoral houses. Increased capital led to the ability of occupiers to fence, establish permanent waters and attempt to address the issues of feral animals and weeds. Smaller landholders usually had their capital tied up in stock and thus there was little money available to establish improvements. Several other issues also contributed to make this an especially important period in the history of the Western Division. Firstly, while this period saw a significant flood in the Darling River, it also saw the worst drought settlement had encountered to date. As Hardy (1969, p197) shows, the drought years between 1865 and 1870 left the landscape a “perfect desert” that following rain, regained all its natural productivity. However, following the drought of the 1890s the response was more dramatic. This was the effect of the continued overstocking, and importantly the huge effect of rabbits, which were now well out of control.

George Riddoch, an early pastoralist, remembering his early years said:

> When I got away from the stock track the horses went up to their fetlocks in loose friable soil …it was like a well tilted field; and the moisture, as it fell, penetrated the soil and fertilised the plants. Now it is scarcely an exaggeration to say that the very ground I am speaking of rings under the horses hoofs (quoted in Hardy 1969, p198)

While there had always been considerable amount of soil drift and movement in the landscape, the depletion of ground cover and trampling by hard footed animals hastened this process. As a result the valuable topsoil was blown away, or deposited into the water courses thus making once deep and permanent pools shallow and less reliable. Sturt’s rock holes at Yancowinna (near Depot Glen) were now no longer permanent.

Some said that at the end of the nineteenth century, the productivity of the Division had fallen by a third up to even 60% to 70%, and the stock numbers certainly reflected this judgement. On Toorale Station (one of the better properties on the Darling south of Bourke) carrying capacity fell from one sheep to three acres in 1891 to one sheep to five and a half acres in 1896 (Heathcote 1965, p153). There were less than two million sheep west of the Darling in 1880. By 1886 there were more than four million sheep in the same area, and by 1896, six million sheep. A peak was reached in 1894 when there were...
almost eight million sheep west of the Darling. In 1901 the number had fallen dramatically to less that three million sheep. In the Western Division in total, the numbers of sheep went from just under six million to almost fourteen million by 1893-95 to under four million by 1904. By 1950 when wool was at its height in terms of profitability sheep numbers were around eight million.

5.6 Fencing

P R Gordon, Inspector of Sheep, Sydney, in 1867 proposed a Fencing Bill. Writing in support of the Bill, Gordon (1867) stated:

The fencing in of our waste lands is a subject of the most vital importance, both as regards to the material and moral advancement of our colony; for if fencing were carried out it would … double the wealth of the colony…

Gordon considered that while fencing had become one of the institutions of squatting in the south west of the colony (Victoria), there was a reluctance to initiate it in NSW and Queensland. He stated that the fencing of the waste lands would lead to the “material and moral advancement of the colony” (Gordon 1867).

Where the availability of permanent waters once limited the movement of stock in the Division, the discovery of artesian water in 1888 meant that there were no longer such limitations. Between 1880 and 1885 many properties were sub divided for the first time by fences. This allowed more effective control over livestock and more effective grazing of pastoral leases at a time when there was considerably more pressure to become productive. Following the introduction and spread of rabbits, leaseholders were required to erect fences to prohibit the spread of the vermin. Fencing required considerable investment in both material and labour, and it was not until lease conditions were such that station owners could invest with a sense of security that such investments were made. The need to become more efficient was another contributing factor, and the steady fall in wool prices from 1860 to 1900 led to increased in farm capitalisation partly in the form of fencing.
Fencing is an important aspect in the culture of land ownership. Not only does fencing delineate ownership and the sense of exclusion and inclusion, it significantly alters land management practices. Fencing allowed the control of animals and grazing, and the ability to segregate land types in terms of their use.

One of the obligations under a Western Lands lease was the obligation to fence the land. In fact, the lease could be forfeited if the lessee failed to conform to this requirement. It is often assumed that fencing, apart from its practical outcomes in delineating areas of ownership and controlling stock and trespassers (human and animal), had little other purpose. While these benefits are significant, the history of fencing would indicate that its function was not for this reason alone.

The belief that fencing led to increased production originated in England. Between 1700 and 1850 animal output from British farms had increased by two and a half times. Grain yields had doubled and the four course rotation had resulted in the production of approximately 80% more food (Overton 1996, p115). Enclosures may have played a part (through an Act of Parliament in the eighteenth century much of the remaining open tracts of open country were enclosed for private use), but the real driver was the introduction of leguminous forbs (non-grasses or shrubs) and the introduction of rotational farming practices (Harvey 2001).

The provision of fences allowed for the controlled use of sections of land. Not only could grazing be controlled and managed, “natural” pastures could be manipulated and managed. Harvey (2001) describes how the idea that particular species could be added to swards\(^9\) or species within the sward manipulated to increase productivity was novel at this time.

While the nature of agriculture was changing as a result improvements in pasture management and husbandry, there was an added factor in Australia. The discovery of

\(^9\) Swards – a body of grass.
gold in Australia in the 1850s meant that the supply of cheap labour was diminished as the goldfields attracted itinerant workers in large numbers. Thus the availability of people to work as shepherds was reduced, and those who stayed demanded increased salaries. There was reluctance on the part of pastoralists to commit to the expense of erecting fences, and the argument was raised that shepherded sheep were more productive than sheep in fenced paddocks. Gordon (1867, p12) argued that fencing runs delivered considerable benefits to the individual, but in addition enabled up to a doubling in the stocking rate. He pursued this argument and maintained that fencing enhanced the value of the public estate, and as mentioned above, would double public wealth. He cited the insecurity of tenure and the fact that for Crown tenants there was the absence of “any law recognising the right to compensation for improvements” (Gordon 1867, p26-27) as a reason why many of the runs were not fenced. While a change in the security of tenure could not be given as it “interfered with the operations of free selection” (Gordon 1867, p27) and this would not be popular, Gordon argued that the Crown should make fencing the boundaries one of the conditions of the lease, with the internal fences being valued when the lease changed hands, so by compensating owners for capital improvements. These changes, he maintained, would provide an inducement to develop the land, would bring useless land into production, and provide work for the labouring man “from one end of the colony to the other” (Gordon 1867, p27).

5.7 The Homestead Act

The Homestead Act of 1884 saw a change in emphasis in the philosophy of Crown Land management. The need to transform the “wasteland” into productive and useful country was seen as a priority. To accommodate this change the concept of the Home Maintenance area was introduced. A broad definition of the Home Maintenance area was that it was an area of land sufficient to provide a living for the average sized family. Special Ministerial dispensation was required to lease more than this. As a result half of the area of all the big stations was resumed and the resumed areas put up for selection. Areas that were selected immediately or that needed building up with other resumptions were leased back on a yearly basis to the original lease holders under a permissive
occupancy lease. In this way the concept of limiting the area that any lessee could own entered into the administration of Western Lands leases (as they were later to be called). The ownership of land in other parts of the State or in other States was a consideration when the application for lease ownership was made, and very often it precluded ownership. This restriction continued into the mid 1980s.

Fencing became part of the lease requirements in the late 1800s for the Western Division, and while fencing undoubtedly had its supporters as a means of prohibiting the theft of stock, the belief that it lead to greater productivity was also a significant factor. Fencing, apart from saving labour, forced stock on to areas of land that they may not choose to graze by choice. It also provided a more even grazing of the landscape by spreading stock throughout the landscape. Alternatively, it kept them in the landscape in dry times, leading to the degradation of areas that otherwise may not have suffered so badly. For example, overgrazing in country of heavier soils did not cause the erosion problems (due to the deeper A horizon) that it did in the sandier or lighter soils.

Fencing was thus a mechanism for landuse that had no foundation in accommodating the special needs of the ecosystem. Rather, fencing had its roots in the more practical application of a desire to increase productivity. The fact that “waste land” could be fenced and returned to some level of productivity obviously had strong attractions. The fact that it also mediated against a social problem (that of stock stealing), also provided an attraction. It is hard to find reference to the fact that fencing may be desirable in the context of better aligning grazing pressure to land capability and as a result generally fencing did not distinguish between land classes. Thus the opportunity to use fencing as a means to secure sustainable land management was by and large lost.

Together with fencing, land clearing was considered to be a fundamental duty of Crown lessees. Gordon (1867, p34) made reference to this, saying:

Sapping (ring barking) is the speediest and most economical mode of improving our forest pasture lands. It has been found that in every instance it will double, in many cases triple, and in densely timbered country … quadruple the grazing capabilities.
Gordon then went on to talk about the “evil effects of trees” almost as if trees and agricultural productivity were incompatible. He finished by quoting a saying that “he is a benefactor to his country who makes two blades of grass grow where only one grew before” and adding his own interpretation that a similar person is one who makes the land carry two sheep where only one was carried before. It bears remembering that these statements were made by the Inspector of Sheep in NSW.

The foregoing discussion makes it clear that land was seen as a source of wealth through improvement and production. Clearly, there was a desire to make the land compliant with community expectations. Land not suitable to production was regarded as “waste land”, implying that it was not of value.

5.8 Royal Commission of Enquiry 1901

The Royal Commission of Enquiry into the condition of Crown Tenants in the Western Division of NSW in 1901 and the factors leading up to that enquiry are well documented, for example Quinn (1995), Condon (2002), Heathcote (1965) and King (1957) to name a few. There is a common theme in all of these articles relating to overstocking, rabbits, low commodity prices, the spread of inedible scrub, and extreme variability of weather. The 800 pages of the report of the Commission itself details some further issues such as distance from market; the destruction caused by wild dogs, poison plants, eagles, wild pigs, the effect of windstorms and drifting sand, high interest rates, defective legislation, floods and lack of capital. The period 1884-1901 saw changes to the environmental, social and physical conditions of the Division. Socially, the reign of the big pastoral companies was coming to an end, and the new social order of smaller more intensive properties was emerging. The Shearer’s Union was in the process of being formed, with strikes in late 1891-92 and 1894 being particularly important. Environmentally, an ecosystem that had been under stress began to change. Such change was evidenced by changes in pasture species and composition, density and heightened erosion.
There was a series of good seasons in the mid to late 1880s and the early 1890s reflecting substantially above average rainfall. From 1892 to 1903 there was a steady decline in average rainfall, but it was not until the 1920s that the annual average returned to where it had been in the 1880s. The Royal Commission of Enquiry sat in the latter stages of the drought of 1896-1903 and as a result dealt with the effects of the worst drought pastoralists had experienced to that date. In the early days of settlement and up to the 1880s the Western Division was an active area for speculation, and saw a rapid expansion in the sheep industry. In the period 1884-1901 stock numbers peaked and then began to fall. While on one hand the densities of sheep were at their highest, on the other the losses were also at a record.

The 1884-87 drought caused the NSW Royal Commission into the Conservation of Water to speculate that the limits of pastoral expansion may have been reached “unless the benefits of irrigation can be placed within reach” (quoted in Heathcote 1965, p147).

Prices paid for grazing rights were high, and capital expenses (water points, stock fencing and stock, for example) increased debt. Butlin (1962, p114) estimated that more than half the leases in the Western Division were mortgaged, with the percentage west of the Darling River probably being considerably higher than this. Finance was not easy to get owing to the short term tenancy of many of the leases. Debt had been incurred partly due to the purchase price of the lease or grazing rights, and partly because of the costs of developing the land.

The enforced subdivision of properties not only reduced the ability of owners to reinvest in the land, it also had the effect of reducing security, and thus increasing the cost of borrowed funds. In 1893 there was a bank crash, which paralysed the industry, and several banks which had invested in pastoral properties foreclosed on their clients (Heathcote 1965, p156). A cartoon entitled “Backcountry Squatter, AD 1892” depicts a squatter wading through a sea of debt toward financial ruin carrying on his back the weight of such issues as drought, the Amalgamated Shearers Union, the Carrier’s Union, resumption, 9% interest, mortgage, locusts, dingoes and a rabbit sitting at the top of the
load (Noble 1997, p19). While this cartoon does not directly relate to the rangelands of NSW (it originally depicted Western Victoria), many of the issues were the same and the cartoon does illustrate the range of negative issues that were impacting on pastoralists in the region at the time.

Prior to the 1880s the major sources of revenue for the Colony of NSW were customs duties from both outside Australia and between other colonies, land sales and rent (representing approximately 22% of the Colony’s income throughout the 1880s). There was, therefore, a good incentive for the Government of the day to set these prices at their upper limit. While the revenue from customs was independent, the revenue from land and rent was directly related to the profitability of agriculture. The 1880s had seen a large expansion in external borrowing by the large pastoral companies, mainly from England, and with this came the obligation to repay interest and principle. This obligation to repay debt came at a time when the wool industry in the west was under considerable pressure.

Wool prices had fallen to their equivalent price in 1870 when they were again at low prices. World wool supply had peaked in early to mid 1890s, and only slowly declined in the latter half of the 1890s. This difficult trading environment was further effected by the drought of 1896-01 and the rapid increase in rabbit numbers in this period. The contribution of the pastoral industry to the balance of payments had been substantial in the 1880s, but in the 1890s this contribution, while significant (wool still represented 29.9% of total exports in 1900), the contribution was greatly reduced. The multiplier effects on the State’s economy were substantial, and it has been said that the depression of the 1890s was at least in part due to the effects of this decline in rural prosperity (Boehm 1971, p319-326).

The Royal Commission cites numerous examples of how the downturn in the prosperity of the wool industry had direct affects on business in towns within the region (Royal Commission 1901a Vol. I, p41). Capital repayments and interest payments affected not only the pastoralists, but also the Government who had borrowed heavily for capital
works such as the railway to Bourke, completed in 1889. There can be no doubt that the pressure for increased productivity came from individuals and the Government of the day alike.

The ability to repay the debt was in a large part a function of the productivity of the land, and this had been clearly overestimated due to the run of good seasons during the period of early settlement and the fact that stock were feeding on what in reality was a “haystack” whose replenishment was a slow and fitful process. By 1894 there were less than eight million sheep west of the Darling, representing almost one in seven of all the sheep in the colony, and half as many as in the whole of Queensland. The excessive sheep numbers together with the invasion of rabbits meant that in the drought of 1895-1902 the system collapsed.

Perennial species such as saltbush and Mitchell grass were eaten out to the roots, and in many cases failed to recover. The fragile soil, exposed through the depletion of organic matter began to blow, and there was substantial wind erosion. The loss of perennial species led to the dominance of annuals, and an increase in the rate of invasion of the woody weeds.

The “inedible shrubs” such as Turpentine, Budda or False Sandalwood, Broad Leafed Hopbush, Puntie and Ellangowan were part of the natural system of biota and these particular species were generally unpalatable to stock. However, when there was little else to graze on and other species had been grazed out, these species were selected. While it was possible for stock to kill the smaller shrubs through grazing, the nature of growth of the inedible shrubs (or woody weeds as they were called) meant that grazing seldom killed them.

The overgrazing of the grasslands gave the various species of woody weeds a competitive advantage, and soon it was evident that they were beginning to spread. R W Peacock, the Manager of the Experimental Farm at Coolabah, reported in 1890 “… upon the red
country the pine scrub, box seedlings, and budtah\(^{10}\) (sic) have taken complete possession, to the exclusion of even the worst grasses” (Peacock 1900, p655).

The overall effect was deterioration in the productive potential of the land. For example, on Toorale (south of Bourke) it was said that the carrying capacity fell from one sheep to three acres in 1891 to one sheep to every 5.5 acres in 1896. Other properties did not necessarily suffer the same losses however, as the reduction in carrying capacity was not even. While the reduction in carrying capacity was important, this was in part countered through the fact that through improved breeding and management productivity had in fact increased on some properties. Heathcote (1965, p155) shows how the wool cut per head had roughly doubled between 1860 and 1900, from about 1.75lbs/sheep to 4.5lbs/sheep. Heathcote’s figures indicate two things: first, that a significant increase in productivity per sheep occurs in the early stages of production (between 1860 and 1880) occurred and secondly that there has not been any significant increase since.

As a result of the severe drought at the time, by the time the Western Lands Board was established, sheep numbers in the Division had fallen from fifteen million sheep in 1895 to 4.5 million in 1902. Sandstorms had left millions of acres in an unstable state, fences and yards had been covered, and excavated ground water tanks filled by sand. For stock that could not be moved out to pastures elsewhere (which meant most of them), most subsequently perished through lack of feed and water. One of the first jobs of the new Western Lands Board was to extend the terms of the leases so that they fell due for expiry at the end of June 1943.

The Royal Commission of Enquiry and the subsequent establishment of the Western Lands Board marked a significant milestone in the way people thought about their relationship with the landscape and how they interacted with it. While there is little argument that the events that triggered the changes were initially related to social

\(^{10}\) Budda, as it is commonly now called, is an Eremophyila, and also referred to as false sandalwood, or budtha and is one of a group called “woody weeds”
conditions rather than environmental factors, the changes that came about were aimed to address both social and environmental issues.

Social deprivation was caused by drought, low wool prices and loss of productivity. City people were informed of the plight of pastoralists in the Division by journalists such as Millen (1899) through a series of articles in the Sydney Morning Herald. Such articles gained wide coverage, appearing for example in the Riverina Recorder (25/4/1900) and the Western Grazier (27/1/1900), and prompted considerable debate, both in Parliament and within communities. Journals such as the Australasian Pastoralists Review\(^{11}\) and the Agricultural Gazette of NSW\(^{12}\) argued that the damage had been done by inadvertent overstocking and that the Western Division was still terra incognita for its occupants (Millen 1899).

The effects of overstocking had been noticed considerably earlier (Russell 1885, Rankin 1884, De Satgé 1901), and while there was an awareness of the issue it took the drought of the 1890s to galvanise action. While the action that followed was initially focussed on shorter term considerations (lease rent and conditions), the ultimate aim was to manage social and environmental welfare. While other areas of NSW suffered drought, many of these areas were freehold title and as such the State lacked the ability to change agricultural practices to the extent it could for leasehold land.

The Western Lands Act came into force on January 1, 1902, and replaced the Crown Lands Act of 1884. Amongst the actions the Act determined were:

- The Western Lands Board was established to oversee management
- Rents were to be restructured and renegotiated
- Controls were to be implemented to prevent environmental degradation
- Land could be resumed and reallocated to needy pastoralists

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\(^{11}\) The Australasian Pastoralists Review, January 1900, pp. 655-56

\(^{12}\) Agricultural Gazette of NSW, 1900, Vol. 11, Part 8, pp652-7, Part 1 p207.
Under the new terms and conditions of leases, provision was made for the enforcement of the destruction of noxious animals and weeds, and except for special conditions, timber was not to be removed without permission of the Commissioners. Further, there was a direction that edible shrubs should be fostered and cultivated at the direction of the Minister. Finally and importantly, there was a provision for leases to be cancelled if conditions were breached.

The Act was to be administered by a board (the Western Lands Board) and the actions of this Board were subject to great public and government interest. In the history of the Western Lands Act, no lease has ever been forfeited through failure to comply with lease conditions. As early as 1902 the measures for environmental protection were being eroded (Quinn 1995, p144), with estimated expenses for weed and vermin control being included in lease payments. Pastoralists maintained their right to self determination, as stated in the Pastoralists Review (1902, p681):

The pastoralists and agriculturalists have a great deal more right to rule the country than the Labor Party; they are more numerous; they add more to wealth; they are stronger in nature and character.

Pastures Protection Boards were established in the Division in 1902 under the Pastures Protection Act of that year. They were made up of six directors elected by local pastoralists (within set Divisions), and a Chairman appointed by the Government. These Boards charged pastoralists a levy and enforced the destruction of noxious weeds and animals. In this way a degree of self regulation was passed on to local pastoralists.

It is not intended to follow the changes to the Western Lands Act here in any detail. The important point is that the Act itself represented a mechanism by which social and environmental considerations could be taken into account in terms of land management. While it was clear that the Act intended to address both social and environmental issues, it became obvious as time progressed that social issues took precedence over environmental issues.
Following the changes made by the Western Lands Act, there was growing discontent on two counts. The first came from a relatively small number of settlers requiring additional land, while the second source of concern was over the expiry date of 1943. The length of the lease was considered too short to allow for the sort of investments that needed to be made in terms of fencing, water and other developments. The result of this was the Buttenshaw Act of 1934, which allowed lessees to apply for a lease in perpetuity (99 years) over one home maintenance area, and the right to extend the lease over any remaining land for a period of up to twenty five years. This was on the condition that the Crown was able to progressively withdraw up to a half of the original lease for closer settlement. By 1948 almost 80% of the land in the Division was brought under this Act. The Buttenshaw Act further built on the idea of a “home maintenance area” (HMA), the precise formula for which was laid down in the 1934 amendment to the Western Lands Act. The home maintenance area was the area of land deemed sufficient to support an “average” family. The area contemplated at that time was the area capable of carrying 3,500 sheep where the land could carry one sheep to three acres and 8,500 sheep where the land could carry one sheep to twelve acres. Certain values were added to these percentages to accommodate distance from trucking yards etc. Thus by implication, 3500 sheep were considered sufficient to make a reasonable living in the better country, while 8,500 sheep were required in the more remote areas of the Division. Up to 1968 a transfer policy operated to prevent the transfer of land that was substantially more than one living area, and following this date the policy was varied to prevent the transfer of more than two HMAs. Other changes allowed from the early 1960s onwards was the policy of allowing children to participate in the property through the acceptance of stock partnerships (a partnership trading as a company, where the partnership was made up of the individual family members), and the allowing of public companies to hold Western Lands leases. Sub leasing was also allowed.

During and following the second World War the demand for land for soldier settlement increased, and as a result a number of further Acts were passed in the course of time that sped up the process of withdrawing land for closer settlement, and the provision for land due for withdrawal in 1948 to be withdrawn in 1943. In 1949 an Act was passed that
allowed for the withdrawal from the lease of any land in excess of two home maintenance areas, and for this land to be allocated for new settlement. In 1952-53, 215 blocks were made available for such settlement. Following the Second World War, pricing controls were brought in under the National Security Regulations of the time, and in 1949 the Minister was obliged to refuse all sales where the price was more than 10% above market value. The aim of this legislation was to prevent the use of land for speculation. However, these regulations were later used to prevent cashed up outsiders (usually from the more closely settled areas) purchasing land in the Division that more appropriately should have gone to neighbouring lessees to enable property build up. It was argued that adjoining lessees could only purchase land at these elevated prices by over-use of their existing pastoral resources.

Wool prices had been steadily declining in real terms since 1860, except for a short spike in 1899. Using 1900 as a base year, the price of wool in real terms (1900 = 1,000), in 1860 was 1220. By 1890 it had steadily fallen to 900, reaching the lowest point in 1901 of 500. To put this into some perspective, after World War II, the index was at 1050, still only just above the price in real terms that was received in 1900. From this point there was a rapid rise in price to the records of the 1950s, when it reached 14,000 points in terms of the index. Since then the price of wool has steadily declined in real terms. The financial difficulty of lessees has been a common theme in the settlement of the Western Division. Productivity, terms of trade and the variability of the climate have all impacted on the successive generations of settlers. This trend continued throughout the 1900s and into this century.

5.9 The 1982 Hassall Report

The Hassall Report of 1982 was initiated by the NSW State Government on account of a number of factors. The concept of the home maintenance area had been the driving force behind closer settlement for almost a century. As the terms of trade for pastoralists had deteriorated so had the size of the HMAs been periodically increased. However, by 1982 some 68% of leases were below the HMA laid down (Hassall and Associates 1982, p4).
Thus a large number of leases were unviable, largely as a result of Government policy, with the consequence being that there were a large number of families living in reduced standards of health, education and welfare. Capital assets such as fencing, improvements, waters and the like were also deteriorating. Finally, it was recognised that unsustainable rates of grazing were being applied (as a short term measure) and the long term condition of soil and vegetation was at risk. The Government, as landlord of the 31 million hectares of the Western Division, had a responsibility for the land and its tenants. The Western Lands Commission Annual report for 1978-79 lists the gross income for that year from sheep, cattle and dryland cropping as being eighty six million dollars, and the level of rent being $898,000 for that year.

In 1982 Hassall and Associates produced a study of the Western Division entitled An Economic Study of the Western Division of NSW. The major funder of the research was the Australian Wool Corporation through the Wool Research Trust Fund. The aims of this report were fourfold. The first was to access the economic position of lessees in various land types for a range of rents. The second was to use base line financial data and using cost of production forecasts and likely returns, undertake a five-year projection. The third objective was to collect a range of data from lessees that included financial, sociological and attitudinal about the problems perceived by lessees. The fourth objective was to make recommendations based on the first three objectives. The results of this survey provide information on the status of lessees in the Division up to this point, and as a result, reflect the effectiveness of successive legislative changes since the Western Lands Board was established at the beginning of the century. As in 1901, the plight of the “Crown Tenants” was once again the subject of the review (Hassall and Associates 1982, p6)

The report made a number of recommendations. The first recommendation was that there should be no limit to property size. The second was that the home maintenance area should be abandoned. Thirdly, newcomers to the Division should only be allowed to
purchase blocks with a minimum size (5,000 dse\textsuperscript{13} in the east and 8,000 dse in the west) In regard to rentals, the report recommended that while carrying capacity should be retained as a means of assessing rental, rentals should be more flexible and responsive to changing economic conditions. Any increase should be not greater than the consumer price index (CPI). The fifth and sixth recommendations related to fragmentation and consolidation, discouraging the former and encouraging the latter. The seventh recommendation related to property build-ups, and suggested that any land advertised for sale should not be sold until neighbours had been notified and that the time between advertising and sale should be no less than three months. The final recommendations related to things like the retention of Ministerial consent to transfer, the abandonment of price control, the establishment of funds to enable property build up and finally a recommendation for the development of eradication programs for feral animals (goats and pigs) and kangaroos.

5.10 1981-1985 NSW State Government Inquiry (the Fisher Inquiry)

In 1981 a Joint Select Committee was established to enquire into and report on:

(a) Land use in the Western Division including the relevant historical matters, land administration, land tenure and administration, also having regard to administration of arid lands elsewhere in Australia

(b) Matters relating to the environment and strategies for conservation and utilisation of natural resources within the Division

(c) The needs of the community generally, and the relevance and effectiveness of Government structures and schemes of assistance within the Division.

( Noble 1997, p31)

\textsuperscript{13} DSE means “dry sheep equivalents” or the grazing requirements equivalent to a 40kg merino wether
This review essentially proposed some minor changes relating to the size of living areas, and further adjustments relating to cropping. The review originated from a general disquiet amongst the wider community regarding land management in the Division, and from lessees in the Division seeking changed conditions regarding leases.

5.11 2002 NSW State Government Review (The Kerin Review)

The Kerin review is, in part, the result of six consultancies dealing with separate aspects of the Division. It also incorporated wide public consultation. At the time of the report wool prices were depressed, the woody weed or scrub invasion was continuing, populations were declining, and there were concerns about biodiversity. The Western Lands Act was increasingly being overlayed by a series of other Acts that in some way affected land use in the Division, and as such was seen to be becoming redundant.

Looking into the future (five to ten years) it was seen that the people of the Division were going to become increasingly dependent on the Government for welfare due to declining world commodity prices, increased costs, and limited opportunities outside traditional land use.

In regard to the environmental status, the report makes some interesting observations. There is an acknowledgement that significant damage was done to environmental systems before and at the start of the 1900s, in other words at the time the Western Lands Act came into existence. This damage continued until the 1950s according to the report, largely as a result of rabbit populations. When the rabbit population finally declined in the 1950s (as a result of myxomatosis), the damage continued as the result of the policy of closer settlement. The report is uncertain about the ecological effects of closer settlement, saying that while degradation continued in some areas, other areas slowly improved. What is certain is that many palatable grass species had been lost, the spread of inedible shrub continued unabated, and greater numbers of kangaroos and non domestic animals further increased grazing pressure. As a result some landscapes were seen to be becoming dysfunctional.
In some areas vegetation change was extensive, and seen to be irreversible, at least in the short term. Soil degradation through wind and water erosion in areas such as the red mulga country and the mallee to the south were considered directly attributable to over utilisation through grazing and the suppression of traditional fire regimes. Currently as many as twenty five species of mammals and fifteen species of flora are believed to be extinct in the Division. Many of these were thought to have been lost in the 1800s, and the greatest impact, in regard to mammals, has been through predatory non-native introductions such as the cat and fox.

An interesting observation was made in the Kerin Report:

Many people in the division do not believe that the scientists and others are correct in their assessment of their state of the rangelands, and do not share the principles inherent in a range of NSW and Commonwealth Government Acts to manage our natural resource based systems (Kerin, 2000, p.vi)

Many residents of the Division felt that the scientific evaluation of the condition of the landscape did not reflect its true state. Many argue that the landscape is in a lot better condition than scientists and the Government would have them believe. This is a point of view that is often voiced by pastoralists in my experience and it has two components. The first is whether the landscape has changed significantly, and over what time period. The second part of this is whether the change has been for better or worse. If current attitudes and values regarding landscape are compatible with landscape condition, then there is little incentive to change behaviour.

While the rest of the report goes on to outline a range of administrative measures that integrate and simplify management of the Division from the Crown perspective, the report fails to deal adequately with the issue of changing landholder behaviour. The report does suggest that degradation is continuing with the Division, though it does make clear that this is not universal, and that some areas have indeed improved in condition since the Western Lands Act was formed. The report is ambiguous in assessing the success of the Western Lands Act in terms of environmental management, and
concentrates more on the administrative side of the Act. However, the issue of sustainability and the environment was a major factor in the establishment of the original Act, even though the language used then may not be the same as today. Numerous submissions at the Royal Commission of Enquiry that led up the formulation of the 1901 Act dealt with the deteriorating condition of the land and the effect that it had on the prosperity and welfare of the inhabitants.

Probably an accurate summation of the changes to the Western Lands Act is made by Dr John Pickard, a former assistant commissioner of the Western Lands Commission, when he says that:

most of the changes since 1950 to legislation, administration etc. have had minimal impact on the landscape. The changes to the landscape are almost invariably caused [by] management changes (poly pipe etc) initiated by individual lessees. An exception is myxo and more recently RCD\textsuperscript{14} (personal communication, 2003)

5.12 Implications of changing technology

Internationally, social attitudes and values toward landscape had traditionally developed in a context where agricultural practices had evolved and changed slowly. The amount of land a farmer could till, or the number of animals a single person could control had hardly changed through time.

