Finding Meaning: Differentiating the Multiple Discourses of the Potter Farmland Plan

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A thesis submitted in fulfilment of the requirements for a Doctorate of Philosophy

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May 2009
Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

[Signature]
Acknowledgements

I am grateful to the ‘Potter farmers’ who all agreed to participate in this research. They were generous with their time and thoughtful in their reflections. I also acknowledge the Potter Farmland Plan operatives and management, those in state government agencies and many other farmers who were also generous in recalling their involvement and experiences. Land & Water Australia’s support with scholarship funding, research seminars and other communications have been a source of encouragement over the years. I acknowledge the Victorian Department of Primary Industries which kindly agreed to wait for me while I did this research.

Thanks also to my stoic supervisors. John Fien has been unfailingly encouraging and taught me so much and over this long and circuitous research journey. Ruth Lane has waded through countless drafts and offered consistent help and advice.

I have been fortunate to have the support of a group of colleagues who have provided timely distractions over the last three years. At RMIT in Hamilton, Kaye Scholfield, Mary Johnson, Julia Schlapp, Shelagh Krummel, Marilyn Lyons, Paul Collits and Bill Vistarini have provided critical reflections and laughs. At RMIT Melbourne, the level 5 PhD students have maintain a welcoming ‘home’, sounding board and coffee companionship during my many visits to Melbourne.

I am most grateful to my wonderfully supportive family for accommodating my preoccupation with this work. XXXXXX
Abstract

The Australian community makes multiple and conflicting demands of rural land. As a result there has been an increasing awareness of environmental issues associated with the practice of agriculture. Programs designed to support and encourage farmers to improve their farming practices to ameliorate and minimise their impact on the environment have been a feature of natural resource management in Australia since the 1980s. Progress has been made toward understanding the factors involved in the adoption of improved farming practices. As a result, adoption is now conceptualised as a ‘journey’, rather than a defined event, and is understood to be dynamic, non-linear and often fragmented. The result of this is that participatory projects that seek to influence changes to farming practices or management can result in uneven outcomes. This study explores the meanings created in a journey through a participatory project with uneven outcomes.

The case study selected for this study is the Potter Farmland Plan (PFP), an innovative project with a selected group of fifteen farm families who sought to align the farm enterprise with ecological principles. The project generated wide interest amongst rural and urban audiences. This interest, and the subsequent media attention, generated a public narrative – or story of the PFP.

The meaning of the PFP to its agents is taken from their communications. The study examines project material and agents’ accounts to identify the patterns of meaning in these narratives. Three techniques of discourse analysis were used. The first two identify the diversity among narratives. These are the Storyboard and Plot Analysis techniques. The Storyboard technique helped to analyse the content of the documents. This found that the PFP narrative evolved from the time of the project and expanded over time into a narrative about an archetypical farmer exhibiting a ‘new’ environmental consciousness modelling innovative sustainable farming practices to their peers. The contemporary accounts of some farmers helped to clarify this element of the narrative, while accounts of others provided alternative narratives of their experiences. The nature of the diversity of narratives was identified through the second analysis, the Plot Analysis. This found a Transforming narrative which was closely aligned with the
dominant PFP narrative. The other narratives displayed minimal (Affiliates) or no (Utilitarian) alignment with the PFP public narratives. For example, the latter offered a utilitarian depiction of their involvement as an opportunity to undertake subsidised farm improvement works.

These narratives provided the data and text for the third Dryzekian discourse analysis. This analysis examined differences and tensions within and across the narratives of the PFP to identify the discourses that were operating in the PFP.

In Dryzekian terms four of the discourses identified were ‘reformist’ and were underpinned by assumptions about the appropriateness of farm productivity and profits. These discourses accommodated conservation goals within a ‘business as usual’ framework. The discourses were labelled Managerialism, Sustainability, Social Leadership and Farming Praxis. These discourses utilised particular metaphorical concepts. They refer to ‘business’, ‘systems’ and ‘frameworks’ to promote ‘managed change’. Metaphors for a sick human body such as ‘cancer’, ‘fragile’ and ‘illness’ were used to portray land degradation in the Sustainability discourse. This tends to recognise a special connection between the farmer and the land rather than the business relationship of the Managerialism discourse.

Three remaining discourses were ‘radical’, in Dryzekian terms, as they problematised agriculture and connect it to broader global issues such as limits to resource use and ethical concerns for humanity. These discourses also used the language of illness, but saw the relationship between humans and nature as dysfunctional. As a result the radical discourses tended to be pessimistic foretelling of catastrophe if the status quo is maintained.

The discourses of Managerialism and Sustainability shaped the public image of the PFP. These discourses and the public image were reinforced by the practices of agents involved in the project. This was most evident in the use of the symbolism around Social Leadership discourse that the PFP farmers used as an expression of their own farming discourses. As a result, the uneven levels of commitment and participation in the PFP were masked by the symbolism of public PFP narrative.
Levels of participation were found to be mediated through discourse as agents created and reproduced them through their many social acts. For example, some agents recalled incidents that occurred that made them feel excluded when they presented an alternative understanding of the PFP. As a result, these people tended to reduced their involvement in the discourse rather than explore the differences. The PFP discourses therefore routinised the participatory experience and tended to lock the PFP narrative in time despite over two decades of rapid social change. This meant the PFP discourse mediated a favoured type of participation, one that met with the symbolic character of the PFP rather than the particular farming practices it promoted.

This study has identified different patterns of meanings that were attributed to the PFP. Uneven participation among the PFP farmers is reflected in the patterns of both narratives and discourses. There is a connection between participation and discourse as both exhibit similar patterns and these persisted over time. The farmers’ discourses were found to connect to the public discourses indicating a deliberative engagement with discourse as they accessed publicly established language that expressed the meaning of the PFP. The analysis has articulated the different assumptions that underpin the discourses and may be useful in other practice change situations that must contend with complexity and uncertainty.
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1 Introduction

1.1 Background to the Research Problem

This thesis uses discourse analysis to explain uneven patterns of participation among the many individuals and groups that participated in an agri-innovation project. The project used as a case study is the Potter Farmland Plan (PFP). The PFP was conducted between 1984 and 1988 on a small number of predominantly grazing properties in south-west Victoria, Australia. Well funded from philanthropic sources and supported by strong government and community interest, the project was an early attempt to promote conservation farming practices on a regional scale in Australia. Significantly, the project was also one of the first in Australia to apply the emerging new extension process of ‘farmer first’ participation. The PFP was influential in developing a farm planning process that became a feature of the integrated catchment plans developed by Landcare groups in many parts of Australia during the 1990s. However just as the uptake of landcare across Australia was uneven (National Farmers Federation & Australian Conservation Foundation 2000), so too the farmers participating in the PFP displayed varying levels of commitment leading to uneven and inconsistent outcomes. This may be one of the reasons why, despite the successes of the PFP, and indeed Landcare nationally, farm based land and water degradation in southwest Victoria, as in Australia as a whole, has yet to be contained or reversed.

A recent report by the Victorian Catchment Management Council on the status of eight indicators of catchment quality, such as native vegetation, biodiversity, soils and streams, found that Victoria’s south-west region was among the poorest of all the Victorian catchments (Victorian Catchment Management Council 2007). Similarly, on a national scale, estimates produced a nearly a decade ago calculated the cost of land and

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1 During the 1970s agricultural scientists focused on bridging the ‘gap’ between the high yields from trials on agricultural research stations to the comparatively lower yields achieved on farms. The ‘gap’ had been regarded as evidence of a shortfall in farmer knowledge and skills. However during the 1980s agricultural scientists, especially in the developing world, became aware that the ‘gap’ existed between farmers and scientists and could tackled by taking a more participatory approach to extension. This was the beginning of the ‘farmer first’ approach that valued local knowledge and sought, through processes of involvement and collaboration, to improve farming practice through empowerment. (Chambers, Pacey & Thrupp 1989)
water degradation at about $3.5 billion a year (Council of Australian Governments 2001) and a sum of $60 billion would be required to simply manage, let alone overcome these problems (National Farmers Federation & Australian Conservation Foundation 2000). This prognosis was recently reiterated in the Victorian 2008 *State of Environment Report* (Commissioner for Environmental Sustainability Victoria 2008, p. 184). This report concluded that the present generation has inherited a poor environmental legacy, which, despite improved understanding of environmental issues and processes, the policies and initiatives implemented in recent decades, and extensive investment in the environment, the condition of Victoria’s natural environment has continued to decline.

Much of the research to date on the receptiveness and capability of farmers to respond to land degradation has tended to focus on the delivery and efficacy of natural resource management programs to alter behaviour. This has included studies of the processes of adoption of conservation farming practices from the perspective of farmers and highlights the paradox between positive attitudes to conservation and the relatively low levels of consistent adoption (Lawrence, Richards & Cheshire 2004).

One of the reasons for this situation is that Australia’s approach to natural resource management has been ad-hoc, inconsistent and confusing (House of Representatives Standing Committee on Environment and Heritage 2000, p.5). Similarly, an international review of participatory watershed management programs concluded that most programs were underpinned by rhetoric rather than management change theory (Rhoades 1999, cited in Marshall 2004, p.272). The consequences of this have been a frustrating lack of action to alleviate the land and water degradation despite so much attention. This failure to translate pro-environmental intentions into matching behaviours represents a challenge to researchers in understanding engagement experiences as a dynamic and ongoing negotiation.