Following the industrial revolution agricultural technology changed rapidly with mechanisation and scientific advancements. While the ability of a community to modify the environment that it occupied increased significantly, traditional attitudes and values relating to how society saw its relationship with the natural world did not. The result was that attitudes and values failed to keep up with current practices. In the Western Division improved capacity to supply water through pumps and polythene pipe allowed pastoralists to maintain stock numbers when otherwise they would not. In other words feed now ran out before water. A further effect was that there were population shifts out

\textsuperscript{14} Both Myxo (myxamotosis) and RCD (rabbit caliece virus) are biological controls of rabbits.
of agriculture and the bush toward metropolitan areas, and so the sense of social
connectivity between the wider society and the landscape was being eroded.

5.13 Discussion

This chapter has discussed the administration and settlement of Western NSW in some
detail. Methods of land allocation are a socially based phenomena and therefore not
necessarily similar across cultures. Cultural attitudes to landscape and land use were
therefore enshrined at a very early stage in the settlement of Western NSW. It could be
argued that through the process of settlement the cultural norms and attitudes of the wider
community were indelibly etched on the landscape and those who occupied it. They were
locked into a particular culturally orientated paradigm of land allocation and use.

According to Sandford (1983, p117), there are a number of ways in which societies
allocate land. One distinction is whether the same person or organisation that owns the
land also has an interest in or ownership of the livestock. In parts of the world this
relationship is often split and the owner of the livestock may or may not own the land,
and hence there is a disconnection between the land owner and the land user.

As has been shown, in Western NSW the Crown owns the land, and the owner of the
stock (the lessee in most cases) is bound by the terms to the extent and intensity of
activities that can be carried out. A subtle but important point is that the Act prescribes
the nature and the intensity of activities, but fails to describe the land condition that the
lessee is required to maintain. There are two approaches for control: one is to prescribe
the activities and intensity of these activities that may be carried out on the lease. The
other is to define a satisfactory lease condition, and say that any activities are appropriate
provided the appropriate lease condition is maintained.

This failure to prescribe the land condition reflects a number of things. Firstly the
ambivalence by the wider community as to what the landscape should “look” like.
Community attitudes as to the degree to which the “naturalness” and natural systems are
modified to accommodate agriculture is just as, if not more, divisive now than it was one hundred years ago. While it is easy to reach agreement on what is not wanted, it is not so easy to agree on what is wanted.

Secondly, natural systems are not static, and are constantly evolving. Any scientific goal in terms of the environment needs to be in terms of function as opposed to state. Not only is this difficult to define, it is also difficult to measure in the time frames necessary to achieve appropriate management.

The administration of the Crown Lands Western Division of NSW was the initial responsibility of the Colony of NSW and, since federation, of the NSW State Government. In the course of this chapter it has been demonstrated that there has been a consistent pressure for reform from leaseholders and the community in general, but for different reasons. It could be argued that the Government (or the appropriate agency within the Government) is the only body capable of administration given its ability to assess the economic, social and ecological factors and it having the breadth of vision to plan for long term outcomes. However, there are some challenges to this argument. Sophisticated long term planning is expensive and time consuming, and as a result can not be readily repeated. Detailed maps of bioregions have only recently become available, and seldom are at a scale applicable on a paddock level. Recent advances in satellite mapping have improved this, but historically there has been a problem with scale. The NSW Government until recently has been reluctant to give powers over land use to regional communities, though this is changing.

Experience shows that Governments have been unreliable at applying land use decisions. Often short term political pressures and expediency have over-ridden long term goals, and while some of this may have been useful, this flexibility has not been based on “well thought out environmental or social criteria” (Sandford 1983, p109).

The size of the unit or lease has been based on land area, but considered the number of stock units considered necessary to make a living. Thus social and economic factors
influenced the size of lease holdings and both of these factors are difficult to estimate over time. This led to the continual re-arranging of lease sizes over time as different social and economic factors became apparent. In the Western Division preferred lease sizes decreased until the second half of the 1900s and then have began to increase as economic conditions deteriorated.

The settlement and subsequent development of the Western Division can be traced through a number of historical threads, each thread being of greater or lesser importance depending on the critical concerns at the time. Pre Federation the major concerns dealt with the orderly occupation of land and in a sense this was an administrative imperative. However, toward the end of this period the imperatives were more to do with social equity, and breaking the monopoly of the larger pastoral owners.

The drought at the end of the 1890s came at a time when there was not only social unease, but also macro and micro economic problems for both pastoralists and NSW as a State. The bank crash and the tightening of credit, low wool prices and the lower productivity attributable to seasonal conditions, rabbits and a change in plant species populations all contributed to the pressure for a major review of settlement policies and land administration.

The initiation of the Western Lands Act demonstrated recognition of the special needs and problems of the semi arid areas in NSW, and that the need for a specially tailored Act to deal with these issues. During the process of the formulation of the Act the public hearings attracted a range of ideas that could be grouped into two broad categories. The first were those that dealt with the declining resource base and included such issues as overstocking, rabbits, the incursion of woody weeds and low rainfall. The second group was a more eclectic group and contained such issues as declining prices, high interest rates and costs and the “want of sufficient area”. It has been said that little mention was made in the Report of the effects of pastoralism on the ecology (Noble 1997, p23). There was information available at the time that proposed that high stocking rates of introduced species of animals (sheep and cattle) “resulted in the wholesale destruction of native
grasses and herbage” (Hamilton 1892, p76-96). Mention of this effect is also made in the Royal Commission’s Report (1901a, Vol. 1, pp vi-viii) and therefore it is clear that there was some recognition of the fact that introduced animals, run in a manner driven by income rather than by sustainability, may have led to degradation. This is not only in the sense of a loss of species or biodiversity, but also with further consideration that such losses eventually led to a loss of productivity.

The fact that pastoralism may not have been an appropriate land use was never considered. It was always assumed that pastoralism with individual land ownership was the only type of appropriate land settlement for the area. The concept of ownership was considered in the sense that while the land was owned by the Crown, individual leases were owned by the tenants. Private ownership could be mirrored by the duration of the lease, and to this end a ninety nine year lease was considered a lease in perpetuity and almost the equivalent of freehold. In the early stages of settlement leases were for a limited duration, and as time passed the duration was gradually extended as a result of pressure from lessees. It is clear from the discussions above that the early lease durations were the result of administrative requirements rather than the product of any environmental considerations.

This chapter has traced the socio-economic history of settlement of the Western Division. It has highlighted the struggle for the attainment of social equity, productivity and settlement in a highly variable climate.

The next chapter looks at the interrelationship between grazing and pastoralism and the variable seasonal conditions that are a feature of the climate in the Western Division.
Chapter Six: 
Grazing and the Environment of the Western Division of New South Wales

Figure 6.1: Principal localities in the Western Division

This chapter explores the history of grazing in the Western Division, focusing on the way stocking levels reflect peoples’ understanding of land capability and seasonal variability.

The Western Division of New South Wales (NSW) is a large area of land representing almost forty two percent of the area of the State on NSW. The region is 32.5 million hectares in size and represents 9.1 percent of semi arid Australia. In 1990 there were 314 pastoral establishments in the Division (Ison 2000, p3). As previously mentioned, the
term “Western Division” derives from the time when the State of NSW was divided into three regions, the Eastern Division, Central Division, and the Western Division. Figure 2 shows the principal localities in the Western Division, with the major areas of population being in the eastern section and north eastern areas in the Division. The Darling River is shown bisecting the Division in a north-easterly south-westerly direction.

The Western Division provides a unique insight into the evolution of the relationship between the community, settlers and the landscape and this is made easier given the large amount of information available on the region. The volume of information exists because soon after white settlement in the Division reasonably good records were kept of both the social and ecological environment. The numerous Commissions of Enquiry into the state of the Crown tenants in the Division provided further information about the state of Crown leases, policies of settlement and the state of the pastoral community within the Division.

As discussed in Chapter Five, the principle of sustainable use of land has been an issue for lessees and administrators alike in the Western Division since the passing of the Western Lands Act in 1901. A succession of inquiries has indicated that entrenched issues remain after 100 years of administration.

6.1 Grazing in the Western Division

Figure 6.2 shows livestock type for Australia as a whole, but it should be noted that in the Western Division sheep are historically the predominant type of livestock raised. With current low wool prices and buoyant cattle market there has been a shift from sheep to cattle where possible, but still sheep are the predominant livestock.
Sheep have the ability to eat closer to the ground than cattle, and hence do more damage to grass butts and emerging vegetation. They also require less water to survive, and their ability to browse and graze makes them highly efficient users of the semi arid rangelands. While sheep were the preferred choice of livestock in terms of economic returns, the attempted eradication of dingoes and the erection of the dog (barrier) fence from Hungerford west to and south from Cameron’s Corner in the far north-west corner of the State further encouraged their use.

Typical landuse in the Western Division is grazing, with some small areas of cropping confined to the eastern margin of the Division. The Western Division of NSW fits neatly into the category of rangelands, is typified by an arid to semi arid climate, with the principal landuse being the extensive grazing of sheep. Stocking densities decrease from east to west, and roughly follow rainfall. Figure 6.3 shows the grazing densities for
livestock across Australia and demonstrates that the Western Division of NSW is generally similar to the rangelands of eastern Australia in terms of stocking density and its relationship to rainfall.

Figure 6.3: Density of cattle and sheep distribution across Australia in 1997 (expressed as DSE15/ha)

Source: Veitch, Australian Bureau of Agriculture and Resource Economics, Canberra ACT

The rangelands of Australia have come under closer scrutiny with the recognition of a range of new values relating to land apart from the traditional agricultural ones. These values include biodiversity values (as rangelands represent one of the largest groups of

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15 DSE means “dry sheep equivalents” or the grazing requirements equivalent to a 40kg merino wether
ecosystems in Australia remaining relatively intact), value in terms of income derived from agricultural pursuits, tourism and mining and value as a repository of considerable cultural heritage, for both indigenous and non indigenous Australians. Furthermore, the rangelands have potential for a range of new values that include acting as a carbon sink, providing the source of a range of clean and green food and other products, and hold importance as the source of many of the major drainage systems in the continent. In particular, the Western Division occupies a large amount of the Great Artesian Basin, and is a major catchment for the Murray Darling Basin.

The above criteria are examples of the change of community expectations through time that have affected the way the landscape was used. It also clearly shows that initial land settlement criteria were based on social considerations first and foremost, and while there was some attention paid to land capability, it was only in respect to its use in agricultural pursuits. People clearly recognised early on (as evidenced in the Report of the Royal Commission), that significant changes were taking place and had taken place.

While the nature of the changes in land administration, lease conditions, rents etc. that were planned and that have taken place are well documented by Royal Commission (1901), and authors such as Hamilton (1892), Heathcote (1965), Bean (1910), Peacock (1901) the reasons for these changes are, however, far more complex.

6.2 Issues of sustainability: stock numbers and overstocking

Land settlement in Western NSW can be generalised into two distinct periods. The first was the period leading up to 1901, and particularly the years at end of the 1880s and 1890s when sheep numbers built up to record levels. Issues in that period mainly related to equitable land allocation and the terms of leases and rents. The devastating drought of 1897-1901 was the catalyst for rethinking land settlement not just in terms of equity, but also in terms of capability. This period set the stage for the social and environmental changes that followed. It also posed two fundamental questions that people have struggled with since. The first was “what was the long term sustainable carrying capacity
of the land?” and given this “how was the land to be allocated in a socially equitable manner?” These two fundamental questions underlie most of the subsequent changes to land administration in the Division.

While the second question impacted on land administration and legislation, the first question, that of the capacity of the landscape to meet the economic and social expectations of the emerging community, lay at the heart of understandings relating to use and perceived abuse. Debates about stocking rates relate to debates about usage, about perceptions of landscape function and sustainability and about the place of people within that landscape. It is here that the dichotomy between observed behaviour and attitudes and values is most readily expressed. For this reason the discussion of stocking rates, and the debate around them, is lengthy. The productivity of the land as measured by stocking rate or carrying capacity became a measure for the social allocation of land, regulations for the management of land by the Crown and the determination of holding size.

Overstocking is a term that describes the depasturing of domestic animals (either in time, duration or intensity) that is contrary to the sustainable use of that pasture. This is often confused with the concept of total grazing pressure which refers to the grazing pressure from all animals, both domestic and other herbivores. Total grazing pressure became a significant issue at the end of the nineteenth century with the explosion in rabbit numbers, and increased kangaroo numbers due to the provision of artificial waters. Thus the landscape was being modified by domestic and wild herbivores, the result being changes to landscape composition and function, with the associated impacts on biodiversity. For a further discussion on total grazing pressure, see Ison (2000).

It was commonly assumed that overstocking was one of the primary reasons for subsequent changes to grazing land, and that inappropriate levels of stocking were the result of an incorrect assessment of the carrying capacity of the land and unrealistic expectations of annual rainfall. The correlation between stocking rate and rainfall has been studied by Emmerick (1981). While Emmerick’s work relates to the period leading up the formulation of the Western Lands Act (1901), it is reasonable to assume that the
relationships he demonstrates continued past that date. While changes in the Western Lands Act affected absolute numbers of stock that could be carried, the fluctuations in these numbers remained relatively independent of the Act. There is an assumed relationship or correlation between rainfall and sheep numbers, and the nature of this relationship is assumed to depend on a range of factors such as the ability to supply permanent water, the options and ease of transport, the value of the stock and the availability of alternative sources of feed. Beadle (1948) claimed that while this relationship was true for the Division as a whole, it was not homogeneous across the whole of the Division. When the stock numbers were considered for the various Pasture Protection Boards there was found to be no correlation. Beadle used a constant figure for the number of acres grazed, adjusting the number of acres required per sheep and in so doing used the number of acres grazed as a surrogate for sheep numbers.

Emmerick (1981, p37) pointed out that the area grazed when used as a proxy for sheep numbers is a poor indicator of these numbers. The reason for this lay in the split between resumed areas and leasehold areas, and the fact that the pastoralist was able to adjust his grazing area to use part or all of the resumed area depending on the season, while maintaining stock numbers constant. Beadle had challenged the existence of a correlation between rainfall and stock numbers when applied to particular parts of the Division. However, as Emmerick (1981, p37) showed Beadle was correct, but for the wrong reasons. Emmerick showed that when statistics are used for Sheep Districts (the Pasture Protection Boards, now called Rural Lands Protection Boards) and these Districts are adjusted to make them compatible with the Pasture Protection Board areas, sheep populations, acres used and rainfall could be traced back to the early 1880s. Emmerick also compared these variables for each Sheep District within the Western Division, and his results show that there were marked differences within the Division for the various sheep districts. In the Sheep District of Bourke, which was the largest District within the Division, sheep equivalents peaked in 1884 at 3.5 million, and again in 1891 at 3.46 million. Emmerick’s analysis also showed that there was no relationship between sheep equivalents and rainfall, and no relationship between the number of acres used and rainfall, but there was a relationship between the number of acres used and the number of
For each of the Sheep Districts examined by Emmerick there are substantial differences in the peak periods and the relationships between sheep equivalents, rainfall and acres grazed. At times there is a correlation between sheep equivalents and rainfall, at times this correlation is lagged, and at other times there is no correlation.

What Emmerick’s research does show is that during the period of his study there was no common attitude toward stocking rates in the Division and hence the utilisation of natural pastures. While some of the differences can be explained by varying seasonal conditions, the response to these changed conditions was not uniform. As Emmerick (1981, p51) concluded, “these statistics indicate that a stocking policy was not common to a particular District and varied from station to station. Most probably the difference was due to local climatic and vegetational differences as well as differing management policies”.

In a letter to Emmerick\(^{16}\), R W Condon (the Western Lands Commissioner in 1982) sought to question the lack of correlation between sheep numbers and rainfall. He said that the correlation is probably influenced by the continual downward trend in stock numbers since 1888. Another factor he cited was the degradation of the hard red country, and the fact that such country takes a long time to recover. The final point he made is that the years of higher rainfall in the 1880s and 1890s led to the increase in the inedible shrub population thus limiting grazing. There are of course many other reasons for the lack of correlation between sheep equivalents and rainfall. Rabbits were an increasing problem at that time with more than £800,000 spent by the Government under the Rabbit Nuisance Act of 1883 between 1883 and 1890\(^{17}\). The ability to change numbers in response to rain varied too, with those with access to the new system of rail transport able to use this means of transport to de-stock or restock. C J McMaster, Chief Commissioner of Western Lands 1901-1923, stated “It is a well known fact that last year, one of our

\(^{16}\) The letter was dated February 8\(^{th}\) 1982, and was attached to Emmerick’s thesis, the copy being held by Department of Land and Water Conservation, Dubbo NSW

\(^{17}\) Large amounts of money were spent under the Rabbit Nuisance Act of 1883. This Act was replaced by the Rabbit Act in 1890 when a further £40,000 was spent up to 1900 (Emmerick 1981, p103)
leading pastoralists removed by rail about 100,000 sheep that could not be travelled by road. If the railway had not been available for this purpose, this large number of sheep would no doubt have completely eaten out the country, and after devastating it would themselves probably have perished” (McMaster 1903, p142)

The important point is that while there can be debate about the extent of the relationship between stocking rate and rainfall, what Emmerick does make clear is that there would appear to have been no clear common policy by leaseholders in matching rainfall and stocking rate. For whatever reason, this relationship was vague at best. Later developments such as road transport improved the ability of pastoralists to change stocking rate with a greater rapidity thus enabling a closer relationship between rainfall and sheep numbers. However, if the slow adjustment in numbers was apparent during the years of Emmerick’s survey, this effect would have shown up as a lagged effect, but even this feature is not universally apparent.

For whatever reason, the lack of correlation between sheep equivalents and rainfall demonstrates a clear inability to match land use with land capability, and this after one generation of occupation. Whether the reason for this lack of compatibility is in the individual or in the accepted agricultural system (for example, the inability of the individual landholder to assess land capability or changes in capability, or a market/management system that rewards inappropriate behaviour), the underlying fact is that it is the natural resource that was least protected and cherished throughout. This is in spite or early recognition of the effects of over grazing. For example, Alex Hamilton, a pastoralist, when giving evidence to the Royal Commission stated, that pastoralists stocked their holdings to the maximum of their capabilities. The result of this was “wholesale destruction of the native grasses and herbage all over the country, …every blade of grass, as it appears above the ground, is immediately eaten down” (Royal Commission of Enquiry 1901, Vol. I, pp vi-viii). While more is known now about the effects of overstocking (in both duration and intensity), and it is possible to look back with the wisdom of hindsight, the reality is that there was a pretty good understanding of the effects inappropriate stocking levels even then.
Several other errors of judgement contributed to the incorrect appraisal of land capability. Edward Millen, in one of a series of articles sent to the Sydney Morning Herald in 1899, stated that he believed a fundamental error was that pastoralists understood a “good” year to be the norm, and that drought was exceptional, when the reality was the reverse (Millen 1899, p4) Another error was to assume that normal rainfall was the yearly average, when in fact the median rainfall (or most common yearly total) was mostly less than the average. Emmerick (1981, p59) shows that for the six principal centres of Ivanhoe, Milparinka, Wilcannia, Wentworth, Cobar and Bourke the median rainfall is constantly less than the mean. Associated with this perception is the lack of understanding of the variability of rainfall.

Emmerick (1981, p110) details the stocking rates (in Figure 6.1) for the Sheep Districts as they were presented to the Royal Commission of Inquiry (Royal Commission 1901, Vol 1), and the figures for the Balranald Sheep District are of particular interest as they demonstrate the incompatibility of early stocking rates with sustainable production. The figures begin at 1881 (the time of the Sheep Districts legislation), and end in 1900, and although it would be beneficial to have figures earlier than these, the correlating of those figures with actual areas grazed is so difficult that their value is significantly diminished.

Figure 6.4 below demonstrates the high variability of rainfall in the Bourke district over a short period of time. It also shows the intensity of stocking in the latter part of the 1800s prior to the drought of 1897-1901. Wapweelah Station, regarded as one of the better properties in the district, was only rated at one sheep to ten acres in the 1980s – a far cry from a sheep to three or four acres as shown in the figure below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rainfall mm</th>
<th>Acres per sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881</td>
<td>419.75</td>
<td>3.2</td>
</tr>
<tr>
<td>1882</td>
<td>381.50</td>
<td>3.0</td>
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<tr>
<td>1883</td>
<td>263.75</td>
<td>3.2</td>
</tr>
<tr>
<td>Year</td>
<td>Rainfall (mm)</td>
<td>Stocking Rate</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>1884</td>
<td>219.25</td>
<td>4.5</td>
</tr>
<tr>
<td>1885</td>
<td>278.00</td>
<td>5.4</td>
</tr>
<tr>
<td>1886</td>
<td>351.75</td>
<td>4.6</td>
</tr>
<tr>
<td>1887</td>
<td>556.00</td>
<td>4.1</td>
</tr>
<tr>
<td>1888</td>
<td>178.25</td>
<td>4.5</td>
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<td>5.7</td>
</tr>
<tr>
<td>1892</td>
<td>388.75</td>
<td>6.2</td>
</tr>
<tr>
<td>1893</td>
<td>345.25</td>
<td>6.1</td>
</tr>
<tr>
<td>1894</td>
<td>547.00</td>
<td>5.2</td>
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<td>1899</td>
<td>253.25</td>
<td>6.7</td>
</tr>
<tr>
<td>1900</td>
<td>356.25</td>
<td>7.1</td>
</tr>
</tbody>
</table>

**Figure 6.4: Annual Rainfall and Stocking Rate, Bourke district**

*Source: Modified from Emmerick 1981*

Figure 6.4 shows yearly rainfall as it deviates from average rainfall, in the Bourke area for similar years as displayed in Figure 6.1. Intensity, duration and timing of rainfall are all important in terms of grass produced, and what is clear from the stocking rates (as seen in Figure 6.1) and the rainfall deviation figures (as in Figure 6.4) is that stocking rate response is lagged and slow. Early expectations of carrying capacity were clearly excessively optimistic in terms of sustainable carrying capacity.

Research by Gale and Howarth (2002) in the New England region of NSW indicates that substantial changes in the ecology (as measured by the rate of sedimentation and pollen count) occurred before the time of official settlement. If these changes also occurred in
the Western Division it would mean that a substantial environmental impact created by unofficial grazing and squatting had already occurred by the time official data was being collected. Gale also speculates smallpox, which appears to have been present at the time of the first contact with Europeans in eastern Australia (as witnessed by early explorers), could have disrupted indigenous community life leading to a cessation or alteration in traditional land management practices (personal communication, 2005). However, this is currently speculation only.

![Figure 6.5: Yearly rainfall for Bourke 1883-1897](image)

Source: Australian Rainman

There was also a lack of understanding of the fragility of certain ecosystems. Research by Wilson et al (1969) showed just how sensitive forbs\textsuperscript{18} were to stocking density. At one sheep per acre, after three years the bladder saltbush had almost 100% mortality. At a sheep to four acres (a quarter the stocking rate) in three years there was only a mortality of 6% in bladder saltbush. The plant species *Atriplex sp.* occurs widely in the Western Division of NSW with both annual and perennial types represented. However the species is most prolific in the Riverina. It can be seen from the figures above that if we use the figure found by Wilson et al (1969) to be the sustainable intensity of grazing for *Atriplex*

\textsuperscript{18} Non-grassy herbaceous species
vesicaria of one sheep to four acres as being sustainable with only a 6% loss of the species, then the levels of effective grazing from 1880 to 1884 were unsustainable. It is quite conceivable that stock were actually eating into a historical reserve of feed that was depleted in the next decade. Indeed the figures would indicate that in subsequent years the acres per sheep more than doubled while the number of acres grazed remained relatively constant between 1890 and 1900\textsuperscript{19}. One explanation for this is the rainfall at the time, and indeed there is a positive correlation between rainfall and sheep equivalents between 1880 and 1900 (Emmerick 1981, p50), but this explanation warrants closer examination. As saltbush was the dominant species on the Riverine land system, and one of saltbush’s characteristics is that it is able to withstand drought in the sense that it is an important source of feed in drought times, the response by the figures for sheep equivalents to rainfall could well be that by the late 1890s there had been a major decline in the population of this species. The high stocking rates at the beginning of the period under question would add weight to this argument.

There were, as has been shown, misunderstandings by early settlers and the wider community about the climate, and about the extreme variability of rainfall. Expectations about the capability of the natural systems to support grazing were clearly not in line with the reality. However, as has been shown, the relationship between grazing and degradation was understood from very early on. For example, while dust storms were considered a natural phenomena, it was known that

overstocking undoubtedly reduces the surface of the country to a condition that leaves it at the mercy of the disastrous westerly winds, the lighter and more valuable portions being blown away completely, while the raw sand – usually red but sometimes white - left behind accumulates into drifts, leaving bare parches of stones or clay to mark the place that once was covered with soil and valuable fodder plants. (McMaster 1903, p139-140)

\subsection*{6.3 Conclusion}

\textsuperscript{19} Emmerick (1981, p110) calculates the area grazed as being 4.8 million acres in 1890 and 3.7 million acres in 1900
The history of settlement of the Western Division is essentially a history of a community coming to terms with the landscape in which it lives. It is also the history of a wider community adjusting expectations and attitudes to accommodate the diversity of the environment that it occupies. The serious drought of the late 1800s and its social and environmental impacts made it clear to the wider community that the semi-arid rangelands of western NSW required a different understanding and management to the higher rainfall areas in the east of the State. The deterioration in the state of the resource following settlement was apparent to the Royal Commission. While the reasons for this were clear, what to do about it was less clear. While a more detailed understanding of the environment was to be gained through time, the long lasting effects of the first 50 years of occupation were harder to deal with and it could be argued that they remain today. The loss of dominant perennial grass species has led to a reduction in productivity, the invasion of less palatable species and the growing dominance of shrub species.

The land administration has been characterised by a system that promotes reactive administration rather than proactive action, being primarily concerned with land use rather than land condition. A constant theme of land administration in the Division has been an attempt to allocate land on the basis of living areas (the amount of land needed to run sufficient sheep or cattle to make an acceptable living). However, this approach takes insufficient account of long term changes in product prices and long term trends in rainfall and climate. The result has been the continued mismatch between utilisation and natural resource capacity, and the imposition of static land administration system in an especially dynamic and variable ecosystem.

Difficulties in the management of the environment were generated by the constant pressure of social objectives such as equitable land allocation, the provision of hardship relief (such as drought relief, freight relief for stock in times of drought etc) and the ideas of development and utilisation. While market forces and social objectives drove certain objectives, such as rewarding pastoralists for production and productivity, sustainable land management objectives were mostly relegated to a secondary consideration.
Technology made the exploitation of the natural resource more effective through time. Road transport meant that sheep could be returned to pastures sooner than before after rain; the provision of artesian water and later piping meant that areas that previously could be grazed only when surface water was available, now could be grazed regardless of rainfall. Where water once limited effective grazing, it was now feed availability.

Throughout the last two hundred years the ability of society to alter or modify the landscape in which it lived has changed dramatically. In any number of ways people are more efficient and effective in their pursuit harnessing the natural resource than they have ever been. This change has not necessarily been accompanied by similar changes in the social and individual understandings of the relationship between people and the natural world. This issue is discussed in greater detail in the following chapter.
Chapter Seven: Discussions on Landscape

People connect themselves to the land as their imaginations allow

Heat-Moon, W. L (1991, p84) in *PrairyErth* - *A deep map*

Looking over the yet uncultivated scene, the mind’s eye may see far into futurity. Where the wolf roams, the plough shall glisten; on the grey crag shall rise temple and tower-mighty deeds shall be done in the new pathless and wilderness...

Thomas Cole (1836) in *Essay on American Scenery*

This Chapter explores the connections between social attitudes and values and landscapes through an examination of western visual art and literature. By looking at features such as the nature and construction of the image, and the position of the viewer, social values and expectations surrounding the relationship between the people and the landscape may be discovered. There is some discussion of literature which can be used to gain a further understanding of social attitudes toward the environment. However, the emphasis in subsequent chapters is on visual art.

If there is a partial dichotomy between what people do and what they feel in their relations with the landscape, then where does this dichotomy lie? While actions are plain enough to see, feelings, values and beliefs are far harder. One way of gaining some understanding is through the examination of reflected values and beliefs as they appear in art and prose.

This section relates to the shaping of spirituality, and the factors that have influenced the development of spiritual relationships with the Australian landscape and the environment. A history of feelings about place and landscape is hard to plot, as feelings of spirituality, connectedness and place are hard to measure, change and reflect numerous other complicating factors. While every individual has personal attitudes and values, these
reflect socially accepted attitudes and values to a greater or lesser extent. The examination and recording of behaviour and actions is one method of understanding attitudes and feelings toward landscape and place. However, the relationship is imprecise. An alternative method for understanding such attitudes and feelings is proposed by this thesis and this method involves the use of landscape art and written text as media allowing people to identify attitudes and values and to express feelings in a non-confrontational manner.

Although this section discusses art as a way of looking at social attitudes, as a note of caution it needs to be stressed that the appreciation and interpretation of particular pieces of art varies between individuals. Individual artists have individual attitudes and works of art are often commissioned by people with their own personal preferences and attitudes.

Artists since antiquity have enriched and intensified the lives of urban dwellers with the depiction of landscapes, whether through prose and poetry, paintings or even in the construction of formal landscaped gardens. Nature was seen through a range of eyes. For example, the semi-religious medieval illuminated manuscripts presented one interpretation of nature, sixteenth century German forest painters presented nature at its most mysterious and seventeenth century Dutch painters presented nature at its most ordinary.

As the rate of urbanisation increased towards the end of the eighteenth century, cities replaced the countryside as the hub of production and progress. “Nature in all its previous meanings seemed ancillary to rather than fundamental to human enterprise” (Jones 1998, p23). The yearning of humanity for the deep connection with nature and all its associations saw the substitution of a natural engagement with a fabricated one, that of the visual, verbal or imagined that in some way replaced the original sensory connection. Commonly, landscape imagery has dealt with the relationship between the image and the local political community in which it was developed. An image was constructed to be read on a number of different levels and to impart meaning on these levels. For example,
early views of Sydney depicted it as structured and orderly, progressive and underlined its potential in order to encourage settlement (Rose 2005, p25). The rural landscape was similarly portrayed, as in Joseph Lycett’s series of paintings *Views of Australia* (1824-25) and the accompanying text which read in part:

> We behold the gloomy grandeur of solitary woods and forests exchanged for the noise and bustle of thronged marts of commerce; while the dens of savage animals, and the hiding places of yet more savage men, have become transformed to peaceful villages or cheerful towns (quoted in Rose 2005, p27).

Lycett’s words reflect another stage in the progress of colonial landscape art. The “selling” of the new colony to those at home and the reaffirmation of its virtues to those already here was to become replaced by a sense of ownership or the right to lay claim to the land through improvement. This sparked work that depicted the “civilising” of the landscape; the depiction of cleared and productive landscapes, of transformed landscapes or landscapes in the process of transformation. “Civilising” the landscape was also a way of claiming it: of turning the worthless into something of value, of harnessing the unproductive and making it productive. It made people feel good about not only who they were and what they were doing, but also where they were – their new homeland.

For those who contemplated the full meaning of improvement issues arose. What place had indigenous people occupied in the landscape and what was their relationship to it? The artists Glover, Eugene von Guérard and Martins all included indigenous people in a number of their landscapes. Viewers were either left to ponder this relationship between indigenous people and the landscape, or to see the presence of indigenous people as a metaphor between the old and the new; the past and the present. The setting of a scene in twilight, (as in the case of Eugene von Guérard’s *Stony rises, Lake Corangamite*, 1857, Art Gallery of South Australia) only served to add greater symbolism.

The concept of Divine Creation so popular throughout the eighteenth and early nineteenth centuries was seriously challenged by Alexander von Humboldt who provided evidence that showed that nature was in a constant state of flux and change and that the forces of change that initially prevailed continue to do so (the Theory of Uniformitarianism). The
elements that shaped the landscape in past millennia continue to do so today. The landscape was seen in a new and different light; a light of awe and wonder, and as a result Australian landscape art began to depict natural wonders - mountains and water in particular. For those who still believed in Divine Creation such works symbolised “force and wonder, providing awe inspiring sights; for von Humboldt and his followers they became the strongest evidence of earth’s continuous process” (Rose 2005, p36).

The questions that surrounded the Theory of Uniformitarianism in relation to Divine Creation related to seeing nature as a significant “other” and as such led to the reconceptualising of the place of humans in this “other”. God could not be seen only in the light of the creator but as an ever present spirit. Touring landscape became an emotional experience and for many “could give them an emotional experience for which they were starved” (Rose 2005, p40).

Rose (2005) maintains that at the beginning of the nineteenth century landscapes reflected the optimism and confidence of civilised progress. They represented opportunities for development and civilisation; the opportunity to turn the wild into the service of mankind. They also provided for the urban an emotional experience of the “nature” they so much longed for. Towards the end of the nineteenth century nature as an autonomous entity receded into the background, and the landscape image “became the stage upon which artists and patrons constructed an ideal social self, and figures in these landscapes acted out their designated roles” (Rose 2005, p45). No longer did artists look:

into the deep quiet face of Nature; lingering where the winding, almost silent river bathes the feathery wattle branches … finding beauty in odd corners of some country shanty, or by some lagoon which palely reflects the banks all bathed in a great shimmer of trembling brilliant sunshine. (Tom Roberts 1893, quoted in Rose 2005, p45)

A common anxiety lingered throughout the nineteenth century, as it does today. No matter how much one travelled and became “worldly” (as at the beginning of the century), or how science provided explanations for nature (as in the middle of the century) or the extent to which society immersed itself spiritually in nature (at the end of
the century), nature itself remained elusive. People still lived “on” the landscape rather than lived “in” it. The quest for the spiritual union remained.

This chapter examines the development of spirituality or feelings of connectedness by European settlers as reflected in landscape art. The struggle to identify with a new and (seemingly) hostile empty landscape provided as great a challenge to early settlers as any traditional conquest. The sense of spirituality that emerged is reflected in both prose and art, landscape painting in particular.

7.1 The development of a sense of connection with landscape

In this thesis the word “spiritual” is used in the sense that it refers to those qualities that are highly refined and pertaining to the mind and not connected with material things, and that affect the spirit or soul of an individual or community. The use of the word in relation to landscapes does not refer to religious connotations of spirituality but a more general sense where it refers to a quality or condition that relates to the non material aspects or qualities of the landscape.

Any study of the development of the interaction between people and landscape has to have a historical component, as all attitudes and beliefs have a genesis. The starting point in Australia’s case in terms of European occupation (and this thesis) is clear. It was 1788 when the first eleven ships from England arrived in Botany Bay. The context is somewhat more difficult to articulate. Ecology and ecological thought as it is understood currently had not emerged and:

early interpretations of the Australian environment were based on late eighteenth century ideas and philosophies. Many of the colonists and visitors had received an education which provided a vision of the unity of the natural world, organized into a “web of life” and the Great Chain of Being. Ecology was not developed as a field of science until the late 1870s and there was no concept of the environment as we know it today. (Martin 1993, p.xv)

The development of attitudes toward the natural world has been a process of constant evolution, as documented in Chapter Two. However, it is important to reiterate that the
importance of ecological sustainability is well recognised today, while one hundred years ago it was not even considered as an issue.

Ecological processes incorporate constant change. Whether such change represents oscillation around some sort of static state, or represents a sequential state of climaxes has been the centre of considerable debate. For the purposes of this study it’s enough to accept that ecological processes do not present a static situation. Thus any notion of “a static normality” in terms of the natural ecological state of the landscape as viewed by the first European settlers was an inaccurate perception. Add to this the effect of continuous indigenous human manipulation of the natural environment throughout the last 40,000 years and any notion of “static naturalness” of the environment becomes meaningless. The following description of a section of land west of Sydney toward the Blue Mountains is by Captain Watkin Tench (1979, p58), a 29-year-old military officer who arrived with the First Fleet in 1788:

To reward their toils, our adventurers had, however, the pleasure of discovering and traversing an extensive tract of ground, which they had reason to believe, from observations they were enabled to make, capable of producing everything which a happy soil and genial climate can bring forth. In addition to this flattering appearance, the face of the country is such as to promise success whenever it shall be cultivated, the trees being a considerable distance from each other, and the intermediate space filled, not with underwood but with a thick rich grass, growing in the utmost luxuriancy.

One suspects that not only was this description very optimistic and no doubt made following good rains, it also conveys a sense of normality and stability. The fact that these conditions could be exceptional, or these conditions could have been induced by human intervention was never countenanced. In terms of the knowledge and experience of the observers, the observations made were no doubt reasonable. However, as later experience was to prove, until a new frame of reference was developed, observations such as this were perilously deceptive for the new settlers.

When the first European settlers came to Australia they brought with them a dynamic and changing social system that collided with a dynamic but manipulated ecosystem. Recognition of the latter fact and its implications has been (and in some cases, still is) a
long time coming. The concepts embodied in words such as “pristine” and “wilderness” remain not far below the surface in the thinking of some sections of the Australian community.

A lot has been made about the “Eurocentric” views and values of the first white settlers and the subsequent development of attitudes toward nature and landscape. The inference is that these views and values that were the result of a continuous co-evolutionary process with nature and society derived from an entirely different continent but transported together with the human cargo and applied in a new context in Australia. As author David Malouf (2001, p20) stated: “What arrived here with those eleven ships was the European and specifically the European culture of the late Enlightenment in all its richness and contradiction”.

Thus the way landscape was interpreted, the place of humans within it, and the ability to manipulate landscape for a range of (initially) social objectives was viewed as a product of a European experience. As Malouf (2001, p26) says:

> Our ways of thinking and feeling and doing were developed and tested over many centuries before we brought them to this new place, and gave them a different turn of meaning, different associations, a different shape and weight and colour, on new ground.

The process of viewing Australia through Eurocentric eyes and valuing it through Eurocentric values was more than just a simple transportation and translation of values. The settlement of Australia was not devoid of the concept of conquest. For early European settlers possession manifested itself in the conquest of values, beliefs and social constructions. The triumph of the civilised over the uncivilised and the conversion of the worthless (the bush) to something of value (productive agriculture) was the measure of progress for white settlers.

Eurocentric attitudes were not alone in the initial shaping of perceptions (Lopez 1986, p10) and in Australia there were other influences. The English experience in North America laid early foundations for some attitudes, and to an extent provided a shared
heritage. The way convicts were treated in Australia was a product of the experience gained by the British in Virginia. Similarly, the fact that convicts and not slaves were used to establish the colony was another lesson from North America. One further analogy died hard. That was the analogy that there might be an inland sea or river system as in America that would enable the creation of wealth and power for both individuals and the nation as a whole. It was not until almost 50 years after settlement, through evidence provided by explorers like Sturt, Stuart, Bourke and Wills, that it was finally accepted that the dreams of an inland sea (or Mitchell’s imaginary “Victoria River”) were just that, dreams.

However, there are more subtle implications of a failure to appreciate the new natural world that settlers found themselves in that relate not just to understanding a new natural environment but to the transfer of knowledge from old to new environments. Lopez (1986, p11) states “[the] difficulty in evaluating, or even discerning, a particular landscape is related to the distance a culture has travelled from its own ancestral landscape”. Here Lopez relates understanding not so much to natural landscapes but to ancestral and therefore cultural landscapes. His point is that the greater the difference between one landscape (in terms of cultural understanding and experience) and another, then the harder it is to transfer a sense of knowledge and understanding between them. Thus Lopez is saying an important factor in understanding any particular landscape is a sense of connectedness, and that this connectedness is generated through an inter-generational exposure. He says that in comparison with indigenous inhabitants “we have no alternative, long-lived narrative to theirs, no story of human relationships with that landscape independent of Western science and any desire to control or possess” (Lopez 1986, p11).

Learning in the object world occurs both before and during language acquisition. Cognitive processes that have largely been analysed through linguistic models show that language is the primary determinant of perception, and as a result requires mutual agreement on categories and concepts. The common understanding of categories and concepts provides the means by which symbolism is commonly understood.
Linguistic models such as this fail to adequately show how the physical, visual and non-verbal symbolic universe contributes to cognitive interaction. Recently, linguistics, psychology and anthropology have begun to correct this imbalance, acknowledging fully the object world’s role as “vehicles of meaning” (Miller 1987). In addition, language is often limited by its explicit and linear form, requiring consecutive interpretation, while visual or physical symbolism is more lateral in its nature, permitting simultaneous absorption of a complex of meanings. Thus the physical and visual worlds, rather than language, are the “primary media in which every object or image carries meanings, associations and values, which may be expressed through language, ritual, art and action” (Strang 1997, p178).

Spirituality is reflected in feelings and attitudes, and this can be further reflected in art and the written word. As mentioned earlier late nineteenth century landscape art reflected profound spiritual feelings about nature, and a struggle to understand or fathom the spiritual relationship with the wild that urban people longed for.

Reflecting on the meaning or choice of words and re-reading imagery can shed light on social attitudes and values. While both art and literature can reflect attitudes toward landscape and the relationship between people and nature, landscape painting in particular can provide visual cues regarding how people felt about their relationship (or society’s relationship in a more general sense) with nature.

7.2 Prose and verse as a reflection of attitudes

Colonising can occur in many forms, none of which are mutually exclusive. A physical presence is only one of many ways to colonise. For example “colonising is not only an experience of physical presence, but of language” (Arthur 2003, p4). Arthur points out that for the last two hundred years the struggle has been to describe a non European landscape in a European language. Descriptive words such as “forest” or “river” imply a sense of meaning or knowledge that relates to function. Australia was and is considered
unique not only for its plants and animals, but also for its geography and climate. A host of words that described landscape features and biota in other regions (like Europe) were not appropriate here in Australia. To quote Arthur (2003, p72) again “part of knowing is the act of naming”. New words had to be invented (as for example, for the placental mammals), while old ones were made to fit uncomfortably in new situations. The language abounds with examples of words that originate from Europe and have been applied in Australia but do not quite fit. Arthur’s point is that a failure to name correctly (or to name inappropriately) equates to a failure to “know”. Thus the application of a word like “river” with its European connotations to the Australian situation fails to convey the true characteristics of an Australian “river”. Similar words are drought, flood, fire, empty (in terms of the landscape), desert and lake to name just a few. These words are used as there are no other words available to describe what we are talking about in the Australian sense. The continued use of such words as applied to landscape raises issues regarding society’s knowledge of and understanding of its natural surroundings.

It is clear in this example that words fail to convey the true meaning in the Australian context. As a result it could be argued that the use of an inaccurate and inappropriate word to describe what passes for a river in this country has cemented a poor appreciation of its river systems and riverine ecology. Even where meaning is possible, the nature of this meaning is by no means assured. This is demonstrated by Arthur (2002) who maps the same Kimberly landscape with three different sets of words, each of which convey a different meaning for the same landscape.

The written word, while informative, suffers in several areas. The first is in the interpretation of meaning whereby the exact meanings are not necessarily universal. Secondly, language is only appropriate where there are words that fit the intent of the speaker. Where there are no words, there is no language, and therefore meaning is impossible to convey.
Words can also be used to create a symbolic image that reaffirms social sentiment. For example, at the end of the last century the newly married English woman Constance Jane Ellis (1981, p20) wrote in her diary on coming to the station now called Wapweelah:

One day we came to the most picturesque little Station I have ever seen. A small shingle roof place on the bank of a sparkling creek almost buried in trees, masses of flowers, and to me it(s) name Wopwailey [sic] was as pretty as it looked.

The image presented by Ellis is strikingly European, but the reality was far from European. For her readers, the image presented by Ellis would have been a welcome reminder of European values.

Tacey (1995, p66) says the destruction of the old European consciousness continues, and the problem is that it takes place unconsciously. There are images and glimpses emerging of the social conscious of where we are now and were we need to go, but so far these have not translated into concepts that help us to understand the situation better. Tacey’s point is that many of the changes come about involuntarily, and that real progress will only be made when society is prepared to knowingly make the necessary psychocultural sacrifices. Tacey (1995, p73) goes on to make the point that “it is not until society and nature, conscious and unconscious, are organically related” that problems with personal or national identity can be put to rest. As Jung (1927/1931, p103 stated: “He who is rooted in the soil endures. Alienation from the unconscious and from its historical conditions spells rootlessness. That is the danger that lies in wait for the conqueror of foreign lands”.

In Australia the development of attitudes towards landscape was complex. Tacey (1995, p56) argues that there were two possible scenarios both arising from the same defensive consciousness, either of which result in different relationships with the landscape. In the first scenario there is an acceptance that the landscape is “foreign”, and that it has to be battled against. For example, W C Wentworth wrote around 1820:

what is a cheering prospect for the philanthropist to behold what is now one vast and mournful wilderness, becoming the smiling seat of industry and the social arts … to hear the joyful notes of the shepherd … instead of the appalling yell of the savage, and the plaintive howl of the wolf. (quoted in Tacey D 1995, p57)
The second scenario is that the differences be denied, and in a sense the landscape becomes a “blank canvas”, to be appropriated and filled in by second settlers. For example, in Furphy’s *Such is Life* (a book portraying rural life and society in the late 1800s in a realistic and unromantic way), the principle character, the nationalistic Tom Collins declares that Australia is a free and “recordless land” and “is clogged by no fealty or shadowy idols” (quoted in Tacey 1995, p56). The implication is that the country lies ready to be converted, or moulded into industry and human commerce. A land such as this is free of any legacy, and it is almost the obligation of the settler to transform this utopia. This civilising, or conversion and the imposition of a new social order gave the authority not only to banish indigenous people, but also to banish indigenous knowledge, and understandings of landscape.

*Such is Life* was first published in 1903 following the conflict between the utopian and dystopian images as portrayed by influential authors Henry Lawson and Banjo Paterson in 1892-1893. For Lawson things were bleak and grim, but for Patterson it was the reverse and these different views lead to a public debate between them carried out in verse and chronicled in the *Sydney Bulletin* magazine. The *Sydney Bulletin* was the most significant literary journal at the time, and both Lawson and Paterson enjoyed popularity through verse in the magazine at the time. Lawson was, however, somewhat anti-establishment and was very supportive of the up and coming labour movement (especially in the shearing industry). Another publisher of his work was the Brisbane *Worker* whose editor was William Lane, the founder of the Utopian movement (later to settle in Paraguay). Paterson, however was a romantic, whose poems romanticised the bush. Such poems as *The Man From Snowy River* and *Clancy of the Overflow* romanticised people and landscape. Paterson was establishment, a member of the Sydney legal fraternity, writing under a pseudonym. In mid 1892 a (contrived) duel in verse took place between Lawson and Paterson. It was published in the Bulletin, and the superficial issue was the interpretation of the truth in relation to the conditions in the city and the bush. The real issue lay in the questioning of values between urban life and life in the bush. The values underlying Patterson’s romantic interpretation of life in the bush were
brought into sharp contrast by Lawson who saw those living in the bush as living a life of hardship and deprivation.

The initial poem in the duel was Lawson’s *Borderland* published in the Bulletin Magazine, July 9 1892, which began:

I’m back from up the country – very sorry that I went

and finished with the lines:

Land where gaunt and haggard women live alone and work like men
Till their husbands gone a-droving, will return to them again:
Homes of men! If home was ever such a God-forgotten place,
Where the wild selector’s children fly before a stranger’s face.

Paterson replied in the same magazine on the 23rd of July 1892 with *In Defence of the Bush*, the final lines of which read:

You’d better stick to Sydney and make merry with the Push
For the Bush will never suit you and you’ll never suit the bush.

Paterson later removed the name “Mr Lawson” from the poem *In Defence of the Bush*, and replaced it with “Mr Townsman”, a more generic term and one that better defined the elements of the argument. Other poets joined in, such as John le Gay Brereton, Edward Dyson, A. G. Stephens and Joseph Furphey. Paterson had the last word when he wrote in *A Voice from the Town*:

Well, I waited mighty patient while they all came rolling in
Mr Lawson, Mr Dyson, and others of their kin,
With their dreadful dismal stories of the Overlander’s camp,
How his fire is always smoky and his boots are always damp;
And they paint it so terrific it would fill one’s soul with gloom-
But you know they’re fond of writing about “corpses” and the “tomb”
So, before they curse the bushland, they should let their fancies range,
And take something for their lives, and be cheerful for a change.

Lawson and Paterson represented two different interpretations of life, and in a sense two different geographical interpretations of society. Paterson saw the idyllic side of bush life, especially illustrated in poems such as *Clancy of the Overflow* published in the Bulletin Magazine, Christmas edition on December 21, 1889:
And the bush hath friends to meet him, and their kindly voices greet him
In the murmur of the breezes and the river on its bars,
And he sees the vision splendid of the sunlit plains extended,
And at night the wond’rous glory of the everlasting stars.

Paterson provided the happier side of bush life, and presented the country as a romantic and idyllic landscape, where many of the social values inherited from other parts of the world were alive and well. Lawson, however, was not a country person, and saw the harder side of life in the bush. His heroes were in most part unromantic people like swagmen, who struggled from one day to another, or drover’s wives who spent the bulk of their lives separated from their partners, battling drought, heat, flies and all the vastitudes of the bush.

This verbal joust was not simply a battle between a romantic and a realist. Simon Pugh (1990, p1) would argue that the interchange represents far more than the simple search for truth, and that it represents a reframing of the order of ideological landscape, such as happened in Venice at the beginning of the sixteenth century, Holland in the seventeenth and Britain in the eighteenth. The realignment of the ideological landscape in Britain in the eighteenth century occurred as a result of the industrial revolution, when there was a significant population move from the country to the city. People left the idyllic world of the countryside that represented the “seductive mixture of peace and solitude with security and visual pleasure” (Pugh 1990, p2). The ideological shift Pugh maintains is a shift from rural capital to “city capital” or capitalism, and represents a reordering of the physical world. It becomes about power, and workers and how “power is structured and made evident” (Pugh 1990, p2). In other words landscape became a political domain, both in verse and in imagery.

This struggle for identity sat uncomfortably with emotions created by the opening of the Royal Garden Palace in Sydney in 1879, in which the International Exhibition was held, the ninth since the great exhibition of 1851 in London’s Crystal Palace. The International Exhibition of that year, a showcase of world manufacturing progress, was more than an industrial exposition, as it showcased cultures and crafts from indigenous and new
colonists alike. In a sense the colony was put on display. The exhibition was one of a number staged around the world (with Adelaide in 1887 and Melbourne 1888), and provided the holder an opportunity to promote themselves and show their wares. The Exhibition in Sydney generated enormous patriotism and drew large crowds.

In a competition run by the Sydney Morning Herald, Henry Kendall won £100 for his rhetorical poem *(The Sydney Exhibition Cantata)* celebrating past achievements and embodying a sense of patriotism that was genuinely felt at the time. Kendall (1920) wrote (in part):

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Here is a land whose large imperial grace
Must tempt thee goddess in thy holy place!
Here are the dells of peace and plenitude,
The hills of morning and the slopes of noon;
Here are the waters dear to days of blue,
And dark-green hollows of the noontide dew;
Here lies the harp, by fragrant wood winds fanned
That waits the coming of thy quickening hand!
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This verse, with its classical Grecian references and romantic nature evokes much of the traditional symbolism that would have been popular at the time. The “noontide dew” and “fragrant wood winds” with the “dells of peace and plenitude” hardly reflect the realities of the new colony, or the sentiments embodied by poets such as Lawson and Paterson. Embodied in the verse is also the sentiment that the land was awaiting the touch of God’s hand (no doubt through European settlers) to enable it to reach its full potential. While the choice of Kendall’s poem for the prize was criticised by some, it met with local enthusiasm, and this alone was considered sufficient acclaim to be awarded the prize. Both Lawson and Paterson enunciated a more realistic relationship between people and the land. For Paterson it was more in line with the Arcadian sublime, but for Lawson it was the struggle between man and nature. While the completion of the Garden Palace and the ensuing International Exhibition were incredibly popular, it appears that with the destruction of the buildings it was all soon forgotten. Kendall’s sentiments became part of history to the extent that they no longer reflect social beliefs, replaced by the birth of a national identity (Federation) that more closely reflected the relationship between people and the land on which they lived.
While the debate between Lawson and Paterson could be seen as a mere literary squabble, the International Exhibition was designed to be a demonstration to the world of what Australia was all about, and was to embody the ideals and values of a nation. The romantic tone of Kendall’s poem presented a dream; a dream that people longed for, but reality never delivered.

The timing of the debate is important, as the end of the nineteenth century and the beginning of the twentieth century was a period of significant cultural change within Australia. This period saw the great shearer’s strikes and the beginning of the labour movement in Australia. It saw a questioning of the national consciousness as being “masculine in the symbolic or archetypal sense” (Tacey 1996, p50). By this masculine was meant as being “tough, forceful and aggressively defensive” and manifests itself in “rituals of combat and battle, both locally … and on sports fields and overseas in exotic theatres of war” (Tacey 1996, p50). Thus characteristics like femininity, feelings and emotions were suppressed. More than that “Australian experience, aboriginals, women, individualists, foreigners and landscape are all carriers of negative psychic image” (Tacey 1996, p53).

For many, Paterson’s Arcadian landscape represented life in the bush a hundred years ago. For many more it represented what they would have liked to think life in the bush was like. Lawson however, presented a different picture. Lawson’s picture was a picture that was more disturbing, more challenging, and a picture that resonated more closely with current understandings. The important point is, however, the treatment of landscape. In Paterson’s ideal, landscape was internalised and was in a sense inseparable from those who occupied it. Lawson’s image however externalises landscape; it treats it as “other”, and in association with this, provides negative aspects of place. This theme is reflected in art as well, and is explored in the following sections. However, it is worth recognising that McCubbin’s Lost and Streeton’s The Purple Noon’s Transparent Might reflect these same issues. In Lost the landscape is presented as being alien, frightening and dangerous. It’s an “us-and-them situation” where the bush is seen as foreboding and (colonial) and
humans frail and fragile. Streeton however presents an entirely different picture of landscape, where people have dominated over a benign landscape and “civilised” it. There is no hint of fear of foreboding, but only glimpses of what the future could be in a landscape that has been civilised.

The polarisation of the cultural understanding of place in landscape proved an uneasy solution to the ongoing challenges of identity. The bank crashes in Europe and the subsequent depression in Australia in the early 1890s provided a medium for both ideals to flourish. The bush became the enemy, and something that one had to struggle with and fight against. Its vastness became all-consuming, swallowing up people and ambitions. This image is strongly reflected in books such as Patrick White’s *Voss*, Henry Handel Richardson’s *Australia Felix*, D H Lawrence *Kangaroo* and others. The popular film *Picnic at Hanging Rock* presents a superficially benign and beautiful landscape that “swallows up” a party of picnicking schoolgirls, never to be seen again.

Tacey (1996) believes that the wilderness without creates a wilderness within, and that the inability to become part of the natural world leads to a detachment and remoteness within ourselves. The failure to create an organic connection, and the “distance between spirit and nature, between conscious and unconscious” (Tacey 1996, p66) creates a sort of death wish, and the relationship that was unattainable in life (between spirit and nature) will be forced on the individual in death. Judith Wright (quoted in Barnes 1961, p335) put it eloquently when she said:

> Are all these dead men in our literature, then, a kind of ritual sacrifice? Is it perhaps the European consciousness – dominating, puritanical, analytical …that Lawrence saw as negated by this landscape? …Reconciliation then is a matter of death-the death of the European mind, its absorption into the soil it had struggled against.

Tacey (1996, p82) says that “there is an enormous psychic gap between the consciousness of Europeans and the primal reality of the Australian landscape”. Is this gap then the creator of the spirit of heroic sacrifice that drove early land development and settlement in the Western Division of NSW? Tacey would have us believe that this was the foundation for the spirit that drove Australians to later fight in the world wars and
earlier in the Boer War. He says that the inability of society and individuals to arrive at a meaningful spiritual relationship with the natural world in which we live is reflected on in the sports arena as well, where there is a similar tendency for “sacrifice”. Perhaps then it is this unbending spirit, “dominating, puritanical and analytical”, as Judith Wright says, that manifests itself in the day-to-day activities in the landscape as well as a generic philosophical understanding of the relationship between people and landscape. While ever there is the unquestioning belief in the heroic, the will to dominate and to own, there is little chance of reflection and reassessment. As has been shown in Chapter Six of the thesis this position was aided and abetted by the advances of science. Through scientific advances, the need to see the reality of the position was delayed. The constant friction and the constant questioning is important however, as this is what leads to a reappraisal of social values and concepts.

7.3 The concept of “Landscape”

Throughout this thesis the word “landscape” is used, and its use is not in the traditional geographic concept of the word. The word “landscape” is a relatively new word (C16th), and derives from the medieval Dutch word “landschip or “lantskip” referring to a painted portrayal of the countryside. In Italy landscape referred to land adjacent to the village that was culturally part of the village. In other words, the word came from art (or artistic scenes) and was applied to natural scenes. Mabey (in Affrey et al 1993, p65) has the word landscape coming from the Dutch word “landschap” meaning region or province. Similarly the word “picturesque” was applied to landscape because the landscape “looked like a picture”.

Rather than simply being a geographical definition, the term landscape is often used to refer to a social or cultural construction that relates to certain aspects of landform, and as such imparts meaning in that context. The following discussion explores the wider use of the term and its implications.
In his poem *The Sydney Exhibition Cantata* commissioned for the 1879 opening of the Royal Garden Palace in Sydney, Henry Kendall (1920) wrote (in part):

Shining nations! Let them see
How like England we can be!

The sentiments embodied in this short piece of poetry appear clear. However, what does “being like England” really mean? It could mean being like England in cultural or social terms, or in terms of being civilized, or even in terms of aesthetics. It could mean being like England in terms of traditional attitudes toward the natural world. However, given the context of the poem, it is clearly a call for the reaffirmation of inherited values that are supposedly linked to everything that is worthwhile. Using England as a model that people presumably held in high esteem, the author calls for behaviour that reaffirms those values. Kendall’s words call for action that is underpinned by a social acceptance of the implied truths it contains.

Individual attitudes and values are not so easily dealt with. While a sense of fair play, honesty and integrity are values for which there is almost universal social and individual support, attitudes and values concerning how we relate as individuals and as a community with nature are far more complex.

The impetus to “check” the existence of the phenomena depends not just on the awareness or other potential possibilities, but also on the level of social consensus (Tajfel and Fraser 1986, p309). If there is a high degree of social consensus then “physical” verification is not always undertaken. An individual’s world view basically originates from two sources. The first is the mass of sensory information accumulated by the interaction with the functional environment, or the context in which individuals find themselves. The second source is through information provided by others. However, this simplistic sensory/social distinction between information sources fails to accommodate the potential interaction between the two sources. For example, individual sensory perceptions of a situation may be modified or elaborated on through social sources. It can be seen that the social environment, particularly through social consensus (conventional meaning), has the potential to mould the views and understandings of an individual.
The potential for a change in belief comes a reinterpretation of social communication, and new “truths” are established through the reinterpretation of the conventional representation of the social environment. As Tajfel and Fraser (1986, p209) put it “… some of the clearest examples of our perceptual experience of the outside world can be found in the conventional representation of the outside world”. There are many media through which this can take place, and art, mapping, language and photography are examples of these. While not only ascribing the “rules” for the interpretation of the visual experience, these forms of communication can also challenge accepted truths, and suggest new and different ways of interpretation. “The acceptance by a wide public of an artist’s new ways of transmitting his vision is an excellent example of the social diffusion of changes in the ways in which sensory information can be selected and organised” (Tajfel and Fraser 1986, p310).

Hardly anyone appears to be indifferent to art, even though it is notoriously difficult to talk about. Art, and here I am particularly concerned with visual art and landscape painting, reflects aesthetic pleasure in the way that it is constructed, and in the relationship between the various images embedded within the work. As Geertz (1993, p96) says:

The talk about art that is not merely technical or a spiritualization of the technical – that is, most of it – is … placing it within the context of these other expressions of human purpose and the pattern of experience that they collectively sustain.

The aesthetic force within art is culturally specific and relevant, and so Islamic poetry, for example, has great relevance to those who are cognisant of the Islamic cultural context. One view of art has been that it defines and strengthens social values, and while this may be true, its real strength lies in the semiotic plane, where Geertz (1993, p99) says “they [referring to Matisse’s colour jottings] materialise a way of experiencing”. Different “eyes” can see a painting differently and the reading will depend on the perceptual skills that an individual brings to the painting. Some perceptual skills will be more relevant than others, and much of what is referred to as “taste” refers to the fit of appropriate skills
between those called for by the artwork and those provided by the viewer. As Baxandall (1972, p40) says:

The beholder must use on the painting such visual skills as he has, very few of which are normally special to the painting, and he is likely to use those skills his society esteems highly. The painter responds to this; his public’s visual capacity must be his medium. Whatever his specialised professional skills, he is himself a member of the society he works for and shares its visual experience and habitat.

In regard to religious art, a Dominican preacher is alleged to have said, “it is one thing to adore a painting, but it is quite a different thing to learn from a painted narrative what to adore” (quoted in Geertz 1993, p104). In this way the semiotics of a painting can reaffirm cultural values and myths; it can cause disquiet, adoration, reflection and inquiry, as well as a range of other emotions. Like any other medium of communication, a host of messages can be communicated through the construction and semiotics of a painting. Thus the study of art becomes a window on culture, and the semiotics embedded in it a reflection of the “signposts” of society. Art becomes a visual record of a culture, and must be read in the same way as one learns to read a foreign culture. It is in this context that a review of contemporary landscape painting at the early stages of the settlement of the Western Division is important, as it reflects views and attitudes held at the time. In such a reading it is important also to recognise that the semiotics are culturally specific, and that works need to be read using contemporary cultural attitudes and values.

Much has been written about the relationship between art and landscape and it is not my intention to review this literature in detail, but to use the relevant literature to demonstrate that understandings and insights of the social relationship to nature can be gained from such work. Careful analysis of the artwork helps to indicate what the artist thought was relevant about the landscape. Furthermore, what was included and what was excluded, and how the work was presented, indicates a reflection of wider social sensuality and sentimentality toward landscape.

Importantly the meaning of the word “landscape” is a social construction that was originally intended for a specific purpose that has now been adopted more widely. As Thomas (1983, p265) says “The initial appeal of rural scenery was that it reminded the
spectator of landscape pictures”. The reverse also applied, and there are many examples like Standby’s water colours of the *Falls of Clyde* or Von Guérard’s *Ferntree Gully* in Victoria, where natural locations became popular through their prior representation in art.

There are a number of different perceptions of what constitutes a landscape depending on the context in which it is used. Geographers use the prescience of enduring features to define a landscape, while ecologists see it as linked to ecosystem function. Writing from an ecosystem perspective, Maginnis et al (2004, p331) define a landscape as “a contiguous area, intermediate in size between an ecoregion and a site, with a specific set of ecological, cultural and socioeconomic characteristics distinct from its neighbours”. Common usage ascribes cultural attributes as well, and therefore landscapes can also reflect cultural history (Maginnis et al 2004, p330). The concept of landscapes is therefore a constructed concept, and is complex - the sum of its parts is greater than the whole, and includes cultural, geographical and ecological components. According to Grieder and Gurkovich (1994) landscapes are a construct of people within a particular cultural context, and as such it is impossible to set rigid boundaries. The word provides a meaning for the area where stakeholders live and work, and provides a context for understanding landscape functions that are relevant to that stakeholder group.

Landscapes imply a social construction and are seen as a sub set of or complimentary to the ecosystem approach. It is clear then that landscapes can be defined by different people for different purposes, and it is possible to have landscapes that overlap or that are superimposed on one another.

“Landscape” also means the surrounding natural system that the individual or community finds itself in. It differs from “place” in that the word landscape as used in this thesis encompasses not only where an individual or community live, but also represents the stage on which all activities are carried out. A landscape in this sense represents more than just the physical or picturesque representation, but also the subliminal understanding. For example, the words “inside” and “outside” country are often used in Western NSW in relation to place. “Inside” is used to mean the country
where there are many people, many services like weekly mail, shops, TV reception and the like. “Outside country” is an area that does not have these services, that has dirt roads, poor communications, few towns and shops etc. There is no actual dividing line between the two, and for everyone there is probably a slightly different understanding of what the differences are. Most of the features that differentiate are features of significance to those who live there, such as aridity, distance, temperature and geographical location. The important point is that people in Western NSW feel that there is a difference in landscape between them and their urban cousins. Thus landscape and place for many becomes “outside” or “inside” depending on where one lives. The word landscape as used in this thesis includes these extra meanings. Landscapes as used in this thesis are also always “constructed” landscapes: landscapes constructed by the observer or the artist; constructed by the people who inhabit the landscape or constructed by those who seek to use the concept as a tool.

The terminology “inside” and “outside” was quite common in the time I lived in the Western Division and its use reflects some of the discussion above. For example, it could be argued that it indicates a perceptual move from the civilised to the uncivilised, or from the controlled to the un-controlled, or from the secure to the insecure. While all these alternative readings may have some validity, I have made no attempt in this thesis to explore these alternatives. The important aspect in terms of this thesis is that such terminology locates individuals and communities perceptually and to a lesser extent geographically. It is the way the subjects of this thesis locate themselves perceptually and in their minds, in a spatial sense, that it becomes reality. The feeling of being inside or outside a socially constructed landscape leads to the terminology of being either “inside” or “outside” in the sense that it is not solely based on a geographical location but on an emotional one as well.

William Dawson’s *View of the Great Chasm of the Axmouth Landslip* (Plate 7.1), painted in 1840 is a good example of an alternate cluster of values. This landscape painting is a portrait of a quiet pastoral scene, where inside an amphitheatre formed by crumbling limestone cliffs reapers are working at harvesting a crop. High, on one of the cliffs to the
left of the picture flies the Union Jack with another on the right, while in the foreground are groups of people obviously taking in the majesty of the landscape. However, the placid presentation belies the historical dynamics. While this landscape was always relatively unstable, in 1839 approximately six hectares of chalk slipped along the harder rocks underneath and into the sea. Into this chasm the next section of cliff fell, almost intact. While such slippages were not unusual, the extent of the 1839 slip was. As the cliff alongside fell into the chasm, it took with it a wheat field almost intact, and it is this field that the reapers are shown harvesting. The whole harvest was turned into a ceremony, and “the reapers were led by young women who were given silver brooches in the form of sickles as souvenirs” (Mabey 1993, p63). While harvest ceremonies were common at the time, what is so special about this one and the ambivalence that seems to hang over it? Mabey’s interpretation is that there are traditional rules of human survival in landscape: the shock of the unexpected and the ensuing catastrophe, and then the insistence of things going on “as usual” despite the chaos.

![Plate 7.1: View of the Great Chasm of the Axmouth Landslip (1840), William Dawson](image)

Mabey’s interpretation (in Alfrey et al 1993, p64) is that there are two opposing forces relating to human needs that are bridged by landscape. The first is the need for continuity, for vitality and productivity, for the familiar and for a platform for the expression of man’s creativity and control. This is typified by *View of the Great Chasm of the Axmouth Landslip*. The other is the need for something that transcends the artificial and the manipulated and returns us to nature and the natural world, and in this case raw nature at its dramatic best.
It’s worth contemplating this gap, for within it lie many myths and tensions relating to the perception of landscape. The word landscape, and its derivation from the Dutch landschap, has another meaning according to Mabey (in Alfrey et al 1993, p65), for which there is no suitable English word. This meaning according to Mabey relates to the fact that landscape has the connotation of home, place or somewhere one looks out “from”. In other words they convey something about ourselves - they are intimate and personal. The recruit Edward Thomas who, when enlisting for the Artists rifles in 1915, was asked what he thought he was fighting for. His reply was “literally for this” as he bent down and picked up a handful of (English) earth. (Mabey 1993, p63.) One myth about landscape is that there can be such a thing as a “National Landscape”- “the” landscape that represents or defines the nation. In both world wars the English landscape was idealised and distilled to represent the essence of what the fight was all about and what was being defended. The desecration of English soil, the iconic cluster of houses and idyllic country lanes that was England – potentially being outraged by Prussian armies was the issue. However, this archetypal landscape was essentially an invention; a distillation of a range of features that captured the essence of a nation, but provided everyone with something to fight for. Rupert Brooke (1916), the famous English poet, similarly exploited this sentiment in the now famous lines of the poem The Soldier (Brooke, 1916):

If I should die, think only this of me:
That there is some corner of a foreign field
That is forever England. There shall be
In that rich earth a richer dust concealed;
A dust whom England bore, shaped, made aware,
Gave, once, her flowers to love, her ways to roam,
A body of England’s, breathing English air,
Washed by rivers, blest by suns of home.

Lewis (1997, p11) talks about “cultural landscapes”, and by cultural landscapes refers to the more obvious landscapes made by humans where population density is high. While this definition of the landscape refers to urban or closely settled landscapes, a number of axiomatic principles can also be applied to more natural landscapes that have been less dramatically modified by human intervention. In reality, only pristine landscapes do not lend themselves to this sort of scrutiny, and very little of the Australian landscape falls
into this category. The basic principle according to Lewis is that all human landscape has a cultural meaning, and as such can be “read” as such a landscape reflects characteristics such as the values, aspirations and tastes of the society that inhabits it. Lewis developed a number of axioms to read such landscapes.

The first of Lewis’s axioms is that landscape is a clue to culture. If the landscape changes, then there are good cultural reasons for this change. For example, changes in the Australian landscape from wooded to more open reflect agrarian practices and values. Having said this, these landscape changes need not reflect only one set of influences. For example, clearing land leads to a changed landscape visually, but has more subtle effects like increased salinity and a loss of biodiversity that are only indirectly related to the initial cause. If landscapes look different between two different regions, then there is a good chance that the cultures in the two landscapes are different also. The corollary may also apply, in that if the two landscapes look similar, then there are probably similarities in the associated cultures as well.

The second axiom is that of cultural unity and landscape equality which in essence refers to the proposition that in terms of their role as clues to culture, all items in a cultural landscape are of equal value on understanding that culture. This axiom aligns with the proposition that culture is a “whole”, and not a collection of discrete fragments.

The third axiom, that of “common things”, is especially relevant to this thesis in that it refers to the fact common landscapes, regardless of their importance, are difficult to study by conventional academic means. A landscape can be identified because it looks the same – it’s homogenous in geographical on geological terms, or it can be identified because it feels the same to those who live in it – the outback, for example. There is a perception of commonality or a range of common elements within a landscape that is shared by those who live in it or those who view it. These elements have as much to do with commonality of “look” (it looks the same) and commonality of “feel” (it feels the same). This axiom underlines the need for the interdisciplinary approach undertaken in this thesis, and calls on a range of methods for gaining an understanding of the cultural
attitude between people and landscape. While the Western Division of NSW is made up of a range of ecological communities, soil types and landforms and could be segregated on these levels, for those who live there it all “feels” the same and for them it is a single landscape.

The fourth axiom relates to the fact that the nature of contemporary landscapes has inherent characteristics that are rooted in the past. So to understand the present one has also to understand the cultural context of the past, and the attitudes and values of those who preceded the present.

The fifth axiom relates to context, and maintains that it is only appropriate to study a cultural landscape within its geographic context. This axiom also relates to the subject matter of this thesis in that it openly acknowledged that there is a relationship between social systems and natural systems. What the axiom is saying is that the natural or geographical context is important in understanding specific interrelationships between people and the expression of their culture and landscape.

This point is further stressed in the sixth and final axiom. Lewis (1979, p24) puts it this way “Most cultural landscapes are intimately related to physical environment. Thus the reading of cultural landscapes also presupposes some basic knowledge of physical landscape”. The question could well be asked given an inappropriate, inaccurate or incomplete knowledge of the physical landscape (in the fullest sense of the word), what then is the effect on the cultural landscape, and how can the nature of the cultural landscape alert us to this deficiency in knowledge?

At the start of the 1800s in England there was a growing move away from the appreciation of a “managed” landscape to the appreciation of wild and natural landscapes such as those presented by artists such as Gasper, Claude and Salvador Rosa. The move to the cities and the industrialisation of Britain fostered the romantic notions of nature and the wild. This new picturesque was characterised by the absence of the fertile, cultivated productive landscape, and its replacement by a wild and uncultivated one.
The use of the name Salvador Rosa in Australia has also been applied to geographical features that are seen as wild and romantic. Examples include “Salvador Rosa’s Glen” (a fern filled gully on the slopes of Mount Wellington in Tasmania) and Salvador Rosa National Park in Central Queensland. What was ideal in terms of the interaction of people and landscape had now changed from a managed coexistence to an unmanaged absence. The very essence of the desirable qualities of the landscape had changed, not through any natural forces, but through cultural ones. This change was however, not universal.

Yi-Fu Tan (1976) uses the word “geopiety” to represent the attachment to place that goes beyond the popular model of animal territorial behaviour. Geopiety covers a broad range of emotions, with elements such as propitiation, pity, compassion and affection. The meaning of piety covers relationships between not only man and gods, but man and man, and man and nature, all three being closely related. While this close inter-relationship between man and gods and man and nature was more pronounced in the past, geopious feelings still play a role in the attachment to country and place, the love of country and patriotism. For indigenous Australians the feelings are still strong, but for second settlers or white Australians nature has been secularised, with the gods no longer residing in nature or natural forms.

While landscapes that underlie individual perceptions about place or identity are often presented “looking out”, those that underlie nationalism present a more inwards view - from the top looking down. Thus one of Frank Newbold’s popular posters that appeared in the Second World War and had the caption “Your Britain. Fight for it now” and attempted to appeal to popular British landscape mythology and national heritage. While this image could hardly have reflected actual place for many people, it did represent the essence of what could be “home” for a nation. Although an actual landscape, it was also a symbolic landscape in the sense that it was part of the iconography of the nation, “part of the shared set of ideas and memories which bind a people together” (Meinig 1979, p165). Such landscapes convey a range of meanings, and are evocative because they represent a particular “kind” of place, rather than just its geographical location. Similar to Newbold’s image is an image presented by Meinig (1979, p166) of a village in New England (USA),
that he says is popular as it symbolizes an “intimate, family centred, God-fearing, morally conscious, industrious, thrifty democratic community”. It is distinctively American (as Newbold’s was distinctly English), and as such represents a national symbol. Patriotism, one particular form of geopiety, is easily distorted by abstractions. This, the image reflected in “Your Britain”, though no doubt symbolising “place and home” through attachment based on an intimate knowledge and memories for some, soon was taken up by the majority as representing pride of Empire even though it was not part of any direct experience.

Meinig’s interest is in using landscape as a mirror of culture. Culture, attitudes and values are reflected in landscape, more precisely in the interaction between the social system and natural systems. He asks such questions as what were the landscapes which have served as the basis for these symbols really like? How narrow are the foundations on which the stereotype lies, geographically, socially and over time? How do actual landscapes become symbolic landscapes? How are they selected and then how is the image disseminated? The answers to these questions lie outside the boundary of this thesis, but are however, important questions.

In this context the image was a powerful influence in unifying a nation (Britain) to a common purpose. It provided a reason for actions and activity, and provided an invisible bond for the attainment of a common goal. It’s important however to consider the image more closely, for not only was the image of a landscape that few would have seen, it was also of a landscape that was transient and constructed. Sequential photographs of the landscape over the last 8,000 years would have shown continuous change. Woods would have come and gone, as would have villages. Fields identified by cultivation or pasture would have changed in nature and size as man’s ability to manipulate them changed. The Parliamentary Enclosure Acts of the eighteenth and nineteenth centuries were said to have brought centralisation and modernisation to the English landscape. However, Rackham (1977) estimates that one half of the hedged and walled landscapes of England date back to between the bronze-age and the seventeenth century. There is a vast difference in the natural richness between these hedges and those resulting from the
Enclosure Acts, which are seldom more than 200 years old. Similarly, the heath lands, popularly regarded as being primeval remnants of true wilderness and land untouched by humans, have been found to be the result of overzealous woodland clearing on fragile soils in the past. The maintenance of these open areas is only possible by the intervention of man in the form of regular burning or grazing. The mythology however, is strong. Thomas Hardy (1974, p36) romanticises the heath land when he says:

To recline on a stump of thorn in the central valley of Egdon, between afternoon and night, as now, where the eye could reach nothing of the outside world outside the summits and shoulders of heath land which filled the whole circumference of its glance, and to know that everything around and underneath had been from prehistoric times as unaltered as the stars overhead.

Which image then represents the true landscape? The answer is that there is no such thing as the true landscape; landscape is how society constructs it. It reflects how people feel about nature and place, and their co-existence within it. In Australia the experience was no different. As Ian Burns (1988, p23) says, the various readings or uses assert a range of socially constructed (non-material) needs of regional culture. Moreover, such relationships between people and place indicate the extent to which, for some viewers, the affirmation also embodied possession, or a proprietorial relation to the land.

Burns goes on to suggest that the constructed image invited ownership and a sense of belonging to particular sectors of society, and gave them a greater sense of proprietary and belonging than other classes or sectors. While most sectors of white settler society were able to experience some sense of attachment through the imagery, indigenous Australians were excluded at every level. The reason for this was not so much to do with race, or the fact that the landscape was perceived as empty, it was more to do with the fact that the range of possible land uses did not include traditional aboriginal land uses and understandings.

7.4 Landscape informed by visual art

It has been suggested that through content analysis, the symbolic qualities of texts, and their relationship to the wider cultural context can be understood (Krippendorff 1980).
Through the process of content analysis, it is possible to gain an understanding or an impression of the cultural norms or context prevailing at the time an image was generated. Further, content analysis can provide a methodology for consistent qualitative interpretation that eliminates bias and enables the interpretation of large volumes of material (Rose 2001, p55). The weakness in this type of analysis is that while it concentrates on the image content and the image itself, no reference is made to the production or consideration made of the intended audience. Images are not created in a vacuum, and usually conform to socially constructed codes of recognition that are part of the creation of the image as well as part of the interpretation.

Before deconstruction or content analysis of the image, Rose talks of looking at an image with what she refers to as “the good eye” or compositional interpretation (Rose 2001, p33). While not a conventional methodology, it is a way of describing images in what Rose says is a kind of connoisseurship in that it produces an overall feel for the image. It attempts to discern the significance of the image through the compositional modality and the image in total, rather than through ascertaining the significance of individual sectors of the image.

It is obvious that images can be classified by their content, but this is only one part of their composition. Colours (hue, saturation and value) are also another critical component of the overall image. Colours provide a certain feel for the image – the obvious one is either warm or cold, but they can also illustrate distance and strength for example. Spatial organisation is another aspect of content, and it relates not only to the relationship between various objects within the image, but also the relationship between the viewer and the image.

One theme in nineteenth century landscapes was that of inviting participation; this is, of inviting the viewer to enter the painting, detach themselves from the present and enter into the imaginary. As De Lue (2004, p127) says “Landscapes that were labelled masterly and forceful, enchanting and poetic, were often described as such precisely because they appeared to invite the beholder into their fictional spaces…”. Through the
process of aesthetic pleasure, and the ability to see beyond the immediate, the viewer is exposed to a series of more profound truths (De Lue 2004, p123).

Another popular construct during the nineteenth century was the capacity of landscape art to evoke recollection, or provide a medium for the recall of personal or cultural experiences. The American landscape artist George Inness (1825-94) maintained that landscape, especially civilised landscape, had the power to communicate human sentiment. “Civilised landscape … marks itself where ever it has been” (De Lue 2004, p117). Landscape was seen to be inextricably linked to memory, and the natural or uncivilised landscapes of the new world with their (perceived) paucity of historical or human intervention provided a dearth of associated value. By their failure to evoke recollections and familiarity, natural landscapes (as opposed to civilised landscapes) presented the greater challenge to the viewer. Absence, as opposed to presence, can often lead to tension from the viewer. It is this feeling of expectation or anticipation that is often unconsciously prompted in the viewer, thereby reinforcing community expectations and values of the occupation or otherwise of this landscape. While the notion of absence or presence communicates one set of feelings, the way the image is portrayed can present another.

Collier (1911, p284) states his belief that the early Australian painters appreciated the landscape, although in British terms, and

The pictures of Chevalier and Von Guerard are said to have no atmosphere – at least, the luminous Australian atmosphere is conspicuously absent. The trees, the mountains, the plains, even the skies are painted heavy and dark, which they seldom are. The Bush is “stern and funereal”, as it was to the first novelists and poets – Marcus Clark and Charles Harpur, whereas in literal truth it is commonly flooded with sunshine. Homesick exiles, they had missed its characteristic note.

Early Australian painters saw the landscape through preconditioned eyes, eyes that were more attuned to a European view, or European understanding, and as such were “painted for exiled Englishmen” (Smith 1945, p55). Landscape art is seldom about pure observation and pictorial representation, and usually contains many other values. It can fortify myth, provide drama and emotion, and provide a vision for the future. It can
reinforce beliefs and values, or alternatively create tension between reality and such beliefs.

In Lycett’s *Inner View of Newcastle* (1818) (see Plate 7.2) the position of the settlement in relation to the landform (in other words, the choice of the viewpoint), places the settlement precariously on the edge of the continent: a small pocket of fragile civilisation on the edge of a huge, empty (and hostile) unknown. The dark clouds above and the light in the distance add a sense of drama, and the blackness of the landscape a sense of foreboding. The future is over the horizon. Tenuous links to civilisation are provided by ships off the coast. Shown from another vantage point, the feeling could have been completely different. The intention was to create drama, to cultivate feelings and reinforce beliefs and by so doing provide a level of appeal that people could identify with. The visual reality was constructed to encapsulate (or create) the emotional reality of the viewer.
To a landscape that was perceived empty and devoid of myth, emotion and drama, these features were also added. Tension, threat and fear emerge in Frederick McCubbin’s *The Lost Child* (Plate 3); this work is dealt with in more detail later. Long’s *The Spirit of the Plains* (Plate 10) and McCubbin’s *The North Wind* (Plate 13) create a sense of spirituality (and an imported European sense of spirituality at that) as their main themes, each in a different manner. *The Spirit of the Plains* presents an image of brolgas dancing and following an elf like person playing a flute. There is nothing threatening, with even the trees presented in an open manner, their long tall trunks letting in lots of light and through which the sky is clearly visible. It can be seen to present a sense of harmony with nature and a sense of kindred spirit.

*The North Wind* (Plate 13) is clearly different. There is a similar sense of spirituality, but it is far more threatening. The viewer is placed almost within the image, and it is an image of foreboding. The colours are pale and washed out giving the impression of heat. The man or husband looks toward the sky with obvious concern. In the wagon is a woman, presumably his wife, with what one would also presume to be all their worldly possessions. The image portrays a struggle between a family and the vicissitudes of nature, and through this a tension is created. The sense of spirit is there, but in this case it is portrayed as conflict.

The previous discussion has been used to illustrate the fact that the representation of landscapes through art need not only be informative and illustrative, but may also be constructed in such a way as to create an image of a constructed or fabricated “reality” that has more to do with an attempt to influence or appeal to the feelings of the viewer than it has to convey any literal reality. Depictions of landscape can be interpreted as an analogy (similar to the same device used commonly in literature), or as a metaphor. It is the understanding of the metaphor and analogy rather than the literal interpretation that throws light on social attitudes towards place and nature. Art and literature therefore can become a mirror in which community values can be reflected.
Australia had been settled for over half a century before the first art museums were opened, with the National Gallery of Victoria opened in 1864, and the Art Gallery of NSW opening in 1876. Among the first acquisitions of landscape artists were the more conventional landscape artists such as von Guerard and Piguenit, which represented the more conventional European concept of the romantic landscape. Earlier work by von Guerard such as *An Australian Homestead* (1861) and *Mount William from Mount Dryden* (1857) were seen to be perhaps too subtle, scholarly and complex to “become part of Australia’s common store of imagery” (Thomas 1974, p159). In the first image, passive indigenous people are juxtaposed with energetic white people, while in the second the introduced European fox is placed with kangaroos and rampant wild blackberry lies with native grasses. Thomas says that these images are images of “immigration as aggression”, and illustrate that the natural cycles of destruction and regeneration are to be accepted and not praised or blamed (Thomas 1974, p159). The common themes or romantic landscape painting such as cliffs, mountain peaks, jungles, waterfalls and wilderness in Australia just happen to lie close to the major centres of population and the earliest areas of settlement. For Melbourne, Hobart and Sydney these romantic topographical features were but a short journey from where people lived.

W C Piguenit was the first Australian born artist of significance and it is in his work that the tradition of the European romantic sublime is most strongly reflected. The romantic images of mountains and waterfalls are certainly not typical of the Australian landscape, and are but one member of a small group of exotica unique to the continent though they have been the “motivation for much exotic landscape art” (Thomas 1974, p158). More typical and characteristic of Australia were the vast grassland plains with their rich golden colours on which most of Australia’s wealth was said to be created. This landscape is therefore a symbolic landscape, symbolising not only the “look” of large areas of the continent, but also symbolising the source of much of the nation’s wealth, and the stage on which many of the community “struggled” with life. Unlike the romantic wilderness areas, this was a populated landscape, with human activity, triumphs and sorrows, and in terms of symbolism, one that most people could identify with. Why then, was this pastoral landscape seldom central to the art of the early landscape painters such
as Lycett (1820s), Glover and Martens (1830s and 1840s) and finally von Guerard and Buvelot in the last quarter of that century?

It was only late in the century with artists such as Roberts, McCubbin, Streeton, Ashton, Mahony and Lambert that the pastoral image became prominent. Thomas (1974) says that this was not an accident, but a deliberate move as a result of the centenary celebrations marking 100 years of European settlement and the search for national identity. What visual image would satisfy the (predominantly urban) search for national identity? The romantic landscapes were now largely displaced by a series of “popular images” depicting the heroic struggle of pastoral life: heat and dust, heroic workers, golden landscapes and cloudless skies. Their intended destinations Thomas says, were the public galleries and museums, they were painted on canvasses that would accommodate such collections, and were the intended contribution of the artists to a political goal: that of the birth of the Australian nation and independence from Britain. They also represented definitions of what it was to be Australian, the Australian character, and were symbols with which all Australian’s could identify. Such works as Under a Southern Sun (Plate 11), The Golden Fleece (Plate 6), Across the Black Soil Plains (Plate 14), all represent iconic images, and are probably as popular today as they were then. Images such as Under a Southern Sun (Plate 11), The Golden Fleece (Plate 6) and Across the Black Soil Plains (Plate 14) reinforce attitudes about life in the bush. The work is hard and backbreaking. If the work itself were not enough, the conditions under which it took place were equally challenging. The challenge of shearing the sheep was only surpassed by the challenges of then having to get the wool to market. The images can be read as more than just interesting glimpses on rural life: they also could be seen as the reaffirmation of the struggle of rural people with nature on one hand, and the challenges posed by a very physical occupation. These works contrast markedly with images such as The Valley of the Nepean (Plate 12) and The Purple Noon’s Transparent Might (Plate 8) where the view is from above and looking down across a wide expanse of nature that has been suitably “civilised” by settlement. These two images present a vision of the future, and in that sense justify all that went before it.
New generations of artists in the 1940s such as Drysdale, Nolan and Boyd, drew nourishment from this pastoral tradition and in a re-interpretation of this tradition provided a sharper edge to embrace the now apparent social and environmental realities of the pastoral scene. The romantic sublime was changing to the surrealist reality, and as the 20th century came to a close, this was a reality that fewer and fewer Australians were able to identify with.

The dominant pastoral image had replaced the earlier romantic image of the landscape, and in a sense built on an Australian reality. Compared to the romantic landscapes of the Southern Seas with their exotic flora and fauna, high mountains and coral seas, Australia had proven a disappointment. It was dull, grey, flat and monotonous. William Westall, a landscape painter who came to Australia on the *Investigator* with Flinders in 1801-1803 said “…I should have been fully recompensed for being so long in that barren coast, by the richness of the South Sea Islands” (Smith 1960, p160). It is therefore not by chance that Australia’s “iconic landscapes” do not contain any images of “seascapes”, as for the last 200 years the Australian sense of identity has been created by looking inwards and through association with terrestrial landscapes. As populations grow along the maritime fringe of the continent, and the growing sense of detachment from “rural Australia” continues, the nature of iconic images of national identity will naturally change as the “rural image” of Australia becomes less relevant to much of the population.

To illustrate the importance of landscape painting as a medium for understanding the relationship between society and landscape, it is worth interpreting several famous images, two from the 1880s and one from the 1920s. In doing this I rely heavily on the work of Burn et al (1988), and likewise recognise that this could be only one of a number of possible interpretations. However, the point is not whether the interpretation is right or wrong, but more about the possibility for interpretation, and the notion that there are a number of informative texts embodied in the individual depiction. These texts can variously appeal, inform, affirm, or question a range of beliefs and attitudes held by the viewer.
The first two are examples of the Heidelberg school, and are Tom Roberts’ _The Artists Camp_ (1886) (Plate 2) and Fredrick McCubbin’s _The Lost Child_ (1886) (Plate 3). Both works are placed in similar bushland (landscape), and are similar in what they include and what they exclude. The bush cuts off any sense of distance, and the horizon is so high that it is hardly visible. In both cases the viewer is placed “in” the bush in such a way that the bush constrains the vision. Both images present a human narrative, and are placed slightly awkwardly in the middle ground. The foreground is such that there is an illusion of looking through the bush toward the incident.

What are the attitudes articulated in these two works? The first is the complete absence of the traditional threats that are commonly associated with bush life. The harshness of the bush life, flood, drought and fire are all omitted for example. The bush as depicted takes on no agricultural values: there is no sight of human modification or work, no open grasslands suitable for stock or trees for forestry. The bush is very much neutral, with neither the harshness nor the pleasures hinted at. This is certainly not a bush that accords with the reality of the pastoralist, prospector or bush worker. The images are of people “visiting” the bush, and display all the attractive qualities that would appeal to people who did not live there. In McCubbin’s _The Lost Child_ (Plate 3) there is tension, as the lost girl depicted is obviously totally alien to her surroundings, inappropriately dressed and unaware of her predicament. The anxiety created would be well recognised by those who are only visitors to such a landscape.

Both works rely on the fact that there was already a well held and commonly agreed idea of what constituted “the bush” and society’s relationship with it, and both images clearly work on the level of this relationship. The bush was for relaxation, contemplation and restoration. There is a suggestion of exclusivity, for those with the intellectual capacity to appreciate such an environment were those of the urban bourgeoisie. Evidence of this relationship is to be found elsewhere.

In a book titled _Federated Australia – Its sceneries and splendours_, published by Charles Taylor in 1901, there is a photograph on page 88 depicting a bush camp in Tasmania.
Gathered are five relatively well dressed gentlemen outside a tent in what is obviously a well ordered camp. The scene is reminiscent of both the scenes in *Lost* and *The Artists Camp*. The caption reads:

A BUSH CAMP, Tasmania. This scene represents a familiar aspect of summer life of Tasmania. Walking tours are exceedingly popular on the island, the beautiful scenery of which usually attracts large numbers of tourists. Australian professional men frequently spend their summer vacation in camping in the Tasmanian bush. It is such a camp that is depicted here, and its Arcadian simplicity is evident. The camp is on the river Leven, a stream on the north-west coast. The river abounds with fish, and all along its banks are to be found tempting spots for the tent, sheltered from both sun and wind, and with wood and water in abundance at hand. The campers live out their holiday in the open air, taking their turn to cook the meals of the party, sketching, photographing, botanising, fishing till on their return to town they are bronzed and hearty specimens of humanity ready to face the toils and stress of the cities with new vigour.

The image of the bush portrayed by Roberts and McCubbin connects closely with the relationship illustrated above in that it is very much class specific, relating to the middle and upper classes. It corresponds closely to the way the upper bourgeoisie with its ideology saw the outside world. This upper middle class urban view of the landscape projected an image of innocence and naturalness, an atmosphere of contemplation and educated appreciation.

The fern tree gullies of the Dandenongs attracted visitors as early as the 1850s “forty kilometres east of the city centre –a three hour drive for those with good horses –they were too far off for a day trip ‘except for robust persons’” (Bonyhady 2000, p105) With the development of the railways in to the hinterland however, such sites became more accessible, and in the 1880s tourism took off. As Griffiths (2001, p115) says “The wedge of forest land between the Sydney and Gippsland railways attracted visitors with its sweet-smelling fern gullies, fragrant bowers, giant towering trees, crystal streams and splashing cascades”. Walking tours were popular as well, and such tracks as the Yarra Track through Victoria’s mountain ash forests became famous. On one excursion, two walkers noticed a grand building on the brow of a hill: “[W]e are informed that it is the
Gracedale Coffee Palace, and will be opened about next Christmas”, the Gracedale later became known as “the best furnished holiday house in Victoria” (Griffiths 2001 p116).

*Ferntree Gully* (Plate 4), a painting of Dobson’s Gully in the Dandenongs by Von Guérard, became so popular that the name of the location became “Fern Tree Gully” (as it now remains) and excursions to the scene also became popular. In 1888 Alfred Howitt said “one of those tropical looking spots one would rather expect to find in the South Seas than in Australia …We ought to have been a thousand miles away from Melbourne instead of twenty, so wild and solitary was the scene” (quoted in Griffiths 2001, p117). It is interesting to note that Howitt (more commonly remembered for his role in the search for the Bourke and Wills expedition) was in the area searching for a lost child. The child was the son of Julie Vieuvesux, a friend of Von Guérard, who had organised a trip to Fern Tree Gully on New Year’s Day, 1858. The bones of the lost child were found two years later in a hollow log. McCubbin’s *The Lost Child* (Plate 3) builds exactly on this sort of apprehension, and it would be almost certain that many of the potential audience and almost certainly the artist, would have remembered the incident.

In Sydney there were feelings similar to those in Melbourne for the bush. The *Picturesque Atlas of Australia*, Volume 1, published in 1886 (Garran 1886, p98), describes the National Park (now the Royal National Park just south of the city) as containing “an abundance of those situations experienced picnickers seek out … a wilderness for those who like the change from hot and dusty streets” and “where on holidays the multitude may get out and find scope for free enjoyment of all innocent natural propensities”. It also stated that the park had “the most characteristic and beautiful features”. It is worth noting also that the Royal National Park, proclaimed in 1879, was only the second such national park in the world, following after Yellowstone National Park in the United States of America. As Burn (1991, p25) points out, the things that made the Royal National Park appealing were not the spectacular views or scenes that characterise the Blue Mountains or the Ku-ring-gai Chase, but the “luxurious and intimate bush areas and beaches”.

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7.5 Art as a medium for ideology in landscape appraisal

Symbols mediate between the experiencing being and the stream of events and entities in the outside world (Gill 2002, p190). Symbols help people make sense of the world around them and provide a rapid mechanism for understanding seemingly complex situations. The symbolic capacity over time becomes part of myth, language, art and theoretical knowledge. An example of this is perspective, which is a symbolic form in which spiritual meaning is attached and intrinsically given to a concrete material sign such as, for example, a mountain (Panofsky 1991). The distance and location of the point of vision become important in the symbolism of the Weltanschauung (world view) of the period, which in turn relates to how people see their place in the world at the time.

Perspective is more than just a symbolic form in which mentality can find itself reflected, it is also the mechanism by which a new world view could emerge and become established. Rather than just reflecting the attitudes of the present, it is also a mechanism for changing and altering those attitudes. Perspective has the capacity to give art the access to the “psychological level of the individual and make possible new forms of religious experience” (Gill 2002, p191). Experience may not be confined to that of religion only though, for as Gill (2002, p191) says “landscape painting created the syntax of a language that allowed artists to express a new range of feelings and responses to the natural world”. Art then has the ability to teach the viewing public to “see and respond to landscape in new ways”, and landscape painting “utilising perspective, offers not only verisimilitude but situates the viewer in a point of vision where nature is laid out for human consciousness” (Gill 2002, p191).

This type of view has been challenged by Mitchell (1994) who argues that the nature of the understanding between landscape art and society is not nearly as passive and benign as envisaged above. He sees landscape art as having an ideological function that through representation makes a particular social order seem natural. His concern is with imperialism, and argues that through the representation of landscape, imperialism can be made to seem an inevitable expansion of the cultural world into spaces narrated as
natural. The “prospect” (the view that opens up a natural scene) is more that just a spatial
scene, but the “projected future for exploitation and development” (Mitchell 1994, p17).

No landscape portrayal can be value neutral. The selection of the scene, the construction
of the image, the colours, and the use of almost any feature under the artist’s control
reflect a preference of one sort or another. For example, the choices can relate to the
emphasis of certain features of the scene, or an appeal to the viewer’s emotions such as
beauty, majesty, awe, fear, or even a combination of these. One of the qualities of
landscape painting is that it communicates or resonates with the viewer. The image can
be allegorical or symbolistic and designed to convey a range of ideas. For some, such as
the American landscape painter George Innes (1825-1894) one of the objectives was to
enable the discovery of the truth. He believed reality was hidden from view and the
“difficulty was in bringing the intellect to submit to the fact of the indefinable – that
which hides itself so that we may see it” (Inness 1879, p377). Innes believed that truth
was by nature unseeable, but by knowing how and where to look, or being guided by
painting, “spiritual sight would bring the unseen before the conscious” (Inness 1879,
p377). Thus the landscape could become the vehicle for truth. As in America, Australian
landscape artists “championed the indigenous genius loci through images of sentiment
and settlement, awe and obeisance, contemplation and absorption …” (Johns et al 1998,
p8).

The imperial gaze becomes the gaze of the master or dominator set to subdue, civilize
and exploit the natural world. It is a conceptual image or a way of seeing in which the
values dominant in imperialism are superimposed over the view in the manner in which it
is portrayed. The imperial gaze also separated human kind from nature by placing people
apart from (as opposed to within) nature, and in a position of power and dominance. The
viewer is placed in a position where they are supreme, august and command all that they
see. The colonial gaze becomes a reaffirmation of colonial values – colonising the new
world; creating wealth where only primitive nature lay and civilising indigenous peoples.

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In America during the mid-nineteenth century the phenomena of the “Manifest Destiny” appeared where prominent artists were patronised by wealthy institutions and individuals who had a vested interest in the promotion of particular outcomes such as land subdivision or development and the extension of the railways. Manifest Destiny portrays the inevitable future and documents the progression of development, figuratively at least. As the eye moves from the foreground to the background so the viewer travels through time - from the present to the future, with settlement portrayed in the far distance. Such images (ie. Plate 12) are symbolic and often allegorical. Manifest Destiny theory (loosely titled) proposes that there is a viewpoint and a line of sight that is not only a visual line of sight, but an ideological line as well. Boime (1991, p.x) argues that Manifest Destiny was born through “the symbolic connection between the disciplined focus that submitted vast reaches of the wilderness to an omniscient gaze and the larger national will to power”. The artists were commissioned to produce works that reflected the values inherent in these developments, so leading to the concept of a manifest destiny. Although numerous Australian artists (such as Martins and Piguenit) travelled to America during that time, there is no evidence of similar commissions in Australia (Mandy Martin, personal communication 2003)

It has been argued that landscape artists of the late nineteenth century and early twentieth centuries portrayed landscapes and the human interaction with them in a manner that reflected the ideals and attitudes of middle and upper class city dwellers. The bush was presented as an Arcadian retreat; an environment that was almost the opposite of the city in that the dust, noise, dirt and the hustle and bustle was absent and one could easily visit and interact with a natural environment. This “cleansed” image strongly contrasted with the image presented by a new crop of writers at the time, mostly working for the Bulletin, who presented an image of the bush that was not an Arcadian sublime, but a battle between man and nature, with the real values being reflected in the relationships between people (eg. mateship), rather than people and the environment. Burns (1991, p26) presents this as not so much as a transmission to the city of a bush “ideal” that originated in the bush or the landscape, but an ideal created by an alienated city intelligentsia and projected onto the bush. While the Heidelberg school taught people to see the landscape
in a different way, they distorted the image, and through that presented a way of seeing that was very much class oriented.

That landscape imagery, either written or visual, can become contested political terrain is well documented (Pugh 1990). It can be used to define moral ground (the power of the “order of nature” for example), and is a field for defining the notions of public and private ownership in the sense that a narrow view defines private and intimate, and a broad view the reverse (Pugh 1990, p2). A more generalised view (say from a hill or elevated position) becomes a metaphor for those who have a broader depth of understanding, who see all, and who understand the interrelationships of objects. There are connotations of ownership, power and eminence. Landscape portrayal is in itself a text that can be read and interpreted, and as such reflects or projects social attitudes and values on to the natural world.

It has been suggested that art can play more that a passive role in directing the relationship between people and landscape. The preceding discussion has demonstrated that art can reflect or mirror a range of attitudes in the relationship between society and nature. Another line of thought speculates that art can also prescribe such a relationship.

Underlying such a concept is the presumption that one can trace the inevitable development (domination) of the landscape by society through the visual codifiers presented by the artwork. Such works depicted the magisterial gaze or historical narrative as opposed to the sublime. As the American landscape painter, Thomas Cole said in *Essay on American Scenery* (Cole 1836).

> looking over the yet uncultivated scene, the mind’s eye may see far into futurity. Where the wolf roams, the plough shall glisten; on the grey crag shall rise temple and tower-mighty deeds shall be done in the new pathless and wilderness.

According to Boime (1991), during the nineteenth century (c.1825 to 1865) American experience of the sublime in landscape had its origin in an elevated viewpoint that progressed to a scenic panorama below and passing into the distance. The approach of looking “down” on the landscape differed from the early northern European viewpoint
which Boime (1991) terms the “reverential” viewpoint. This viewpoint moves from the lower picture frame and ends in an elevated position – from the bottom looking up, and becomes a metonymic image of reverence, and the association of wild and natural to godliness.

The linkage is clear in Casper David Friedrich’s *Tetschner Altar 1808* (Plate 1). The use of a landscape as an altarpiece is unusual, but highly symbolic. The setting sun represents the passing of the old order of the world before Christ. The golden figure of Christ on the cross reflects the light of the setting sun onto earth and the rock symbolic of the steadfastness of the faith in Christ. The green fir trees are allegorical in that they portray the hope in the believer of Christ and the three rays of light the Holy Trinity. Here the image represents not so much a sense of manifest destiny, but a sense of order. God (through Christ) is seen to be supreme in that God created the world and is master of it. Humankind, because of its special relationship with the Divinity, is elevated above the natural world, and the natural world reduced to a stage on which life takes place. The work is clearly allegorical and symbolic.

The representation of nature and the wild is seen in the American Thomas Cole’s *Falls of Kaaterskeill* (1826) (Plate 7). This work incorporates the sublime, and the viewer is placed at an elevation toward the middle of the image. Almost at the same level stands an Indian looking over into the abyss. The Indian is clearly part of the natural world, and is at home within the context of this image. A common trope in both Australian and American work of this time was to link indigenous people with the nature and to see them as part of the past as opposed to the future. This image is about nature and the natural world and because of the placement of the position of the viewer, they are seen to be an equal to it, as opposed to looking up at it. This image steers clear of portraying the myth of nature as some religious doctrine. Unlike *Tetschner Altar*, the viewer is not looking up and is positioned on equal terms with the image. The magnificence of nature is not portrayed as an altar or symbolic cathedral, but in this case as majestic and wild, threatening and powerful, but not out of reach of the viewer.
These two works demonstrate that the image can be presented in such a way as to convey a sense of relationship between the viewer and scene, in this case being the natural world. Looking from the bottom up provides a sense of inferiority and powerlessness. The viewer becomes subservient to the power of nature with all its threats and dangers. The view from the top down is the reverse. There is a feeling of power and control. We are no longer frightened by the potential dangers. The viewer is the master.

As discussed elsewhere, linking wilderness (especially dramatic mountain scenery) with Christian spirituality became popular in the 19th century Britain. This approach emphasised the humility of mankind. However, where the viewer is placed in an elevated position looking down to the middle ground and on to the distance (or that of the magisterial gaze), the message is that of the dominance of the viewer (mankind) and the superiority of civilisation (represented by the viewer) over the natural world (subjugated to a lower visual plane).

The composition was often arranged with the spectator in mind (and often contained a “surrogate” spectator), and was clearly didactic in construction. Another feature was that the construction of the scenic panorama metonymically presented time, with the immediate past in the foreground stretching to the future in the distant horizon. The painting thus became a text to be read in the sense that it became adversarial regarding the future. The “line of vision”, Boime (1991, p2) states, “represents not only a visual line of sight, but an ideological one as well”.

The railway represented the triumph for science and technology over wild and undeveloped terrain fulfilled the dream of Euro-American conquest of the new continent. Thus in the historical narrative presented in this sort of landscape painting often had in the far distance the images of railway … the smoke from the engine, the lines and sometimes the train itself. As the eye progresses from the foreground to the horizon one passes from a “wild and untamed” landscape to a “civilised” one; from undeveloped to developed and peopled (by Europeans). Indigenous people appear in the foreground, and
are clearly associated with the wild and untamed, but are absent in the imagery of the future.

Thomas Cole’s (1801-1848) *View From Mount Holyoke, Northampton, Massachusetts, after a thunderstorm (The Oxbow)* 1838 (Plate 9), is typical of this genre. The viewer is placed high and in the centre of the picture frame and in a position where the viewer is more of a participant than a casual viewer. To the left is the rugged and untamed natural world, the drama increased by the occurrence of a dramatic storm in the middle to far distance. The wild and untamed nature of the landscape to the left is contrasted with the peaceful, idyllic vista in the right of the canvas. Here the topography is lower and far less rugged. The sun is shining, and smoke comes from the chimneys of the farm houses. The landscape has been cleared, fenced, and sown to pastures. As Boime (1991, p10) says it is intended that the viewer believes, metaphorically at least, “the future lies over the horizon”. While the scene presents a portrait of the present, it also conjures on image of the future.

An Australian example of such an image is Arthur Streeton’s *Valley of the Nepean* (1892) (Plate 12). The viewer is placed high above the fertile plain of the Nepean River west of Sydney, and as far as the eye can see in 180 degrees are the signs of agriculture. In the foreground are the remnants of the forest eucalypts showing what the land used to be like in its uncivilised state. Neatly tended fields with straight fence lines and the occasional cops of timber and neat farm houses make up the middle ground. In the distance can be seen a village with smoke from fires. As the artist himself said in a letter to Tom Roberts (Streeton 1891 in Ganbally and Grey 1989):

…Yes here it is a great rich drama going on in front of me. To the right sou-east the plain rises a little, and thousands of strong gum trees stand in a line up to which comes the civilised side of things crops of maize, lucerne & prairie, all so soft & Peaceful & Yet gradually edging their way into the stately dominion of the Eucalyptus.

While Streeton is painting the present, he is also painting the inevitable - the future. Agriculture is edging up to and encroaching on the dominion of the bush. The foreground represents the edge of civilisation. It is clear to the viewer that the fertile
valley has been civilised and now grows crops and provides pasture for animals. People live here, and this civilised fertile landscape bears all the hallmarks of the culture that has conquered it. While not strictly a staged representation of “progress” as in Cole’s (1801-1848) *View From Mount Holyoke, Northampton, Massachusetts, after a thunderstorm (The Oxbow) 1838, (Plate 9) the image Valley of the Nepean (1892) (Plate 8) can be interpreted as providing a guide to the future rather than just a representation of the present.

*The Flood in the Darling, 1890* (1895) (Plate 5), by Piguenit is said to be used “as an argument for conserving water in the west against times of drought” (Bonyhady 2001, p283). The painting, first publicly exhibited 1895, shows a large section of water, obviously shallow, with ibis feeding in the foreground, covered by a mottled sky reflected in the water below. The light is a special feature of the work; it is reflected through the clouds, and where the sun pierces the clouds, and reflected on the water in the distance and below the tree line. The work clearly depicts floodwater, expansive and shallow. It also hints at the potential for vegetative production, and the pulse of life. The work induces a sense of contemplation in the viewer. The mind passes beyond the actual image and reflects on such a vast body of water in the arid interior and drought ridden interior. The painting was produced at a time when the Western Division was in a severe state of drought. One pastoralist had already lost over 130,000 head of sheep to thirst, and Piguenit’s own cousin had worked on a station that lost 90,000 head of sheep in the 1883-1884 drought. *The Flood in the Darling 1890* was in fact a compilation of two earlier works done in 1890 when Piguenit had travelled to Bourke by train.

Piguenit’s work is also as much about drought as it is about floods, and about the need for water conservation. In a letter to one of his English cousins written in 1889, Piguenit says that the combination of severe droughts in some seasons and “the extreme luxuriance” of grass in others was “unmistakable evidence” of the “necessity of a comprehensive system of water conservation being established in the country” (Bonyhady 1995, p302).
What the work does is to provide a symbolic foundation for the philosophical debate that surrounded aridity and drought. One side of the debate was presented by Hugh McKinney (head of the Water Conservation and Irrigation section of the NSW Department of Public Works) and furthered by James Moorhouse, (the Anglican Bishop of Melbourne between 1877 to 1886), who argued that the answer to drought was to conserve the excess water in times of plenty. “Don’t pray for rain, dam it”, although falsely attributed to Moorhouse, became the catchphrase of this argument which argued that mankind should harness the profligacy and waste of nature. According to Macintyre (1991) the alternate view, presented mainly by the Protestant denominations, was against the substitution of irrigation for religion, arguing that local drought was a punishment for local sin, and could be expiated by due humiliation. A day of “humiliation and prayer” was designated by the Governor General for September 15\textsuperscript{th}, 1895, and the day was duly listed in the Government Gazette (Bonyhady 1995). Two days later it did rain. The proclamation outraged those who saw natural forces rather than God determining the laws of nature. In spite of this rain, the drought was only just beginning.

In the light of these arguments raging from the mid 1880s to well into the 20\textsuperscript{th} century, Piguenit’s painting can be seen from different perspectives. Perhaps it symbolised the potential of harnessing floodwater and irrigation. On the other hand, it could also have represented the conflict between science and religion. This painting raises a number of questions regarding these debates: Did prayer bring rain? Was the answer to local sin clever engineering works? Importantly, where did God stand in man’s relationship with nature? Did God answer the prayers of his followers by providing the gift of rain and floods, or was this image of a flood a message that prayer was not the answer to drought, and that drought was solved by better use of the existing gift of floodwater? Did The Flood in the Darling, 1890 symbolise the debate, or did it point to a way forward? In reality it probably represented both, as left up to the interpretation of the viewer.

Henry Lawson, a contemporary of Piguenit, spent nine months on the Darling between 1892 and 1893 and was a strong advocate of water conservation and irrigation. His poem
The Song of the Darling River was first published in the Bulletin on March 25th 1899.

The first two verses of this poem are significant:

The skies are brass and the plains are bare,
Death and ruin are everywhere-
And all that is left of last year’s flood
Is a sickly stream on the grey black mud;
The salt springs bubble and the quagmires quiver,
And – this is the dirge of the Darling River.

I rise in the drought from Queensland rain,
I fill my branches again and again;
I hold my billabongs back in vain,
For my life and my peoples the South Seas drain;
And the land grows old and the people never
Will see the worth of the Darling River.

It is quite clear from this that Lawson is attempting to do two things. The first is to paint a bleak picture of the inland. Death and ruin, hot skies and bare plains, with a sickly stream on the grey black mud – this is the sort of landscape that people were supposed to make a living from. On the other hand, there was the Darling River, the lifeblood of the country, crying out to be regulated. A local landholder, Ernest Millen, who also represented Bourke in the NSW Legislative Assembly, and later became the author of seven articles published in the Sydney Morning Herald detailing the social and environmental condition in the Western Division in 1899, was more pragmatic. Millen (1899, p4) said the only solution was to accept that the Western division was “desert country, capable of but the lightest stocking”. Millen went on to say that settlers had made a fundamental error in believing that the norm was good seasons occasionally punctuated by drought. The reality, he maintained, was the reverse; that of drought punctuated by occasional good seasons, and that the sort of water conservation being spoken of was of little use in long droughts.

Piguenit’s brother-in-law was Gerald Halligan, who was chief engineer in the Harbours and Rivers section of the Public Works Department, and who had conducted a survey of the Darling River in 1885, and returned again in the drought of 1888. In 1883-84 river trade on the Darling had ceased, owing to the fact that the river had become un navigable.
The railways had not reached Bourke by this time (reaching Bourke in 1888), and the Darling was therefore the major artery for trade, in the form of wool leaving the district, or fodder coming in. The damming of the river, and the establishment of locks etc thus became not only an issue for increased production and the amelioration of drought, but also was seen as essential for the transport of people and goods in and out of the region\textsuperscript{20}. Water was seen to provide the lifeblood of the community in so many ways: to provide feed and water for livestock, to allow for transport in and out, representing the potential for the development of a range of new industries, and as a safeguard against future droughts.

*The Flood in the Darling 1890* was certainly used to support the case for water conservation. Suttor, for example, who was a prominent journalist, writing for *The Stock and Station Journal, The Country Life* and co-editor of *Art and Architecture* believed the painting was “a perpetual sermon on the possibilities of water conservation, which should strongly impress our State Governments” (Bonyhady 2000, p305). More than anything else Piguenit’s work presented the eternal dilemma: The interaction of man and nature. For some it pointed the way forward. For others it simply confirmed the need for a better understanding of the place of Man within nature.

Mention should be made of the daguerreotype, the precursor to photography, as it appeared in the mid nineteenth century. The Daguerreotype was first in the new technology of photography, and the influence of photography on impressions of the natural world has been much-discussed elsewhere. Daguerre is quoted as saying that he was now able “to portray nature without the aid of an artist” (Tunnard 1978, p51). However, though photography was able to portray an exact image of the natural world, it

\textsuperscript{20} Following an historic meeting at Corowa in 1902, an Interstate Royal Commission was set up to “inquire and report on “the conservation and distribution of the waters of the Murray and its tributaries for the purpose of irrigation, navigation and water supply”. At the end of the 1890s there was a proposal to construct 40 locks on the Darling/Barwon river system costing over £20,000, the first and only one constructed at that time being just south of Bourke in 1897. In this case the prime reason for the construction appears to have been to provide jobs for labourers in Bourke (Bonyhady 2000, p290).
still lacked something. Considerations to the effect that were this new invention (the daguerreotype) used by an artist as it should be used, it would elevate the individual’s art to a height unknown did not eventuate (Tunnard 1978, p51). According to Tunnard (1978, p52):

If the advances in technique can be said to have influenced our way of looking at scenery, this influence may be manifest by increased boredom with what ‘is’ as opposed to what the camera can make us see.

Modern technology has enabled the transmission of countless landscape images, and importantly the transmission of the same image countless times, so to an extent landscapes have been stereotyped and homogenised. Most Australians would have an image of outback Australia, and at the very least would be able to identify the characteristics of such an image. However, the majority of Australians may never have been in that landscape. This has come about through the constant repetition of stereotyped images in all forms of the media. Urban Australians’ understandings of semi-arid Australia has been developed fundamentally through a series of images and writings that have had as their basis commonly accepted notions about the nature of the “outback”: typical images of desert-like conditions, sparse trees and shrubs, sand hills and predominantly red colours; and newspaper reports of drought, floods and dust storms reinforce subconscious understandings of what arid Australia is like. This culturally constructed stereotypical image replaces reality in the minds of many people.

In many ways then, nature is a constructed phenomena. What people see is real enough, but how they see it is determined by a range of skills and factors, many of which are based in a cultural preconditioning. The notion of preconditioning is important. As landscapes can be a cultural construction, therefore the way of seeing these landscapes is also dependent on cultural orientation. People position themselves within a landscape according to personal and also cultural attitudes and values. In the process of development, individuals assimilate the cultural attitudes and values of the communities in which they grow up. How one sees nature, how individuals interact with it, and the nature of the relationship that individuals and communities have with landscape, is all heavily influenced by the historic understandings, beliefs and attitudes about nature that
are manifest in the wider community in which the individual belongs. Lopez (1986) in *Arctic Dreams*, makes this point well where he discusses indigenous observations and descriptions of landscape and compares them with more traditional European ones.

Early European arrivals to the colony brought with them certain understandings of and beliefs about landscape that originated from a long association with a temperate northern hemisphere landmass. The early descriptions of landscape with words such as barren, parklike, forested, rich etc, all reflected European evaluations based on a European context. The potential of the landscape in terms of farming was once again an assessment made on a European basis.

While art and prose can reflect reality, they can also create or construct reality. Likewise, they can also reinforce understandings and beliefs about how people see “reality” and in respect to the natural world, how they interact with it.

**7.6 Conclusion**

In the preceding section the ability of visual art and text to both reflect and confront community and individual attitudes and values has been discussed. An image or text can appeal to an individual in a range of different ways through concepts as symbolism and metaphor. Landscape imagery is constructed and purposeful with the end objective being a dynamic interaction with the viewer.

This chapter has argued from a historical perspective that landscape imagery can be used to illuminate community attitudes in respect to landscape. The next chapter describes a contemporary series of projects designed to explore this concept, and to ascertain their potential to change the behaviour of pastoralists in the Western Division of NSW.
Chapter Eight:
Visual Art as a Means of Exploring Attitudes and Values: A Project Description

This chapter describes the rationale and methodology for three projects undertaken in Western NSW and South West Queensland between 1995 and 2001. The three projects sought to use visual art as a means of stimulating the exploration of attitudes and values regarding the environment. Although the three projects were not seen as part of thesis research at the time, they have been opportunistically incorporated in this thesis because they support the idea that visual art can lead to identification of individual attitudes.

Both Australian State and Federal Governments have attempted to change landholders’ behaviour toward the environment and address environmental problems through the provision of information, financial incentives and regulations. The provision of information (knowledge) assumes that people’s actions are based on ignorance or that they do not understand the repercussions of their behaviour. Lack of knowledge about what to do or how to do it is disempowering for those in such a situation. The key steps in problem solving are possessing knowledge of the nature of the problem, knowledge of the solution and the ability to apply the solution. The provision of information and financial resources supposedly addresses all three of the steps in the solving of environmental problems. The application of statutory regulations is seen as a complementary action.

Despite 20 years of government intervention through information provision, incentives and regulation, the State of the Environment Report 2001 indicates that the environment is not improving and that sustainability is still far from being achieved (Australian State of the Environment Committee 2001). Curtis (2003, p164) maintains that two reasons for this are the inability to get the information out to the people who need it and so induce
them to change their behaviour, and the intractability of the large scale problems with high structural dependence such as urban sprawl, biodiversity, soil acidity. Other issues such as water use could also be added to this list.

While it is assumed that with more information and knowledge behaviour will change, what is often overlooked is that there may be reasons other than financial and knowledge based that prevent people from changing behaviour. As Curtis (2003, p164) observes:

Only limited consideration appears to be given to (i) the cultural elements which reduce the efficacy of conventional modes of promoting change and (ii) the potential for using cultural elements to more effectively engage the hearts as well as the minds of communities.

The arts (defined as visual and performing arts) have potential in enabling people to reflect on the consequences of their actions, on the nature of their relationship with natural systems and on ensuing environmental problems (Curtis 2003, p164). There are recent examples where environment based activities have used the arts within their methodologies (Meekison and Higgs 1998, Curtis et al 1999, Downfall Creek Bushland Centre 2002). The relationship between the arts and the environment has a long history in Australia (as discussed in Chapter Seven), in which individual artists have tried to influence attitudes toward the environment (Bonyhady 2000). Only recently has art in the more general sense been used as a tool targeted to promote change in the environment.

The linkage between art and nature has been further discussed by Eastburn (1999), Clifford (2000), Grant (2001), Kastner and Wallis (2001), Norman (2001). The power of visual art to reaffirm belief systems is clearly demonstrated by the use of religious art through the centuries. In advertising the power of the image is well recognised and has been used effectively to reinforce behaviour. As Slade (2002, p124) says, “as generally theorised, advertisements are messages designed to induce a process of belief change, which is intended to flow through into action”. A more detailed summary of the effects of advertising is given in Batra and Ray (1985). A common theme is that advertising presents an argument through assorted media that we, the viewers, are invited to participate in. It attempts to stimulate a rational choice or a cognitive decision on the part
of the viewer. However, as Poster says, it can often do more than this. Poster (1994, p177-8) says “[It] works on other linguistic levels, to produce the effects of incorporation and attachment between the viewer and the product … [it] works with simulacra, with inventions and with imaginings”.

Poster’s observation is important when looking at how the use of art can affect how people perceive their relationship with the environment. Current warnings of increasing salinity, soil acidity and climate change present a coherent and rational argument challenging conventional thinking and behaviour. For the majority of people the message is clear: if we continue to do this then the following will be the outcome. As we do not like the potential outcome, then this argument presents good grounds for us to change our behaviour. Poster says that there is another approach and that is to link or create an emotional attachment between the viewer and the object through an appeal to the attitudes and values currently held by the viewer. By doing this the viewer will appreciate that there is a compatibility between the object and themselves and so an attachment will be formed.

With advertising, this attachment is necessarily a single step where the viewer assimilates that product into their lifestyle. In regard to the environment the involvement is more complex and can have a number of outcomes. Feedback reported from an ecological chorale *The Plague and the Moonflower* staged in Armidale NSW in 2002 showed that such performances could:

- Strongly move people and engender a strong feeling for the environment
- Have a very strong capacity for engendering an appreciation and pride of community and can act to strengthen these bonds
- A great capacity for involving a wide range of people and therefore expand the audience for environmental awareness raising
- Allow participants to develop their own ideas.

(Curtis 2003, p167)
The use of images and text as a process through which differing values and attitudes can be reconciled has been identified previously. For example, in a review of a Symposium titled *Australian Values - Rural Policies* held at Old Parliament House, Canberra in 2000, Gleeson et al (2000, p16) stated:

> At the deepest level of conception … the artworks, images, legends, poetry and music that express a multiplicity of values and beliefs come into play. These artefacts provide opportunities to bring forth a sense of commonality whilst appreciating divergence of understandings and engagement. They also create potential for great change in perspective without the need for intellectual debate and conflict.

The author participated in three projects that used art and text as a medium for communication for the discovery, by observers, of alternative ways of seeing and understanding. The insights from the three projects are complemented by a series of informal interviews of participants undertaken a number of years later to discover the extent of attitudinal change.

The projects were developed to address the issue of attitude change, but also to stimulate deeply held personal values. Values are favourable valences to inner feelings such as loyalty, spirituality, and honesty, and relate to deeply held personal positions on various issues. In the development of the projects it became clear that many people held personal positions relating to the landscape that demonstrated a special or semi-spiritual position. “This is our special place”, or “I just love this sand hill” are quotes demonstrating this. In one instance a landholder went to some trouble to grade a road down to a favourite waterhole so it could be painted. The material was designed to reflect and appeal to these deeply held values. The outcome sought was (a) to reinforce these sentiments and build on them and (b) to show that it was quite acceptable to have these sorts of feelings. In reinforcing these feelings the expectation was that they could be built on and developed to include a more expansive attitude toward landscape in general. It was also hoped to help develop a subsequent and more holistic understanding of the relationship between community and landscape.
There is a high level of community feeling in the remote areas of New South Wales. For six years I was a member of the Western Catchment Committee, a committee made up of community representatives and New South Wales Government agency representatives to set the direction for Landcare in the western half of New South Wales (this area was later reduced in size when the Lower Western Catchment Committee was formed). Representatives on the Committee were mostly male, and in the whole period of my membership there was no discussion of the relationship between people and landscape, or any sort of spiritual or emotional attachment between people and landscape or the “place” where they lived. Discussion in the Committee was always centred on the effects of the interaction between people and landscape and the problems created (the effects) rather than the problem itself (the relationship). Questions such as “why do we live where we live?” and “what is our feeling about our relationship with the landscape or land in which we have decided to call home?” that could have teased out a deeper and more spiritual understanding were never asked. Answers to these and similar questions could well have helped illuminate and explain the underlying reasons for action and inaction, behaviour and attitudes related to land use and management.

The three projects were designed, through the use of visual art and text, to provide a media through which community members could explore their individual and community attitudes toward the landscape in which they lived. Through visual impression and the written word community members were enticed to reflect on their values and attitudes toward the landscape in which they lived.

Each project was designed as a travelling exhibition and a publication, and through this means was accessible to members of the community, school groups, university groups and other interested people. Though there was wide application of the material, the principal focus was the communities from which the individual projects were developed.

The exhibitions toured to regional and other areas. However, the limited facilities in some of the more remote communities meant that presentation in these areas became impossible. In total over 50,000 people attended the exhibitions.
It is important to note the process whereby individual community members participated in the development of images and text. Many of the images presented are viewpoints or locations in the landscape selected by community members as being representative of what they felt about the landscape or their special place.

The first project, *Tracts Back O’Bourke*, (initiated in 1995) was funded through the NSW Government’s Environmental Trusts Program while the two subsequent projects were largely funded by participants.

The projects were intended to induce people to think more about the landscape in which they lived, and to think about their and their community’s relationship with it. The initial project team consisted of a writer (Paul Sinclair), and artist (Mandy Martin) and an environmental consultant (myself). My role was not so much as an environmental consultant, but community liaison in the sense that it was my role to identify the issues and to ensure that they were presented in a way that was constructive and non-threatening to local people. My role was also to tease out community issues in regard to landscape and see that these were presented in a sympathetic way. It should be borne in mind that the community that was the subject of this project was a community under economic and social pressure. They lived in a landscape whose condition was the legacy of almost 150 years of European occupation, and whose social and economic conditions had been the subject of numerous enquiries and reviews. There was often implied and actual criticism of their occupation of the landscape and the pastoral activities carried out in that landscape. The current occupiers of the landscape were living with the legacy of 150 years of grazing by sheep and cattle.

Most community members were not readily open to constructive dialogue about their relationship with the landscape. Most were sick of the constant researching done at what they considered to be their expense, and much of the goodwill towards discussing the issues of landuse and sustainability had evaporated. Hence it was important that this and subsequent projects were built on positive aspects of people’s relationships with the
landscape, and that negative aspects were introduced in a caring and non threatening way. It was my role to ensure that this took place, and that the projects were non judgemental.

The two subsequent projects had different writers, and were slightly different in construction, and will be detailed. However, the principal parameters and objectives of the projects remained constant.

8.1 The project objectives

The objectives of the three projects provide the foundation for the argument developed in this thesis. The first objective – that of making people feel good about the landscape in which they live, was seen as an essential step in providing a positive context in which pastoralists and community members would feel free to articulate their feelings about the landscape in which they lived. It should be remembered that this community felt that it had been criticised (either implicitly or explicitly) in the reviews of the Division. As a result, many pastoralists held a defensive attitude toward their attitudes and practices.

The second objective of the projects follows from the first in that it was seen as important to develop an environment whereby pastoralists and the community could discuss their feelings (both positive and negative) about the landscape in which they lived. The artwork and the text was designed to be non judgemental, and to encourage contemplation and thought. It was designed to prompt, to suggest and to allude to ideas in such a way that the participant could discover issues for themselves.

The third objective was designed to reaffirm the natural connection between social systems and natural systems. This aligns with Botkin’s (1992) thinking that traditional thought has been to separate social systems and natural systems in any approach to landscape management. It also addresses the sentiment that to preserve a landscape, the removal of people is a necessary step.
The fourth objective was designed to provide a more positive impetus for behavioural change. While the other objectives were subtle in their nature, this objective was more positive. “If you really value this, then why are you doing that?” This aligns with the overall objective of trying to get community members to question their behaviour, and the alignment of that behaviour with their professed attitudes and values.

Objective One

The first objective was to make people feel good about the landscape in which they lived. For many this process took the form of a re-awakening and a reaffirmation of pre-existing feelings and beliefs. In making people feel good about the landscape in which they live they also feel good about themselves, and as a result are more receptive to outside stimuli.

The history of settler occupation of the Western Division (and South West Queensland as well), as discussed earlier, has essentially been a history of environmental and sociological struggle. Declining productivity and product prices coupled with the increasing social focus on natural resource management has created a threatening environment for residents and pastoralists of the area. In a sense pastoralists have felt they are under siege from wider public opinion which has condemned them for the environmental degradation that has occurred since initial settlement. With the frequent coverage in the press and TV highlighting drought, floods, land degradation and social deprivation, the public image of the Division has developed negative connotations in the wider community.

The image of current pastoralists in the Division as irresponsible land holders in terms of natural resource management is a strong one, and promotes an understandable defensive response from current pastoralists and communities. In spite of a continuing decline in price in real terms since the mid 1990s, wool production was still a major activity in the pastoral areas of Western NSW. Hancock (1930, p4) said “wool made Australia a solvent nation, and in the end a free one”. The feeling that sheep and cattle pastoralists,
once the heroes of a nation, are now seen as the villains in terms of the environment, underlies many of the defensive attitudes held by pastoralists.

The observation that there are few other occupations where what an individual does defines their self-perception is especially relevant. Where many people who work see their job as separate from themselves, many farmers see their job as defining who they are. They are “wool producers” or “cattle producers” first and foremost, and they do not see themselves as an individual that is necessarily separate from this occupation.

There are several implications associated with this that are important. The first is that by criticising what someone does (for example, run sheep) the criticism is taken to be a criticism of the person carrying out the action, rather than of the activity itself. For many people there is a clear separation between who they see themselves as and the job they do. In the pastoral areas of Western NSW this distinction was not so clear, and as a part of that community I grew to understand the reasons for the deep resentment people felt when their occupation was criticised.

The second implication of these self perceptions is that to initiate a change in behaviour there has to be a change or expansion in, or expansion of, self perception. If a particular person sees themself as a pastoralist, and a pastoralist is someone who produces wool just the same as their forbears did, then to ask them to do something different can mean asking them to see themselves differently and to change their self image. The other alternative is to broaden the perception of the nature of the occupation to include a range of other activities deemed desirable.

The issue is important because from personal observation unless an individual is able to resolve the past and feel comfortable about it, they can never consider a move to the future. Many approaches to change in the Division that I witnessed began by painting a negative image of the environment (over grazed, the incursion of woody weeds, eroded etc) which immediately put landholders on the defensive and closed their minds to the fact that there were issues that needed addressing. Hence it was important to begin with
the encouragement of positive feelings and then developing a sense of “but we can make this better”.

**Objective Two**

*The second objective was to enable people to discuss openly and in a non threatening environment the features of the landscape and environment in which they lived that they found personally appealing and attractive.* There was an apparent dichotomy between what people did in the landscape and how they felt about the landscape. Allowing people to more openly talk about their feelings, or providing a context where individuals were able to project their feelings on to something else (for example a visual image) and talk as if it were themselves, allowed people to express themselves through a process in which they did not feel intimidated or threatened. The artwork and the stories were designed to both reflect and challenge how people felt about the landscape in which they lived.

**Objective Three**

*The third objective of the project was to “re-people the landscape perceptually”*. The consequences of the initial interpretation of the landscape as “being empty”, where there has been a continued perceptual separation between people and landscape, are still evident today. Objective Three sought to establish a view of the natural landscape that included people, and to give a sense of the co-evolution of people and landscape. In other words, to “re-people” the landscape in an attempt to underpin the belief that both natural systems and social systems have to be considered when developing understandings that relate to the long term sustainable use of the landscape.

Although there was clearly a long history of indigenous occupation, and recently of white occupation, there is a clear separation of people and landscape in terms of looking at problems. Problems are seen as either environmental or social and dealt with accordingly. In terms of environmental problems, the relationship between people and landscape is considered only in so much as people are seen as part of the problem. This is
in contrast to approaches in the United Kingdom, for example, where people are seen as being a natural part of the landscape, and thus inseparable from it with regards to dealing with environmental issues. Rackham (2000), for example, details the long association between people and landscape in Britain, and discusses how the current look and nature of the landscape is very much a product of human intervention through the ages.

**Objective Four**

_The fourth project objective was to challenge people in a constructive way to think more about individual and community relationships with the landscape._ To some extent this objective builds on the objective above in the sense that all landscapes are going to bear the marks of their association with people. Will a landscape be just one that is seen in terms of its value to the production of agricultural products, or will there be other values such as aesthetic values or environmental services that are seen as equally important? And how are environmental needs (in terms of functional ecosystems) incorporated within social needs? These are the sort of questions that need to be raised on a community level. On an individual level people need to consider how their day to day activities impact on the deeper feelings about the environment and the landscape that they have. As an example, would the amenity value of a certain area be increased by different management, such as more appropriate stocking regimes?

**8.2 The approach and methodology**

Each project was constructed specifically to target a particular region and was grounded socially and geographically in that region. While many of the regions are different in terms of social relationships (due to the extensive geographical spread) many of the ecological and land use problems were the same, and indeed all communities would have accepted a theme of commonality on a larger scale. All were pastoral communities, and all lived in the outback and as a result faced a commonality of difficulties and conditions.
The concept and the initial project *Tracts, Back O’Bourke* was developed by artist Mandy Martin and writer Paul Sinclair. Their vision was a series of travelling exhibitions that incorporated visual art and text in such a way as to encourage local people to celebrate and appreciate where they lived, and to prompt thoughts about a more sympathetic co-existence with the natural world in which they lived. The rationale for this has been spelt out in the objectives above.

It was recognised that the ability of many people to attend exhibitions was limited due to time and distance (especially as the project was during a long period of drought) and as a result it was decided to publish a small book that contained both the artwork and the text. The book was to accompany the exhibition and also could be sent out to people who could not attend or were otherwise interested.

My official role within the project was to act as an environmental consultant. One of the conditions of the funding for the first project provided by the New South Wales Government under its Environmental Trust program was that the project team should include an environmental consultant. While I was appointed in this capacity, my connections with the people of the Western Division and the issues of the region meant that I had considerable knowledge of how people felt about the issues the project was addressing, and the sort of responses that were likely to come across as a result of the more traditional forms of awareness programs. Importantly, I had a feeling for the things that mattered for people, and how they felt (privately) about many of the issues. I was thus in a position to ensure the contents of the project(s) would resonate with the local population. A focus on controversial topics, for example, would lose all local ownership of the projects and polarise the community. To create a strong and lasting impact that was likely to have positive repercussions in terms of the project objectives, it was essential to develop a feeling of trust with local community people, and this could only be done by appreciating issues through their eyes. I understood what made local people antagonistic and it was important to avoid that outcome. Developing the projects within the community was absolutely essential for its acceptance in later stages.
My role was to guide the projects intellectually along a course that not only allowed the two other participants in the projects a degree of creativity and the ability to achieve what they saw as their personal goals for the project but also explored the thesis that an individual’s actions do not necessarily reflect the full range of relevant values. My further role was to keep the project focussed on addressing the four objectives that I believed essential to demonstrate the potential for the use of landscape imagery to change behaviour.

One overriding concern was to keep the projects and the products from the projects interactive in their nature. It was essential to ensure that both the writing and the images were accessible to all, at all levels of experience and to ensure that participants did not need to be “guided” in any sense.

The project art and text had to be presented so that there was a degree of comfort between the participants and the project material. To depict images that were too negative would fail to achieve the degree of interaction required, as would the portrayal of images that were too sublime. Being a participant in the project as well as being a community member gave the author the opportunity to guide this balance. In one sense participants had to be reassured, but in another they had to be challenged. Achieving this balance was critical.

A significant part of the project was not funded. The unfunded segment was intended to turn the projects into an educational package that could have been run through local schools and the School of the Air. An essential part of this package was to be the training of the facilitators to ensure an open interaction between participants and the project material, where participants could learn and discover for themselves, rather than being “fed” ideas and values. These objectives could be achieved in future as an outcome of this research.
The first part of the study was a series of projects that were organised and formulated by Mandy Martin. As an artist Martin seeks to explore the issues that surround people and landscape. Both Tracts, Back O’Bourke (Martin 1996) and the second project Watersheds: The Warrego to the Paroo (Martin 1999) were focussed on the region north and north-west of Bourke, while the final project Inflows: The Channel Country (Martin 2001) related to the Channel Country of south west Queensland, an area similar to the study area, but far enough away to indicate that the attitudes and values held by people and communities in the north west of New South Wales are similar to other areas.

The second two projects differed slightly from the initial one in that the approach for the text was changed. Rather than a series of short and poignant stories, Watersheds; The Paroo to the Warrego contained the artist’s notes about the images and an essay by Dr. Tom Griffiths titled The Outside Country: An Elemental History. In the last project Inflows: The Channel Country the art commentary is presented by an outside voice, that of Professor Jane Curruthers, one of South Africa’s leading environmental historians. There was an accompanying piece by Dr Griffiths essentially celebrating people and place in the various locations. Each of his vignettes connects real people with real landscapes in a way that readers can empathise with.

The initial concept in Tracts: Back O’Bourke was to create an atmosphere where viewers could view the art and from the publication read the text, and do so with their own level of understanding and at their own speed. In this way it was hoped that both forms of communication would provide a cascade of ideas (and perhaps reaffirmations) that would prompt a more in-depth consideration of the issues. Importantly, the issues were not spelt out either visually or in the text, as it was considered important that people “discover” them for themselves. Appreciation, discovery and learning were to be achieved on various levels and at various speeds depending on the preference of the individual. In the construction of the text for all the projects, an attempt was made to present issues rather than to dictate solutions. All too often environmental problems are presented to local communities in such a way that they reflect someone else’s problem and some one else’s solution. Neither the problem nor the solution is owned by those who have the ability to
fix it. In the construction of the projects careful attention was paid to raising issues in a context and manner that invited ownership by the viewer, and while possible solutions might have been apparent, they were in no way prescribed.

As many of the attendees were school students, it was initially planned to provide a guide for supervisors. This guide was to be carefully constructed to preserve the methodology of allowing participants to “discover” for themselves rather than to be directed in their appreciation. The guide book was to be set out in such a way as to provide clues to a range of important issues emanating from the various paintings and stories. A guide was intended to promote the common theme in the objectives of self motivated learning. This approach to learning allows everyone to learn at their own pace, in their own style, and learn the things that are most relevant to them. There is currently an enormous amount of information available to people about land use and land management. Providing yet more information was not seen as a positive move. However, providing access to information and learning in a non traditional way was seen as important given the exposure that the local community had had to traditional methods. Unfortunately, however, due to a lack of funding, the supervisor’s guide was never provided, and to a certain extent the exhibitions lost some of their impact by virtue of the fact that the process of self discovery was lacking for many guided groups.

8.3 The construction of the projects

The principles of construction were consistent in all projects and so in the following discussion all three projects will be treated as a single concept. A heavy emphasis will be placed on the first project (Tracts Back O’Bourke) as it was not only placed in the Western Division of NSW but also provided the basic model which the other two projects followed. The artwork cited and the examples of text used represent generic examples of the material in the published projects.

The construction of the visual images
For all the projects Mandy Martin’s works were essentially a combination of text and subtext that prompted a dialogue in the minds of the viewer between nature and people, between sublime and the civilised and between presence and absence. The artist becomes almost a surrogate for the viewer in the sense that there is a distinct familiarity for most people in what is depicted; they can relate to the image. That the images depicted were recognisable or familiar in some way to the audience was important, as the unfamiliar has the potential to alienate the viewer. All the images were real places or locations and contained many characteristics that were familiar to the viewers. That said, while the images generate reassurance and familiarity on one hand, on the other they can create tension in the mind of the viewer through the juxtaposition of the acceptable and the unacceptable or the known and the unknown, for example. Through the creation of this tension an atmosphere is established in which the viewer is enticed to re-examine previously held attitudes and values about the natural world and their relationship with it.

At the time the projects were carried out the Division had experienced years of falling product prices (in real and nominal terms), increasingly hard environmental conditions with the decline in productivity of natural resources, and increasing public concern about the state of the western lands that more often than not manifested itself in criticism (often uninformed) of the practices of current landholders. Landholders, especially in the Ford’s Bridge area, were developing a siege mentality in an effort to survive financially and emotionally, and as a result were particularly sensitive about issues or comments expressed through a sense of trust that could be used later against them. Adding to this state of mind was the fact that many of the ecological problems faced could be seen to be inherited problems in that they were the end results of actions and activities undertaken many generations before. Issues such as the devastation caused by rabbits in the first half of this century were, like the grazing practices of those who had gone before, essentially beyond their control.

To establish a dialogue with the local community the project had to be sensitive to the social context in which it was developed. Martin’s artwork attempted to draw out the beauty of the landscape in a way that people could identify with. In all her panoramas the
The sky is an important feature, with the horizon set low to emphasise the enormity of the landscape. Unlike urban people for whom the sky is almost incidental to their daily life, the sky for people in this area is almost as important as the land. Not only do clouds bring the hope of rain, dust means wind and confirms fears of dryness further out, musters navigate by the sun’s shadow, sheep feed into the wind and any cloud can break the monotony of weeks of steel blue sky. The landforms Martin portrays are generally flat giving a sense of space and distance and provide the viewer with a sense that they are just a small part of a huge landscape. People (either indigenous or non indigenous) don’t play a part in her work but their presence can be felt, either as a viewer or participant, or in the effects they have had on the landscape. There is no need to place indigenous people in the foreground, as Eugene von Guérard (and others) did to signify a presence, instead the landscapes invite the inclusion of people as a natural component, almost as though their exclusion invites their mental inclusion.

The images portrayed in the artwork are images that local people would readily identify with. *Irrarra Creek near Billy’s Pig Trap* (Plate 15) locates the scene both geographically and in terms of human activities.

![Irrarra Creek near Billy’s Pig Trap](Plate 15: *Irrarra Creek near Billy’s Pig Trap*, 1996, 90 x 330cm diptych. oil, pigments, ochre on linen)
Irrarra Creek (an off-shoot from the Warrego River) is the thread of life from which the flood waters emanate and to which they recede. While providing a pulse of life in flood times, the numerous waterholes along the creek provide a semi permanent refuge for animals and birds in drier times. However, they also harbour pests such as weeds and feral animals, and when the surface waters dry up an opportunity is presented to control feral pig numbers. Feral animals such as pigs and goats represent both a threat and a resource. While feral pigs prey on new-born lambs (and as a result can significantly reduce lambing percentages), they also have a market value in terms of their meat. The symbolism portrayed in *Irrarra Creek near Billy’s Pig Trap* would not be lost on local viewers – the importance of water, flooding and unregulated flows in the creek. That the beneficial nature of floods can be balanced with the accompanying loses of stock through drowning and bogging either during the floods or as the waters dry up. Finally, some species of feral animals can be seen as either negative in terms of the environment and traditional farming enterprises, or as a resource which can be harvested.

Plate 16: *Water on Goolring, 1996*, 90 x165cm. oil, pigments, ochre on linen

*Water on Goolring* (Plate 16) presents a picture of hope: the sun shining through the clouds shows that the rain is still there, but the sun is there as well to play a part in the growth process. Water, usually so scarce, is now there in abundance, and represents
another pulse of life. The image entices the viewer to think about the future, to think about the results of the rainfall event and what it might mean, not only in ecological terms but also in human terms.

Woody Weeds and Coolibah (Plate 17) presents a different message. It is hard to convey a sense of heat and dryness, but this is certainly what is conveyed in this image. It is this heat and dryness that many local residents live through in the summer months, and that characterises where they live. Like the majority of other images the sky is commanding, and the eye is drawn to search for clouds as a sign of a temporary refuge from the heat or more importantly, the chance of rain. For those who live in this area and make their living from the land, the sky is important. Firstly, there is so much of it – there are very few impediments to an uninterrupted view of the sky in a landscape that is essentially flat. Secondly, in this semi-arid environment, clear skies are the rule, and any change makes a welcome exception to the endless sunny days. Most rural people are cognisant of what is happening above their heads, but in this area where rain is such an exceptional event, they are even more so. Finally, there are some very practical reasons for being conscious of what the sky is doing. Changes in the sky signal upcoming weather, and if it is rain, then

Plate 17: Woody Weeds and Coolibah, 1996, 90 x 165cm. oil, pigments, ochre on linen
there is the chance of getting sheep stuck in flooded creeks, the potential to be cut off from town, or a host of other inconveniences. It also signals a possible change in wind direction, which in turn affects the direction in which sheep graze, this being a key component in a strategy for mustering. Finally, the position of the sun and shadows is an essential tool for navigation in the bush. Good knowledge of the country is required to muster on overcast days when there are no shadows.

In *Woody Weeds and Coolibah* the red foreground is almost shimmering with the heat, reflected in the sky above by dust. In the distance the woody weeds do not reflect a haven from the relentless sun and heat, but present an encroaching barrier to both vision and life. This work is about contrast; about all of one thing (woody weeds) and nothing else (the desolation of the foreground). It’s evocative in that it poses questions: How did the foreground become the way it is now? What has caused the woody weeds to roll in like a giant tsunami, devouring everything in its way? Like *Water on Goolring*, the image is dynamic, not passive, and with so many of Martin’s landscape works in the project, it portrays change but in a subtlest of ways.

**The construction of the text**

For *Tracts Back O’Bourke* Sinclair wrote a series of short narratives that were designed to be read on a number of levels. At the first or entry level they were simply an entertainment, but an entertainment based around people and land. On another level the narratives raised serious issues about the landscape and its use. In this way various levels of knowledge and understanding were accommodated within the text by a range of issues or ideas.

The first narrative in *Tracts Back O’Bourke* is titled *Louth* and in it the author presents a picture of a very “green” city person visiting the outback for the first time. It speaks about the Landcruiser with its altimeter – something that would entertain people who live in the essentially flat landscape. The story introduces Charles Bean, the writer for the Sidney Morning Herald who visited the Division in 1909 and reported back to city
people on the realities of outback life. Sinclair’s narrative is essentially humorous but does raise some serious issues. He quotes Bean as saying “In certain parts where men have come out on to it, and cut the scrub down recklessly, with rough shod, ready made European methods, the surface of the earth has blown away” (Sinclair 1996, p31). Sinclair introduces the event of the flood of 1890 when the Darling River was over forty miles wide in one place, and makes the point that this was not just a catastrophic event, but also that the flood was simply a part of the “eternal, pitiless beauty of nature’s pattern” (Pearce quoted in Sinclair 1996, p32).

Sinclair’s second narrative, Captain Carrot follows Bean’s writings a bit further. Bean speculated that life in the desert country would affect the Australian imagination as the life of the sea had affected that of the British (Sinclair 1996, p33). This reference echoed what a lot of local people felt – that they were the true Australians, who lived a life battling the elements of nature in the outback. Sinclair then tempered this with the observation that while Bean says that the desert country produced outstanding national types, or “real” Australians, the problems facing the land and its communities require different understandings.

In Bean and the Red Flannel (Sinclair 1996, p34) Sinclair raises the issue of the comparative safety of the “civilised lands” (Bean’s words) and the western lands; of Bean’s story of how parents at Bourke tied red flannels in the hair of their children so they could find them in the long grass on the town common, and how nature’s response to rain and the long grass seemed to be part of history. The issue of the long grass follows on from the hints raised about the current problems raised at the end of Captain Carrot. The story is accessible on a few different levels. On one level it is simply interesting entertainment. On another level, the story highlights the difference between the bush and the civilised areas – those who battled nature, and those who through civilization, had mastered it. On a more complex level, the story poses questions about land use, ecosystems and climate. Why does the land fail to respond to rain like it used to? Is it the rainfall (timing, intensity quantity), or have the grasses gone, and if so why?
The next four narratives introduce four elements that are easily recognised by local people. The first, Devil Water, introduces the changes made by the discovery of the Great Artesian Basin, where stock dependent on the occasional falls of rain were now assured of an apparently unending supply of water from under the ground. What the Lord had failed to deliver technology now had. The Bottom Ten Mile introduces what is probably seen to be the major problem in the area by many local residents – woody weeds. Sinclair introduces it indirectly by describing a mustering event in which he participated and became lost. He then refers to his inability to read the signs and tracks which would allow him to relocate himself. While he can’t read the signs he says, others can, the inference being an acknowledgement of the skills necessary to survive in such a harsh environment. Claypan introduces the issue of past indigenous presence, and the loss of the vital knowledge and understanding necessary for the good management of the terrain. The point he subtly makes in this narrative is the massive change that has taken place in the way the landscape is used and managed. The last of the four narratives relates to feral animals. Feral animals are seen as a pest by some and as a resource by others. The environmental damage they do is substantial, not to mention production losses. However, in a small community like the one the project is based in feral animals (pigs and goats) provide a living for some people who harvest them and sell either the live animal or the meat. Issues like this typify many of the problems facing people living in such areas, and the maintenance of a single immovable position is not always helpful.

The final narrative Nourishing Terrain is probably one of the most moving. It presents the short history of the life of a city girl who came to the country and married. They lived on a small block of land that was less than a living area and previously had belonged to her husband’s parents. The husband had battled all his life on the property, and now in later life could see the environmental effects of this battle. His dream was to return it to the condition he first knew it in, but droughts and the need to nourish his family hindered his dream. He stays on in an effort to repair the land; she stays on because of the power of the community, which is to her the most important thing. This narrative resonates most strongly with local people, as in it is reflected many of the values that they feel.
What this and the other narratives do, is to provide a basis for people to talk about their feelings in such a way that it does not directly associate them with the sentiments expressed. As with the visual art, the image created provides by the text is a medium through which the reader can express their feelings in an oblique manner. In talking about the narratives or the image one can really be talking about oneself.

**Public exposure: regional exhibitions**

The intention of the project was that it be toured through a number of exhibitions in regional locations to allow local people to interact. The belief was that regional exhibitions not only provided the opportunity for local people to participate but also generated a sense of ownership of the content. However, as it turned out this aspect of the project was more difficult than envisaged. The reason was that the exhibitions had to be curated and few regions had the facilities to accommodate this. Those locations that did have Regional Galleries (such as Moree and Wagga Wagga) were not strictly within the project area. Further, to stage an exhibition in these Galleries required several years of planning ahead as they were often committed for months in advance.

The curatorial role is essential with artwork as valuable as that presented in these projects. Further, for school groups (of which there were many) and individuals alike, it was essential that there was an integrated and structured presentation of the artwork and text. Viewers needed to understand what the exhibition was all about to fully integrate with the process. While the text provided much of this introduction, it was not considered suitable for younger viewers, especially children as the subtleties would have been lost on them. For younger viewers without the benefit of having experienced many of the issues the project was addressing and the implications of these issues, there needed to be a more structured and guided learning approach. For this the text alone was considered unsuitable.
The second of the three projects *Watersheds, The Paroo to the Warrego* (1999), differed slightly from the first project. By the time this project was initiated it was clear that there would be limited funding and as a result the projects were less ambitious in their outcomes. Secondly, the ability to tour the exhibition throughout selected rural venues was known to be limited, through the experience of the first tour. As a result of this the format of the project was slightly altered and designed to be more complete within itself, and not to necessarily require support through interpretation.

In the second project, with each image there was a commentary which helped provide a human context for the visual image, and located them within another reference of understanding. The text accompanying each of the visual images not only provided the social context, it also provided some clues as to why the artist chose that particular scene. Such texts were very often anecdotal accounts of episodes that led to the choosing of a particular image or scene, although this was never specifically stated. There were also anecdotes of events that local people would be able to identify with, so making the image more accessible or relevant in terms of local understanding. The images were not of exceptional and aesthetic panoramas but rather were of everyday landscape scenes, the sort of images people would see in their daily activities.

An example of this is the image *Home paddock, 44° Centigrade, 2.30pm, 13 March 1999* (Plate 18).
In the commentary on this image the artist speaks of her attempts to capture the atmosphere and “feel” of a hot day. Lest the heat on a day like the one depicted be seen as exceptional, she then goes on to describe how others on the station are mustering scrubber cattle on a sand ridge some kilometres from the homestead. The day, although hot, is portrayed as just part of everyday life, and as such loses some of its exceptionality. Many of the local people viewing the image would have experienced similar feelings and been through similar days. In a way this image reflected their personal feelings and experiences and as such was something that they could identify with.

The date and time in the title of Plate 18 anchor the image in time and reality. This is not a fictitious representation of an event, but an image created within that event, referenced by time and date.

Another image, *Winrae at Dusk, 11 July 1999* (Plate 19) has a similar anchoring to an actual place and date. The rich black country that begins south of Cunnamulla in Queensland, stretches some 240 kilometres south to Enngonia in NSW. This type of landform is considered to be of high value in terms of livestock production. The best
production of grasses comes as a result of summer flooding of the Warrego River. The landscape is characterised by wide open plains, small outcrops or hillocks of sand and scattered coolibah trees. Some of these trees are very old and in that sense represent the antiquity of the landscape.

In this image the eye is invited into the image by the coolibah and immediately comes to rest on the gnarled and aged trunk. It is then drawn far into the distance, to a further patch of coolibah. The isolation of these trees reflect the vastness of the plains which, in their golden texture, remind the viewer of the grasses that were there following the flood and that have now hayed off and blown away. The image reflects space and time; the space as represented by the seemingly endless plain and time by the aged tree in the foreground. Such an image prompts reflection on the place of people within a timeless landscape.

Plate 19: *Winrae at Dusk, 11 July 1999*, 90 x 165cms. oil, ochre pigment on linen

Both the stories and the artwork attempted to put the human element back into the landscape as this was seen as a critical path for connection that had been lost. The beauty and the spirituality of the landscape have largely been ignored in dealing with people and
landscape issues in the region, with most reports taking an almost clinical approach to social and land management problems. Society and landscape have been separated when conceptualising the landscape and its use, and as a result the intimate connection between people and place as a means of addressing landscape management issues has been lost. Further, the richness of the relationship is lost when the historical context is ignored.

Exploration of the relationship between image (using photographs) and viewer has been used by others as a methodology for interviewing people, in which the psychological significance of imagery is detailed (Collier and Collier 1986, Rose 2001). However, most work has related to the interpretation of visual images, either by the researcher or by the viewer, who is then questioned by the researcher. The important difference between the use of visual images in this research and the standard use of such images is that in this research the images are used as a vehicle to develop a relationship with the viewer that in the first instance establishes a sense of trust and a common ground. The viewer needed to feel a commonality with the image in some way. This may have been in the form of familiarity, or shared experience, or beauty, for example. It may even have been the kindling of a feeling that hitherto lay unrecognised. Once a linkage was established, the image then became the vehicle for the transference of ideas and information.

The text accompanying the second project was titled *The Outside Country: An elemental history* and traced the history of the region through Earth, Air, Fire and Water. It is not a true history in the conventional sense of the word, but a selected history designed to reinforce the importance of the four elements. While in the past the history of the Division has been told from different standpoints, there are obviously common elements that are repeated and with which most people are familiar. The text by Griffiths (1999) talks more about people than events and uses the four basic elements to provide a grounding for the interaction between people and nature. The theme is not about individual people and nature, but about society and nature, and makes the point that what people in this landscape are facing relates to a wider interaction between people (both current and previous occupiers) and nature.
In the epilogue to the text in the second project Griffiths (1999, p54) wrote:

The baked claypan is a microcosm, a bounded world at your feet. I crouched down to examine two distinct artefact scatters embedded in the red sand a few metres from each other. One was the remains of an aboriginal fire. Spread over about a metre were charcoal and flint, flakes of stone cast off from the manufacture of a stone tool, perhaps for the use in catching, preparing or eating food. The other artefact scatter occupied a corresponding area of sand. It was the debris from the second settlers, a 1966 two cent coin, two horse shoe nails, a door knob, two tiny metal labels, and the shattered, patterned crockery from another kitchen.

I wondered what the patterns in the china might tell me. I could see part-pictures of homes, fractured church spires, and the fragments of wooded glens. As the sun rose over the low horizon I pieced them together. One pattern was called “Sleepy Village”. And the other was “Dream Town”. It was illustrated with an intimate cluster of houses beside a broad river overhung by tall deciduous trees. More mirages in the desert. On the claypan it was literally a step from Dreamtime to Dream Town.

The writing in this text was more pointed than that in the previous project, and encouraged the reader to take a more holistic and historical view of the current situation. It focussed attention on communities rather than just individuals, and the past as a precursor of the present. There was little for the individuals to explore or discover for themselves in the text, but importantly a range of issues presented in such a way as to encourage thinking about the future.

The final project Inflows: The Channel Country was undertaken in a regional location to the west of the first two and was chosen for a specific reason. In 1996 local pastoralists organised a workshop at Windorah called “Windorah Scientific Workshop: An Ecological Perspective on Cooper’s Creek”. The workshop was organised by local pastoralists in response to an application for an irrigation licence for cotton on Currawera Station, a property on Coopers Creek just north of Windorah. The workshop was a significant event, as it represented a concerted move by local pastoralists to prevent the development of another agricultural industry on the grounds of natural resource sustainability. The workshop was organised to present an ecological argument against
the allocation of irrigation licences on Coopers Creek. During the two day workshop a number of leading scientists spoke, as well as a supporter of the development.

As a result of the contacts made at the workshop, it was decided that the final project should be located in this area, and hopefully build on some of the outcomes from the workshop. To a large extent this was the case, and from the Stations visited there appeared to be less reluctance on the part of the owners to speak about “special places” and the values they saw in nature beyond the values related to production. Being under threat from irrigation and being called upon to defend (or at the very least to have a position on) their traditional livelihood and the landscape in which it took place appeared to remove some of the barriers that made other pastoralists reluctant to speak openly on the matter.

As with the other two projects, a publication was produced containing both text and images. There were some changes in the direction of the major text, and the commentary for the images was provided by the historian, Professor Jane Carruthers. Carruther’s (2001) writing is almost a travelogue that provides not only the background to the sites of the various images, but also adds a human element to each image. Her descriptions link people to place and local issues to much wider issues. Her experience in South Africa provides the opportunity to show that local issues can relate to national issues and can parallel similar issues in like environments around the world. Carruther’s text therefore enables the contemplation of a local visual image in the context of wider issues.

The images in *Inflows: The Channel Country* were intended to build to many of the feelings (such as of place and spirituality) that came out of the workshop. It was made very clear at the workshop that people lived where they lived because they “liked” where they lived. There were no feelings of “we are only living here to make money to go somewhere else”. Many of the people that visited had their own favourites “places”, and the artwork reflected some of these. Special places were places that reflected a spiritual connection between the occupants and the place, and were usually only revealed after
considerable confidence and trust had been built up between the project team and the landholder.

A number of images in the project publication depict “special” places as selected by various pastoralists. In all cases these locations were volunteered without prompting. Plate 20, *Low sand dune and Bauhinia on the edge of Cooper’s Channels*, below is one such site. What stands out is that this site is much like many others on the Cooper Channels, and for the owner probably succinctly represented all that was good in the landscape in which he lived. What therefore characterised the image was the similarity to the landscape that surrounded it, as opposed to being different in some way. The sky is clear, and the light bright, as is typical of so many days in this landscape where rain and floods are an exceptional event.

Plate 20: *Low sand dune and Bauhinia on the edge of Cooper’s Channels*. August. Work on paper

The above image is in contrast to Plate 21 *The Hollow at Noonbah*, below. The site of this image was selected by the property owner’s children as being their favourite place on the whole station. The parents themselves agreed that this was their favourite place. The special qualities of this place differentiated it from the remainder of the station. It was picturesque, quiet and semi enclosed. One could imagine that it was cooler than the
surrounding landscape in the heat of summer and warmer in the winter. The words “dry creek bed at the beginning of the wet” written on the bottom of the image hint at the changes that will come about after the rains. Though peaceful now, as the clouds gather in the background there is an air of expectation that soon this landscape will be transformed.

Plate 21: The Hollow at Noonbah, 2001, 90 x 165cms. oil, ochre, pigment on linen

The national mythology of the outback is probably most typically encapsulated in the narrative of the failed Bourke and Wills expedition last century. Coopers Creek for many in the wider population represents the essence of “being in the outback”, and in the cooler months of the year the Creek (and in particular the waterhole where the explorers perished) is a popular destination for tourists. Both Windorah and Birdsville have become reliant on the tourism that takes place in the cooler months of the year, and tourists have now been recognised for the benefit they bring to local communities. For local people the arrival of tourists represents people coming to see “our” country and this feeling is important in terms of both the pride it generates, as well as the sense of value it assigns.
The image portrayed in Plate 22 is of Cullyamurra waterhole, the waterhole beside which Bourke and Wills perished. It is just south of the Dig tree, another important location in the saga of Bourke and Wills. This image seeks to reaffirm the romanticism of the location, and portrays it not as a harsh environment, redolent of death, but as a soft and rich location. Here there is water, shade and big trees, the size of the trees indicating the richness of the environment. Here there is life as opposed to the feeling of death as portrayed in the saga of Bourke and Wills.

While the semiotics of this image could well be lost on the general public, they would certainly not be lost on locals who would appreciate that the image is not about the potential for death but the opportunity for life. For others the image romanticises the landscape and contradicts preconceptions about its nature. The symbolism represented by the positioning of the sun and the light is important. Bright light washes out colour, and in this image there is a depth and richness in the hues. The rich, soft texture of the light contrasts to the harsh mid-day light in Plate 18 or Plate 19, and is symbolic in that it could signify the dawning of a new future, for example, or a sunset, closing the chapter on misconceptions and beliefs about the nature of the “outback”.

Accompanying the artwork was text that provided a linkage between the localised image and wider issues.
Because the exhibitions took place over several years and in numerous locations, with each exhibition lasting for up to four weeks it was not possible to have a structured exit interview process. The research results are the result of an informal interview process conducted on a pragmatic basis, and do not represent statistically valid samples of the local population or the pastoral community. The following chapter deals with the responses, and forms the basis for the final chapter.
Chapter Nine:  
Responses to the three projects

It needs to be again stressed that the artwork presented in the projects outlined in Chapter Eight was deliberately designed to provoke thought and discussion, and to provide a forum for this to take place. In a sense it was designed to be ambiguous, being able to be read on a number of levels and/or with a range of understandings. It was intended that the artwork should ideally become a substitute or an intermediary for the expression of personal feelings and values.

As a participant observer in the development and implementation of the three projects, it was clear to me that the response to the projects and in particular the artwork occurred at a number of levels, and ranged from the general to the specific. Importantly, on almost all levels the visual art encouraged the expression of personal spirituality in relation to landscape and place.

While the artwork elicited a variety of responses from viewers, there was a commonality of response in that all moved past the superficial image and engaged at levels that introduced more significant meanings.

In the course of discussions with local residents it was soon obvious that there were a range of feelings toward the landscape that were not totally compatible with those presented in public or with behaviour. These feelings included a degree of sentimentality toward the landscape, and feelings of regret about landscape changes, particularly regarding the incursion of woody weeds, and the increasing growth of coolibah seedlings on the better flood out country. They also included a demonstration of connectivity to the landscape through generations of association. Very often there were long family associations with particular properties of districts that were of importance to current landholders.
9.1 Responses

There were three categories of respondents, depending on the particular associations individuals had with the landscape. Pastoralists have a direct interaction with the landscape. It is where they live, where they make their income and their economic life depends on it. For rural-dwelling non-pastoralists the relationship is not so direct. The landscape is where they are located, but they only depend on it indirectly for their livelihood. The final group were those who had some connection to the landscape (including ex-residents), and who turned up at many of the exhibitions for nostalgic reasons.

All pastoralists or land owners spoken with indicated that they had a particular love for certain parts of their properties. This attitude often reflected more than just an aesthetic belief – “this place looks really nice” – but one more directly connected with the natural world – “just look at the trees and the sandhills, and all this grass. We love coming down here in the evenings and watching the birds and the animals”.

For many who had no direct anchor in the landscape (such as people from towns and villages as opposed to pastoralists) the images provided a general feeling of association with that landscape. “I came from Bourke” said one woman at the Canberra exhibition “and these images make me feel homesick. This is the landscape I love”. This attachment was clearly meant in a generic sense as opposed to the specific attachment to a particular place. Others comments like “I really feel like I am there when I look at this”, or “this is exactly how I remember it” relate more to how people related to the landscape more generally and how they exhibit a sense of nostalgia. The comments illustrate how the “look” and “feel” of a landscape can create a response from people who have had experience of it. “Look” and “feel” are clearly important components of the landscape aesthetic, and are uniquely captured by visual expression.
Figure 9.1 lists the responses in themes that were derived as a result of the semi-structured interviews. The interviewees were split into three groups in recognition of the nature of their interaction with the landscape. The group “pastoralists” were people who actually lived and worked in the landscape. These were people who ran and managed pastoral properties and who lived on these properties. The second group “rural-dwelling non-pastoralists” were people who lived in small towns and villages, and whose work was in some way associated with the landscape in which they lived. Examples of this group of people were land administrators, stock and station agents and service providers. The third group, listed as “ex community” were people who had lived in the landscape at one time in either of the two previous groups, but had moved elsewhere. There were considerable numbers of people drawn to the various exhibitions in Canberra and Newcastle for what would appear to be nostalgic reasons.

<table>
<thead>
<tr>
<th>Pastoralists</th>
<th>Rural-dwelling non-pastoralists</th>
<th>Ex Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic beauty</td>
<td>Iconic</td>
<td>What I remember</td>
</tr>
<tr>
<td>A sense of “naturalness”</td>
<td>“Typifies” where they live</td>
<td>Captures the experience of living there</td>
</tr>
<tr>
<td>Unusual in some way</td>
<td>Reflects how it “feels”</td>
<td>Looks like how I think it should look</td>
</tr>
<tr>
<td>Water/dampness or a tendency toward this</td>
<td>Represents aspects of the landscape</td>
<td>Nostalgic</td>
</tr>
<tr>
<td>Relative shade/cool</td>
<td>Big sky/open space</td>
<td>Generates the feeling</td>
</tr>
<tr>
<td>Sense of enclosure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different in some sense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rich in biodiversity</td>
<td></td>
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</tr>
</tbody>
</table>

Figure 9.1: Grouped responses from semi-structured interviews

A number of the images were of “specific sites” as identified by the relevant pastoralist. These sites were sites chosen by the pastoralist as having special significance to them. On a number of occasions they were family sites, chosen by the family as a shared special
place. What is of interest in the sites selected by the pastoralists was that none of the sites were ones that reflected the values of pastoralism. If the attitudes and values of pastoralists solely related to pastoral values, one would have expected the selected sites to reflect these values, perhaps depicting, for example, vistas of grassland suitable for grazing. However, the sites selected had a range of values such as aesthetic, picturesque, ecological etc, but none truly reflected pastoral values to any extent.

The various values identified by pastoralists in this process indicate very personal feelings toward the environment in which they live. The special locations reveal a range of values that are often linked. For example, the importance of the presence of water and, shade and cool and the characteristic “unusual” in an ecological or geographic sense are all associated with the potential for species richness (biodiversity). While pastoralists clearly appreciated the landscape in which they lived, they were able to differentiate the landscape according to various characteristics. This differentiation may or may not reflect an added knowledge of the landscape, but it does reflect discrimination on the part of those who are closely associated with it. It indicates that the landscape for those who live in it has a range of values which are not associated with production and are identifiable by its inhabitants. As indicated by Figure 9.1, there was also a great range of values identified, and less commonality between these values. This would indicate the strength of personal identity in the expression of these values and demonstrates how visual art can provide the opportunity for the exploration of more individual and personal feelings about landscape and place through images.

In the course of the development of the projects, the project team stayed on location with a number of pastoralists. These pastoralists (five in total) identified places and landscapes that held special meaning for them - special sites. After establishing a sense of trust, pastoralists and/or their families took the team to places that bore special importance to the owners. The sites were all different – a vista between sandhills, a small secluded treed area between rock shelves, a location beside a lagoon in the channel country, a waterhole or an ancient tree in the bend of a creek. Plates 20 and 21 are images of landscapes selected by pastoralists, and these images clearly reflect a range of
values other than just pastoralism. While all the sites were different, they had a common characteristic in that they appealed in some way to those who owned them and had the responsibility for managing them. These sites represented a conduit through which the various attributes of the landscape in general could be discussed in a non-threatening way.

Asking the question “why do you like this site?” enabled a discussion of the qualities of more general landscape attributes to be focussed on a specific example. One site, that of a vista past a long sandhill across an open plain toward the channels of the Cooper was justified in that “this site is what I feel the Channel Country is all about”. There was a sense of the expectation of the waterholes and channels that is Coopers Creek in the distance, the harshness (both colour and texture) of the sandhill in the foreground and in between the soft edible annual and perennial shrubs that to pastoralists represents the heart and soul of the country.

To ask for a description of what was really valued about the landscape would not have resulted in a description of the image presented above. As a member of the pastoralist community, it would not have been possible for me to ask these sorts of questions as I was recognised as a fellow pastoralist. However, when other members of the team asked similar questions a more generic and socially acceptable response was usually provided. For example, when asked “why do you live here?” typical answers would be “I like the country” and “I like being my own boss” or “its good productive country”. A sense of spirituality with the landscape was usually missing, and the landscape attributes commented on, were those to do with production and productivity.

The special places that were identified were of interest not only for what they represented but also for what was not represented. Usually the special place had associations with or represented in some way the complexity of the landscape (in terms of its geomorphologic characteristics), or the complexity of vegetation, water, shade etc. Often they were like an oasis or refugia and of interest is what they did not portray. All except for one were bounded scenes (not large vistas), and did not include endless bare plains, clay pans,
erosion, bare ground, or fierce penetrating sunlight – the very characteristics that most people would use to define such a landscape.

Not only did the concept of a special place allow pastoralists to express their inner feelings and spiritual attachment to place, through the identification of a special place it became obvious what landscape characteristics were “not special”. While no doubt some pastoralists would identify clay pans, dust storms and bare ground as iconic, it would appear that in terms of a sense of preference, attachment and spirituality, the landscapes identified were almost the opposite of these. While flat endless plains, sandhills, stunted trees and paucity of vegetation are characteristics of the stereotypical image of the outback, it would appear that for pastoralists who live in these areas, these are not necessarily the characteristics of the landscape that they have a special attraction to. While these features may provide the overall context and perhaps the public face of the landscape in which they live, there are a range of attitudes and values that would appear to favour an image more in keeping with a sustainable and functional landscape. The characteristics that lead to the identification and selection of these sights of special significance would indicate that there are a range of values held by many pastoralists that may lie outside those commonly displayed by pastoral communities, such as aesthetic quality, tranquility or spirituality. These are not the sorts of values or qualities normally mentioned by pastoralists at public fora such as meetings of farmer organisations.

Finding out what appeals to someone in a landscape image has the effect of discovering what is of value to them in a wider landscape context. The artworks were seen as inviting and evocative: they reflected the way people in the landscape saw the landscape. Griffiths (2001, p56) recorded the response from another pastoralist:

Sandy pranced around the finished canvas, approaching it from every angle and looking at it from the corner of his eye as if trying to surprise it. He muttered to me, gesturing at the painting “this intrigues me this does. This puts emotion into me. I come over all emotional looking at that. The Channels eh? I didn’t know I loved them so much until they began to bugger them up” …“yeah”, he said to Mandy, “well, I would have let you do my portrait”.

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In this instance the comments came from a local pastoralist when shown an image of his “special place”. The image aroused a passionate response that revealed a spiritual connection with the landscape depicted. It is difficult to believe that a simple verbal description could have aroused such a response, the clumsiness of words likely failing to depict the landscape in a similarly meaningful way.

The quote “I really love these trees and the grasses around them” (an actual response relating to a particular image) indicated the importance to the viewer of balanced vegetation and functioning flora. The fact that the landscape was in a natural state as opposed to developed for farming also indicated values associated with the maintenance of a “natural” landscape as opposed to a developed landscape.

It is interesting that none of the landscapes represented in the special places reflect a highly modified landscape, and all reflect to various extents a sense of “naturalness”. While wider community attitudes reflect the importance of development, and the importance of increasing the productivity of the landscape, it would appear that for some individuals (like those participating in these projects), more natural features are still highly valued.

The themes developed out of the responses from interviews with community members and outlined in Figure 9.1 indicated a far greater consistency in response to the identification of values. The special values to this group were more homogeneous and related to a more generalised appreciation of the landscape. Such things as the openness, the feel and the unique characteristics of the landscape were all seen as important. It is clear that this group of people were not as discerning in respect to landscape features as pastoralists, but the general feel was important to them. Many of the values identified by this group were iconic in that they strongly represented perceptions about the landscape as opposed to the landscape itself.

The third group of values identified in Figure 9.1 belonged to ex community members who turned up to the various exhibitions. This group was of interest because of the
obviously strong feelings about a landscape in which they had previously lived. What did they see as special about the landscape that meant so much to them? The interviews indicated a more romantic and nostalgic attachment to the landscape, that was often not realistic in that a key value was that the landscape looked like how they thought they remembered it. These values were often closely associated with the values of current community members, and shared a similar disparity with the values of pastoralists.

While the authors of the project were able to attend at least the opening exhibition of the various projects, they were unable to be in attendance at all venues, and as a result some of the potential impact was lost. Both the artwork and the text were designed to be interactive, and to draw out feelings, beliefs and understandings of the viewer. They were designed to challenge the viewer with new ideas while reaffirming other values that they may have had. A crucial element in the projects was that the interactivity should be preserved, and that viewers should be able to discover things for themselves, and make judgements about what they saw, felt or read. Most galleries, however, were unable to guide people through in a way in which this critical element was preserved. In these circumstances, viewers were not encouraged to “discover” features or issues that might have prompted a re-evaluation about the way they thought about landscape and their presence in it but given the nature of the venues, the funding, and the number of people who attended, it would have been difficult to achieve an alternative outcome.

9.2 Personal Identity and Group Pressure

It has been suggested (Chapter 3) that there are two components to self image or identity. One component is personal identity and the other group identity. Where one sits on any issue in relation to these two components can be likened to a continuum with interpersonal and intergroup perspectives at either end with the actual location determined by the relative strength and pressures of each.

There are occasions where behaviour is driven or motivated by self perception, and at other times we act in accordance with our social identity. Stets and Biga (2003, p418)
maintain that in terms of the environment, one’s environmental identity is an important motivator of behaviour, and people actions tend to verify their identity meanings.

The influence of group pressure has been highlighted in the course of this thesis. The need to conform, to reinforce the concepts of self, and to maintain relationships are all seen as reasons to conform to group expectations. In complex relationships such as the relationship between society and nature there is a tendency to defer to group wisdom and accept the values of the community. Shared values tend to provide validation in the eyes of those who hold them. In response to questioning over Landcare issues at public fora, it was clear that much of what pastoralists expressed was tailored to conform to wider societal expectations as opposed to individual values. If group harmony is highly valued as happens, for example, where there is a perceived threat (such as criticism about land management practices), this adds pressure to conform. Using landscape imagery is one way of minimising the chance of “socially acceptable responses” and soliciting more personal responses.

Two examples from personal experience while living in the Western Division underline the importance of this. One relates to an individual who was the Chairman of a Landcare Group in the region. When asked why he did not push the group’s thinking harder his reply was that he had to live in the area also, and that if he moved too far in front of the group ideologically then he would cut himself from the group. The second example from personal experience is the case of an individual who fully embraced the need for change and developed a new farming philosophy. He so distanced himself from the local community conceptually he became socially isolated, and has since sold out. Both cases illustrate the importance of group pressure to conform, and how effective it can be in controlling behaviour. This is especially the case in situations where individuals rely and depend on social structures for support either physically or emotionally.

An important observation is that the responses given to the visual art work reflected personal identity as opposed to social identity. The images thus became a focus for individual reflection as opposed to the generation of stereotypical responses, and would
in this respect confirm Stets and Biga’s (2003) belief that more emphasis should be placed on the role of personal identity in the prediction of environmental behaviour.

9.3 Conclusion

The project was successful in meeting its four objectives to varying extents. The involvement of local inhabitants at the very early stages of the project development ensured that the response to the project concept was positive, and by building on positive attitudes about the landscape people felt good about the landscape in which they lived. The process involved in the creation of the artwork demonstrated that local people are interested in and value the aesthetics of the landscape in which they live. During the course of the construction of the projects everyone had an idea of comment to make about what “looked good” or was important to them.

The popularity of the three travelling exhibitions was clear, with over 60,000 people attending the various venues. This number represents people who actually made the effort to pass through the gallery doors and as such represents a significant and positive (as opposed to passive) effort to attend. While many of these people were not part of organised groups, there were a significant number of school groups, university groups and other similar groups who attended.

One quote from a viewer stated “the paintings are evocative and the stories enjoyable and meaningful at a number of levels – especially to someone who is familiar with the environment. Of course, both paintings and stories reveal how many different forms that familiarity may take”\textsuperscript{21} Another viewer wrote a letter saying “it was so encouraging to read an article that said all the things we rural people believe but find it difficult to express. All too often articles are written by journalists in the city and so often miss the point”.\textsuperscript{22}

\textsuperscript{21} Contained in a personal letter to the artist relating to \textit{Tracts: Back O’Bourke}.

\textsuperscript{22} Personal letter relating to \textit{Watersheds: The Paroo to the Warrego}
The important point is that for most viewers the imagery induced a positive response and they felt some connection with the images portrayed. The images generally appealed on a more complex level other than just the picturesque and in this way showed similar potential for further exploration in a more general sense as did the artwork depicting the “special places”. When people identify the qualities or attributes within the images that they value (such as aesthetic, landscape or social) the potential for meaningful dialogue about that attribute or condition is greatly enhanced.

The portrayal of the landscape in a way that aligned with the way local people saw it meant that they had an affinity with the subject, and the way it was presented. Many of the comments made related to the fact that the images evoked or reflected the individual’s feelings about the natural landscape, no matter whether the images were of specific scenes or general panoramas. Having local people involved at the start was crucial in attaining this objective.

The feeling of empathy with the images then provided viewers with a foundation from which to speak about the images in a way that reflected their own attitudes and values toward the landscape. There was an obvious tendency to use the image to relay the viewers feelings and in doing so “speak through the image”. As a result the images presented a non-threatening media for viewers to relay their own feelings, and in doing so fulfilled the second objective, that of allowing people to speak freely and openly about their attitudes and values toward the landscape in which they lived.

The third objective was to put people back in to the landscape, or symbolically link social systems with ecosystems. This was done using the text, which appeared concurrently with the images in the publications. It would appear that the focus in the texts on people, and people linked to place, embeds people in the landscape more meaningfully than speaking about communities, society or industries. From personal experience it was clear that there was a deep feeling of resentment by local people when they became invisible in discussions about the environment. As one landholder said, “When they do species lists
out here they always leave off the one species that is of most importance – *Homo sapiens*” (personal communication, 2005).

The texts that accompanied the pictures in a practical and historical sense conceptually embedded the community within the landscape, and as a result made the evolution of their relationship inseparable. Through this approach the tendency to look at the two systems (the social system and the ecosystem) separately was avoided, and as a result the approach was more sympathetic to how people saw themselves and their place in the landscape. This enabled people to talk about their attitudes and values toward landscape more freely than they otherwise would.

The fourth objective was met in the sense that by identifying what individuals valued about the landscape in which they lived, the threats to these values became apparent. This was especially the case in images of scenes selected by pastoralists themselves. By linking potential threats to locations of special importance, these threats become more real than if they are simply referred to in a generic sense.

Threaded throughout the visual context was the social context, and that most landscapes were important in some human context as well as environmental ones was emphasised. While the images discussed in Chapter Seven are seen to reflect the attitudes and values of the wider society at the time they were painted, so the images presented in the three projects could be seen to reflect (in part) the contemporary attitudes and values of individuals to the landscape in which they lived.

The experiences briefly reported here, suggest that visual art could become a tool whereby a range of individual attitudes and values not publicly displayed can be discovered and discussed in a non threatening way. Further, the visual imagery of the landscape can be a powerful media through which to understand individual connection to the landscape in a spiritual sense.
What the project also showed through the presentation of special places was that the characteristics of most of these special places appeared to be more closely aligned to healthy ecologically sustainable landscape function than straight pastoral values. The qualities that people identified (if indirectly) of these special places were qualities that were important for landscape function and were usually associated with patchiness or diversity in an otherwise seemingly homogeneous landscape.

The implications of this are discussed in the following chapter.
Part 3

Visual art and literature as media for reflected values

Both art and prose can be useful tools in discovering how individuals and society respond to landscape. On a broad social level both prose and visual art can challenge, reaffirm or redirect existing attitudes about the natural world and the place of society within it. On an individual level they can do the same, but with the added ability to provide a medium for reflection and a conduit for the expression of attitudes and values.

Part Three deals with the concept of using landscape art to both reflect and generate values. Landscape depiction can be far more than just a mimetic depiction of reality. For example, the depiction of landscapes can be either allegorical or symbolic, or elements of both. Visual art can be mimetic in that it mimics reality or symbolic in that through symbolism it reflects reality. Importantly, visual art can also be allegorical where meaning is symbolically represented and viewers are required to interpret what they see to ascertain true meaning. Further, landscapes can reinforce beliefs and values, or can challenge them. By inviting the viewer into the painting and challenging the viewer to a higher level of contemplation the artist is able to exert an emotional or spiritual influence on the viewer. These effects and the artists potential to use this form of medium to evaluate and access individual attitudes and values is explored.

Chapter Seven explores the issue of landscape that relates to occupation – how societies feel about the landscape in which they live, how they see it and what they do in it. The chapter explores the way that art and literature can reflect and illustrate community attitudes about the landscape in which they live.
Chapter Eight describes a group of three projects which used visual art and accompanying text to stimulate discussion of attitudes and values of individuals in rural communities. Chapter Nine describes the responses of people to these projects.
Plates referred to in Chapter Seven

Plate 1: *Tetschner Altar* (the Cross on the Mountains) (1808), Casper David Friedrich, Staatliche Kunstsammlungen, Gemäldegalerie Neue Meister, Dresden.
Plate 3: The Lost Child (1886), Frederick McCubbin, National Gallery of Victoria
Plate 4: *Ferntree Gully in the Dandenong Ranges* (1857), Eugene Von Guérard, National Gallery of Australia, Canberra
Plate 5: *The Flood in the Darling 1890 (1895)*, William Piguenit, Art Gallery of NSW
Plate 6: *The Golden Fleece* (1894), Tom Roberts, Art Gallery of NSW
Plate 7: *Falls of Katterskill*, (1826), Thomas Cole, The Warner Collection, Alabama, USA
Plate 8: The Purple Noon’s Transparent Might (1896), Arthur Streeton, National Gallery of Victoria
Plate 9: View From Mount Holyoke, Northampton, Massachusetts, after a thunderstorm (The Oxbow) (1838), Thomas Cole, Metropolitan Museum of Art, New York
Plate 10: *The Spirit of the Plains* (1897), Sydney Long, Queensland Art Gallery
Plate 11: *Under a Southern Sun* (1890), Charles Condor, National Gallery of Victoria
Plate 12: *The Valley of the Nepean* (1892), Arthur Streeton, National Gallery of Australia, Canberra
Plate 13: *The North Wind* (1891), Frederick McCubbin, National Gallery of Victoria
Plate 14: *Across the Black Soil Plains* (1899), George Lambert, Art Gallery of NSW
Part 4

Conclusions
Chapter 10: Conclusions

This thesis has sought to question the links between attitudes and behaviour in the context of land use behaviour by pastoralists of the Western Division of NSW. It argues that behaviour is not simply a reflection of social or individual attitudes to landscape, but the interaction of these values with internal or personal factors and external factors. It also suggests that as a result of this, any approach to changing the behaviour of pastoralists must include historical, geographic and economic considerations, as well as the effects of social and personal attitudes and values on behaviour.

Four streams of research have been followed. The first stream is historical research into the history of social attitudes and ideas about the environment. This stream of research looked firstly at the more general development of thought about the natural world and the place of humans within it. The evolution of thought about this relationship experienced profound changes around the time the Western NSW was first settled and became known as the Western Division of NSW. The settlement and development of the Division had as its rationale production and productivity, and equitable social land allocation, based on understandings and readings of a natural world that had at its foundations a Eurocentric understanding and experience.

The second stream of investigation traces the history of land settlement and landuse within the Western Division. This is important for two reasons. The first is that the physical and ecological situation that pastoralists currently find themselves has been greatly influenced by past actions and administration. Land tenure legislation directed the patterns and intensity of settlement. Unrealistic expectations of landscape productivity led to inappropriate levels of utilisation. The introduction of livestock and
the associated effects of grazing altered landscape function in ways that still have implications today.

The second reason an examination of the history of landuse in the Division is important in that it provides an understanding of the expectations of the wider community in terms of the relationship between the local community and the landscape in which they live. Pastoralists were rewarded by the wider community for the successful utilisation of the landscape to produce wool and meat in terms of wealth and their social standing within the community. The expectations of the wider community were reflected in the attitudes of pastoralists.

The third stream is an analysis of landscape art and how it might be used to provide insights into attitudes and values about the environment. Landscape imagery can provide clues to social understandings and expectations of the natural world through time. It is not just the imagery but the way images are constructed that provide clues to social understandings of the role of nature and the position of society within it.

The fourth stream examines a series of projects using art and text which shows how art can be used explore individual attitudes and values in a constructive and non threatening way. Although not tested in this thesis, it is speculated that this process can be used to identify positive attitudes and values and behavioural change built on supporting and reinforcing these beliefs and attitudes.

Landscapes are still valued in terms of their productive capability for domestic livestock rather than their ecological value. However, as shown by the landscape projects, the locations that pastoralists selected as being special to them seldom represented pastoral values, and were more likely to be selected for aesthetic, natural or other values.

There still remains a feeling amongst pastoralists that as the wool industry provided the basis for the national growth from the 1850s to the 1950s pastoralists in the Division are owed something by the wider community. The saying that “Australia grew on the sheep’s
back” echoes feelings that are commonly expressed, though not usually as directly as this. Many pastoralists struggle to understand how they can be criticised by the wider community for engaging in behaviour that they were once rewarded for. While the price of wool has fallen to unsustainable levels there has been a growing level of criticism surrounding the effect of grazing in such a fragile landscape.

10.1 Historical context and the relationship with the natural world

Social attitudes and values that have evolved as a result of historical, legislative or commercial imperatives are still important in the current context. Acknowledgment of the effects of these influencing forces is important in understanding current behaviour.

The settlement of the Western Division of NSW came about at a time when ideas about the relationship between people and landscape were changing rapidly. Historical and religious notions of this relationship indicated that the natural world was there for the betterment of those who occupied it. Milestones for progress and civilisation were indicated by the degree of control people had over the landscape in which they lived, and their ability to use it for their own ends.

Occurring concurrently with this change was the increased ability of people to modify the landscape in which they lived. The growth of mechanical power meant that one person with a tractor could clear and cultivate many times what they previously could with an axe and horse. The result was that individuals and communities were put in a position where they could create enormous change in the environment in which they found themselves.

When the increased ability to create change was coupled with the initial misreading of the landscape in terms of its resilience and productive capacity, future problems were inevitable. The research clearly demonstrates that initial expectations of landscape productivity in terms of pastoralism were optimistic, with total stock numbers higher in
the late 1800s than they have ever been since. The provision of artesian water and road and rail transport meant that stock could stay on longer in dry periods and be returned sooner following rain and this in turn meant that the landscape was placed under increasing pressure.

While the special characteristics of such a marginal landscape were gradually recognised, wider community attitudes about how it should be used in terms of productivity and production, and the equitable allocation of land for prospective pastoralists continued to drive the policies of land administration. Changing economic conditions pre-empted changes in policy, but usually such changes were too little and too late.

The change in wider community attitudes regarding how communities interrelate with the natural world is somewhat in contrast to the values of production and productivity. Values relating to sustainable land use, the preservation of biodiversity and values fundamental to the maintenance of a resilient ecosystem, while being shared by many in the wider community, are at best only partially reflected within the market system of rewards and discounts. While ecologically sustainable production is viewed as desirable in our current society, few are prepared to pay for the real costs associated with such production.

Current attitudes and values of pastoralists reflect historical elements as well as historical experience. While the attitudes and values of the wider society have shifted, this shift has not as yet been reflected in the real drivers of behaviour – rewards in the market place. Lease administration has been slow to incorporate and reflect changes in community values.

The importance of community expectations about the landscape is shown in the dominant ideologies emanating from a workshop held at the Australian Rangelands Conference in 1996 (Blesing et al 1996). The “economic growth” scenario was seen to prevail over the best practice, partial retreat and extra green scenarios, and was thought likely to occur based on national and world trends. Further it was shown that “much of the last four
decades of range management research in Australia has been directed toward the ideals of ‘best practice’, yet it seems even rangelanders themselves doubt if we have the social cohesion to strive for such an ideal” (Blesing et al 1996, p21). The attitudes and values of the wider community and how they are reflected in the economic drivers in the marketplace are not in alignment with those of local communities or pastoralists who see “best practice” as being more important than “economic growth”.

The continued failure of the wider community to recognise the need to value (in a market or economic sense) its desires for sustainable production means that those activities associated with land use that are rewarded in a more profitable manner will always predominate.

What is clear from the research is that the current attitudes and values of the wider community have strong historical components. As a result there is a tendency to reflect previous thinking about the relationship between the community and the natural world as opposed to sentiments about the current one. Further, these attitudes and values do not necessarily emanate as a direct result of the interaction between people and landscape, but can very often have political and religious overtones. The concepts of colonisation, the mastery of nature, turning the un-productive into productive, the un-civilised into the civilized and progress have all contributed to the way communities think about their relationship with the natural world.

The research shows that the administration of the crown leases in the Division has been based on issues to do with productivity and production and had little to do with landscape sustainability. Monitoring and measuring was confined to economic parameters and sheep numbers. There appears to have been little monitoring of the condition of the resource itself, but rather the intensity or extent of use. It can be argued that this approach reflects the attitudes and values extant in the wider community at the time. The fact that lately there has been a move to measure resource condition rather than use reflects a shift in community attitudes towards a more sustainable use of the landscape, at
the heart of which lies the change in attitudes towards the relationship between society and the landscape.

Social attitudes toward landscape and the natural world are clearly based in part on a range of influences that are historically and culturally derived. The majority of the Australian population now live in close proximity to the eastern seaboard, in urbanised locations with little contact with the natural world, and the link between communities and the landscape in which they live has been weakened. The disconnect between people and the landscape in which they live has led to a range of new attitudes and expectations.

Recognition of the historic components of community attitudes and values toward landscape is important in addressing behavioural change. A failure to appreciate and deal with these issues means that some of the underlying forces that contribute to behaviour remain unchanged and thus continue to influence how society and individuals see and interact with the natural world.

Traditional attempts at changing the behaviour of pastoralists have relied on extension methods that accepted the social and attitudinal context in which the pastoralist operated as a given. The cultural institutions that supported traditional attitudes and values and beliefs reinforced and guided appropriate behaviour. The result of this was that practices could only be altered within the constraints of these social institutions. Thus lease regulations dictated land use and market forces directed land use and the intensity of land use. Banks and lending institutions set financial requirements that were more in alignment with market requirements than the requirements of sustainable land use.

Given the context in which pastoralists’ decisions are made, it is not unreasonable then that such behavioural decisions strongly reflect the contextual realities in which these decisions are to be enacted.

It is evident from the results of the research carried out during the course of the projects that pastoralists may well have personal attitudes and values that are more consistent with
a sense of personal identity, and these may not necessarily be reflected in observed behaviour. Traditional extension has built on “what pastoralists can do” (within the constrains of cultural institutions) as opposed to what pastoralists “would like to do” as indicated by their personal attitudes and values.

Some work has been done in this area (for example Webber 2000, Able et al. 1996 and more generally Ison and Russell 2000), but much of the work still remains theoretical. The results from the work undertaken in this thesis strongly suggest the importance of further research into the value to be gained from building on personal attitudes and values in an attempt to change behaviour. This area represents a new and relatively unexplored dimension to the traditional model of extension. The use of visual imagery shows potential as a possible methodology for exploring individual attitudes and values while minimising the effect of cultural context.

10.2 The issue of apparently inconsistent behaviour

What has been discussed so far are the attitudes and values of the wider community, and how they are reflected in individual behaviour. In the course of developing the projects associated with this thesis, it became clear that while many pastoralists reflected the more historic community attitudes and values in public, and displayed behaviour that would appear to conform to these attitudes and values, privately many held a range of attitudes and values that were not necessarily compatible with those held publicly. Conversely, it could be assumed by observing behaviour that there was a certain set of attitudes and values that determined this behaviour. This approach fails to recognise the possibility of an individual holding a range of attitudes and values that may not appear rational or consistent.

If, as the discussions with pastoralists would suggest, many hold values and attitudes that differ substantially with those that could be deduced from their behaviour, how can this be rationalised? In looking at the factors that contribute to this situation, opportunities present themselves as to how it might be overcome. Identifying those attitudes and
values that are in broad alignment with the wider community attitudes and values about such aspects as sustainable land use, the maintenance of biodiversity and environmental stewardship provide opportunities to build on common values. Reinforcing and building on these positive attitudes and values in a way that accommodates individual concerns or inhibitions provides the opportunity for individual and community benefits.

The understanding of individual attitudes and values is essential in predicting and understanding subsequent behaviour. This is despite the fact that the relationship between these values and the ensuing behaviour is not always clear. The reasons for the failure to act in the predicted manner can vary from individual to individual, but in some instances (such as the perceived inability to make a difference) particular factors are clearly identifiable.

The relationship between attitudes and behaviour is a two way relationship, and while there are problems in predicting behaviour through knowledge of attitudes and values, there is also a similar problem in ascribing values through observed behaviour. From personal experience this would appear be the case in the Western Division where pastoralists’ attitudes and values regarding natural systems were assumed to be aligned to the pastoral practices. Practices such as excessive and inappropriate grazing regimes and the cutting of fodder trees to feed livestock by pastoralists were all assumed to reflect a certain attitudinal relationship with the landscape.

A scarcity of people, distance, poor communications and a challenging environment are some of the factors that mean pastoralists have to rely on one another for support. Thus peer group pressure and the need to conform become important drivers of behaviour. Isolated rural communities such as those are found in the Western Division have very strong social connections between individuals. While particular individuals may not agree with or share all values with fellow community members, there is a strong incentive to conform. To add social isolation to physical isolation results in a situation that few pastoralists appear to be able to tolerate.
Behaviour may be inconsistent with values if the individual is powerless to do anything, or if the rewards are inconsistent with beliefs. If pastoralists believe that by changing their actions they will not make a meaningful contribution to the problem (for example, sustainable production), then they are unlikely to change their behaviour. Habit has also been shown to influence behaviour, and is especially relevant in this context where generations of pastoralists have been doing essentially the same thing. Little has changed in the pastoral industry over the last 100 years in terms of fundamental operations. Where properties are passed successively through generations, habit would appear to be a limiting factor in regards to behavioural change. A lack of knowledge or ability to change is also one of the factors that may lead to an inconsistency of behaviour in relation to attitudes and values.

In rural Australia, programs such as Landcare have as their objective the implementation of more sustainable land use practices. In an attempt to change behaviour (and as a consequence, attitudes) “seed funding” is made available to initiate projects that are hoped to lead to eventual behavioural change. The ability to hold conflicting attitudes and values and the resulting effect on observed behaviour would appear to throw doubt on the ability of changed behaviour to change attitudes and values and vice versa. What is clear is that to change behaviour a better understanding of the total context in which an individual’s decisions are made is needed. It would appear that in many cases individuals hold a range attitudes and values that are broadly consistent with the wider goals of society, but that there are other influences (which may include conflicting attitudes and values) that determine the eventual behavioural outcome.

Given the reluctance of pastoralists to reveal attitudes and values that may be inconsistent with the local community or farming community in which they live, how can these personal attitudes and values be discovered and exploited? If the individual is found to hold attitudes and values broadly consistent with community attitudes and values but their behaviour is inconsistent with these values, then how is this explained? This thesis proposes that visual art could be a means of allowing individuals to express a range of personal attitudes and values without directly attributing them to themselves, and to do so
in a non threatening and positive environment. By identifying these attitudes and values the possibility then presents itself to discover why behaviour is inconsistent with these attitudes and values, and in so doing develop situations in which more appropriate behaviour is able to be expressed.

10.3 The reflection of socially derived landscape values through visual art

Narrative, verse and prose have been shown to provide insights into community attitudes and values of the landscape. The struggle between individuals and communities with nature can be contrasted with the romantic and sublime notions of the “bush”. However, while prose and verse are useful for gaining an understanding of attitudes and values through time, their use as a means of exploring and debating personal attitudes and values would appear limited.

By looking at landscape painting from various periods it is possible to see a reflection of attitudes and values in the subject and construction of the imagery. Such images have the potential to underscore or project community feelings about not only the landscape in which the community finds itself, but how it regards the natural world in general. This methodology provides another way of exploring attitudes and values toward landscape, as well as gaining an understanding of what communities see as the outcome of this relationship.

It should be stressed that this methodology is indicative, and as such only provides another layer of understanding. However, when considered in association with the knowledge of such factors as land settlement and land allocation policies, land use practices and regional development patterns, it is informative. In terms of the Western Division of NSW, an examination of contemporary visual landscape art reveals the allegorical qualities portrayed and appear to confirm the attitudes and values that also underpinned the land administration policies extant at the time.
Landscapes can be read as a text in which social attitudes and values relating to the natural world are embodied. The reverential and religious overtones that accompanied images where the viewer looked upwards to the majesty of crags and mountains and where the viewer was placed in a humble position have, through time, been disposed of. In the nineteenth century the viewer is placed above, looking down and into the distance, in a position of command, control and superiority. The viewer could be considered not so much a single person but society, and the horizon not so much where the land meets the sky, but an illustration of the aspirations of society.

In terms of the current pastoralists in the Division, the study of contemporary landscape imagery provides an insight into attitudes and values through time and confirms the attitudinal context in which pastoralism is placed. Current attitudes of pastoralists are as much a product of previous pastoral environments as they are of the present context. How the landscape is visually presented through art and text provides an insight into community attitudes through time.

### 10.4 Visual art as a tool for understanding attitudes

One outcome of this thesis had been the identification of landscape art as being a potential tool in the identification of community and individual attitudes and values that surround landscape and landuse. The failure to address a range of factors that are involved in the development and maintenance of such attitudes and values has led to the failure to understand fully the relationship between behaviour and these attitudes and values. The failure to fully accommodate the development of these attitudes in their full historical and cultural context has led to a poor understanding of how society and individuals interact with the environment. This has in turn hampered attempted changes to behaviour in the attempt to seek long term sustainable land use practices.

Social and individual attitudes toward the relationship with natural systems have been shown to be a complex mix of both historical and contemporary factors. Many of the factors that influence how communities and individuals develop these attitudes lie
submerged in the more immediate effects of the interaction with the natural world in which they live and as a result are seldom questioned. In the current atmosphere of a drive towards more sustainable land use and land management, immediate issues predominate, and the wider cultural understandings of the fundamental relationship between the wider society and the natural world remain unquestioned.

The series of projects indicated that in a significant number of cases individual attitudes and values failed to correlate closely with observed behaviour. Seemingly dissonant behaviour can be readily explained by behaviour theory, but on a personal level it is far more difficult to explore as very often it requires a considerable investment in trust between both parties.

The use of landscape imagery is potentially an important tool for opening dialogue and through this process teasing out values that are closer to personal identity than those attitudes and values more closely associated with various group identities. The research has shown that landscape art can provide a channel of communication or dialogue that has a number of distinct advantages in this respect.

Visual images represent a non threatening mode of communication, where a person’s feelings can be projected onto an image so that it is the image that is under review, rather than the person themselves. It enables the viewer to speak about the image as if it were themselves and in doing so raise ideas and values in a way that does not put the viewer at risk. Developing a medium of communication that is non-threatening is especially important in circumstances such as those in the Western Division.

Experience from the projects showed that visual images allowed people to talk freely about their inner feelings in a way that would be difficult, or at least require a lot of work, in any other context. Very often the image replaced words or feelings that were difficult for the viewer to express. In talking about how the viewer felt about the image or aspects of the image, they were indirectly speaking about themselves and their inner feelings.
Visual imagery has an advantage over the spoken word in that it represents another sense of meaning that is often clear to the viewer and the questioner in a way that the spoken word is not. Many people are unused to vocalising their feelings. In the pastoral industry no great store is placed on the ability to express one’s feelings about such things as the aesthetic landscape, or how one might feel about interacting with natural systems. There is an intricate vocabulary for such things as the weather and the description of livestock, but no such vocabulary for expressing feelings about nature and the landscape. Further, words may or may not mean the same to either party or may not accurately describe a certain feeling. For this reason there is a difficulty in using spoken communication to draw out the exact nature of feelings and beliefs. The predominant psyche of many country people is one that “battles against the elements” which meant that the discussion of a range of soft or emotional feelings towards nature was not considered relevant in terms of social norms. Traditionally many of the aspects of the environment in which such people live are seen in terms of threats or viewed negatively, and as a result it is not the done thing to publicly express feelings that are not negative toward them. As these feelings are usually internalised there was a reluctance to speak about them in public, and even in private a degree of trust had to be developed before people felt free to express these feelings. Visual art as a tool appeared to short cut many of these requirements, and enabled to people to speak more freely at an early stage about their feelings. This took place using a visual language that conveyed feelings (attitudes and values) in a way the spoken language could not have done.

Because visual landscape art is a construction or fabrication and interprets rather than replicates nature, there is the potential to use it to challenge the beliefs and values of the viewer. In the same way as the sublime and the picturesque manipulate the scene to portray a distinct feeling, so can specific contexts within a painting be designed to challenge the viewer. “Manifest Destiny” is one obvious example of this, but there are many other examples as this thesis has shown where social attitudes and views have been reflected in landscape imagery.
Visual landscape artwork can confirm attitudes and values already held by the community, or it can seek to question such attitudes through visual tension. The first point is important as in this context visual art would appear to be able to provide a mirror in which community attitudes can be reflected. How landscapes are seen, whether they are wild and natural or whether they show control by society can reflect how society sees its relationship with natural systems. Although this reading was not a specific part of this project, landscape imagery could well be used to ascertain wider community attitudes toward their relationship with natural systems.

Landscape depiction can be allegorical in that it reminds the viewer of other narratives that relate to social attitudes and values toward nature and the place that society occupies within it. Social dominance over natural systems as represented by modification to landscapes had been seen as a display of civilisation and the progress of humankind. The absence and presence of humans in the landscape can thus be used to draw attention to other aspects of occupation or lack of it. For example, the portrayal of a landscape devoid of human presence could have a variety of meanings for the viewer. It could indicate the pristine qualities of the natural world, and the negative impacts human influence has on it, the implication being that the empty landscape is the “natural” one and that the presence of people detracts in some sense from “naturalness”. At the heart of this reading would be that there is a separation between people and nature, and that humans are not part of natural systems. Alternatively the image could be read as a landscape in waiting: waiting for “civilisation” by people, that it is the presence of people that turn a barren or worthless landscape into an entity of value. Underlying this approach is the belief that nature can not be of real value in its own state, and only becomes a thing of value when modified by people. Each of these approaches is based on a different set of values, and represents different ends of a spectrum. The depiction of visual landscapes helps in locating where individual attitudes and values fit on this spectrum. The way the image is constructed and depicted can be used to tease out these differences.
There appear to be two sets of values for many pastoralists. The first set is those that are spoken about quite openly, generally align to local community attitudes and values and are the values that are presented publicly. These values relate to seeing the landscape as a part of the production process. They hold that landscape represents a factor of production and needs to be manipulated and altered to achieve its greatest potential. Associated with this view is a lexicology that values land and landscape in terms of its productive value, or potential to be changed to capture this value. The second set, although not necessarily conflicting with the first set, appear to be intensely personal and private and relate to special feelings about the landscape. They were usually feelings about a special place or view that encapsulated the characteristics of the environment in which they lived that were of importance to them.

On reflection this is no surprise, as the question would have to be asked as to why people would pursue a lifestyle that was poorly rewarded, hard work and took place far from the conveniences of modern city life. Many pastoralists have the ability to relocate if they wanted to, and while there are a range of possible reasons for not moving, positive attitudes toward the natural world in which they live must certainly play a part.

What the thesis has attempted to demonstrate is that there is a range of values and feelings that many pastoralists hold that would appear to be at odds with observed behaviour and rhetoric. These dissonant values and attitudes are deeply personal and often the expression of them creates a sense of vulnerability in the mind of the person who holds them. Social expectations and norms often are contrary to such beliefs, and hence their expression is limited to intimate contexts. There is not a clear social sense of support for such values, and as a result it would appear that there is a feeling that such values should lie in the personal domain as opposed to the public domain.

However, as shown by the projects, the existence of these individual attitudes and values represents a potential avenue to connect with individual attitudes and beliefs. There is potential to build on these personal values to create a more substantive and sustainable
approach for reconsidering relationships with the natural world, and accommodating these on an individual and community level.

The methodology of using visual landscapes to generate discussion and discover personal attitudes and values provides the opportunity to minimise the influence of broader social attitudes and values. Such an approach also benefits as it deals with the issues that really matter to the individual, and are important in a personal context. The issues discovered through personal exploration of visual landscape art are issues that directly relate to that viewer and may or may not align to broader community values.

Focussing on personal attitudes provides an opportunity to deal with the issue of motivation. Lack of motivation can be based on the perception of a low ability to change the situation, low confidence, low perceptions of relevance, or a poor assessment of the situation. Generic phrases like “sustainable agriculture” will probably have less effect in terms of motivation than terminology that is more specifically targeted to individual values. For example, many people appear to be particularly interested in birds and birdlife, so actions that are targeted at addressing these values are probably likely to be more successful than actions targeted to a more generic goal like sustainable agriculture, even though both goals have much in common.

10.5 Further research

As has been mentioned earlier, the use of fear to change attitudes can have the reverse of the desired effect. If the threat (for example salinity) is greater than the perceived ability to make a difference (“I don’t believe anything I do will make a difference”), then the response can be to dismiss the threat. The raising of environmental fears will therefore not necessarily generate the sort of outcomes expected, and as their use should only be coupled with a very strong message about how the recipient can actually make a difference themselves. With large scale environmental problems this presents a difficulty as the effect of the actions of any one individual is necessarily small and incremental.
Rather than changing behaviour directly, this thesis proposes a potential alternative method of influencing behaviour. It is proposed that more effort needs to be made to determine underlying personal attitudes and values. It would appear that for many pastoralists there is a deeply personal and private relationship with some aspects of the landscape in which they live. Building on the positive aspects of these attitudes and values and encouraging appropriate behaviour could well be more rewarding than attempting to change behaviour per se.

There has only been limited attention paid to the cultural elements associated with the change process, and it is within these cultural elements that there rests the ability to change not only how people “think” about their association with the natural world, but also how they “feel” about it. Arguments for changed behaviour have traditionally been based on a rational analysis and argument using hard facts. The other alternative is to build on how individuals feel about their relationship with place and the natural world, as it is very often these feelings that provide the explanation for seemingly contradictory behaviour.

Visual art has largely been ignored as a tool for examining attitudes and values in rural communities. This is surprising considering its popularity in regional areas. According to a report, 360,000 people in NSW visited art galleries in regional NSW in 2005, this figure representing 29% of all people in NSW who visited art galleries during that period (The Land 2006, p6). Visual art is clearly popular, and as shown by the projects undertaken, has the potential to be used for purposes other than its aesthetic qualities.

The identification of values through art then provides a starting point for further discussion about these values and the potential to build onto positive attitudes in relation to behavioural change. In knowing the key values and by asking questions relating to these values the enquirer is then able to build up an understanding of how behaviour might be modified by using these positive attitudes.
It would appear that visual art and text can be a very powerful tool for connecting people with their attitudes, values and emotions. The work could be allegorical, mimetic or symbolic. There can be multiple layers of meaning. While deconstruction theory is not a part of this thesis, it is important to recognise that visual imagery is a complex area, and can be used as a powerful tool to explore personal and social attitudes and values of such things as landscape and place in the natural world.

A more effective methodology for encouraging behavioural change may be to concentrate on “discovering” personal attitudes and values toward natural systems and landscapes, and initiating activities that complement and build on these values. Previous approaches like Landcare that focussed on a generic approach based on the understanding of wider community attitudes and values have achieved limited success in changing fundamental attitudes in the relationship between social systems and ecosystems.

Two opportunities are presented through this new approach. The first is the opportunity to build appropriate behaviour on positive attitudes and values that may not have been exposed previously. This approach strengthens positive attitudes and values, helps validate them, and also encourages behavioural change in a context where it is most likely to succeed. The fostering and encouragement of behaviour that aligns more closely with personal attitudes and values has a greater chance of being successful and sustainable. It would also appear from the work conducted during the course of this thesis that in many instances these personal attitudes and values may align more closely with those of the wider community than commonly believed.

The second opportunity is the opportunity to explore and mitigate the impediments preventing the implementation of behaviour in line with personally held attitudes and beliefs. Why is it that the individual feels a lack of empowerment? Do they lack specific knowledge and information, or is it that they feel that their actions will not make a difference? There are a range of reasons for the inaction, but these reasons will only be discovered when the associated personal attitudes and values are discovered. Visual art could well present a pathway for this discovery.
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