The attitude:behaviour paradox, coupled with the unquestioned but positive assumptions about participatory processes has led to a hiatus in ways of understanding and promoting conservation farming. For example, a study in north-east Victoria found that farmers were aware of salinity on their farms but differed from catchment managers in their assessment of the severity of the problem (Curtis, Lockwood & MacKay 2001).
This was a frustrating barrier to change for salinity managers. However, a new approach to research on adoption behaviours, which acknowledges the inherent complexity and dynamic state of both human and biological systems and defies the reductionist notions of control and objectivity, is emerging (Allison & Hobbs 2006). The implications for extension are important because persuasive communication alone will not induce people to change practices, certainly not all people at the same time. Thus, a key theme from such studies is that outcomes from extension programs can be diverse and unpredictable. For example, in a review of a community based integrated catchment management program in north-east Australia the participants’ responses were said to be pragmatic and opportunistic. This reflects different reasons for farmers deciding to participate in a program leading to different levels of commitment to the various goals, strategies and activities of a program. This has significant implications for planning and decision-making in natural resource management. As the review authors concluded:

The challenge …… is to deal with a situation in which the goal posts are shifting, and the goals are unclear, multiple, and contested (Bellamy & Johnson 2000, p. 279).

The challenge of uneven project outcomes has been identified in other studies of experiences in agricultural engagement programs. For example, researchers investigating farmer participation in the Environmentally Sensitive Areas (ESA) scheme in the United Kingdom have noted a spectrum of participation ranging from ‘most resistant’ to ‘most active’ adopters (Morris & Potter 1995). Indeed the researchers found that even the active adopters were most likely to concentrate the conservation activities on land with low productive capacity (Morris & Potter 1995; Wilson & Hart 2001).

A similar duality has been reported of an environmental farm planning program in Ontario in Canada. This scheme integrates planning and action through a series of systematic steps such as evaluating land condition and developing an environmental plan. This has been considered a successful program with 17,000 farmers involved since 1993. However, a survey of participants found wide variation in the level and form of participation. The researchers attributed the variation to the selective use of the program by participants who tended not to proceed along the linear pathway offered by the program steps. For example, some participants skipped early steps and began at the later
stages while only half of participating farmers actually implement their environmental plans. The researchers concluded that this was due to different motivations for addressing environmental issues among the parties (Smithers & Furman 2003).

In Victoria, Australia, a program run by the Department of Primary Industry, the Environmental Best Management Program has reported similar outcomes. A preliminary report found that 80% of the fifty participating farmers surveyed had completed a farm action plan, but, of these, over half (58%) felt that their current practices were vindicated and so they had no need to implement the plan (B Hunter, 2007, pers. comm., 12 April). These examples demonstrate high levels of uneven participation in agri-innovation projects at a farm scale.

From a project perspective, uneven participation can result in uneven outcomes at the individual and regional scale. For example, one of the selection criteria for the PFP farmers was that they would have previous experience with conservation works, indicating that they were already committed to change. Different levels of financial support to each of the participating families for the on-farm activities of the PFP were made according to opportunities at each farm to maximise the opportunity for publicity and extension. This led to different levels of activity on the farms resulting in different levels of involvement among the farmers. A recent survey of nine the fifteen PFP participating families still farming found that even today they displayed different levels of commitment and management of environmentally sensitive areas on their farms (Schlapp & Scholfield 2008).

A review of the main theoretical frameworks for explaining the gap between the possession of environmental knowledge and practicing pro-environmental behaviour concluded that the factors that shape pro-environmental behaviour are too complex to be expressed in a single framework (Kollmuss & Agyeman 2002). Instead, the researchers combined environmental knowledge, values and attitudes with emotional involvement and embedded this conglomerate into personal values and other internal and external factors to describe a ‘pro-environmental consciousness’. This nebulous complex serves to demonstrate the machinations behind environmentally inspired behaviour and dispels notions of a direct link between attitudes and behaviour. Within the fields of natural resource management and extension, adoption has also been described as a dynamic
process variously influenced by characteristics of the individual, the practice to be promoted, socio-economic structure of the communities, and broader institutional settings (Cary, Webb & Barr 2002). Thus, many programs that aim to transform an expression of land stewardship into changes in behaviour reflect a simplistic input output view of farm decision making.

It should be noted that this study is not a judgment on the behavioural responses of the farmers who participated in the PFP. Nor is it a critique of the model of intervention. The PFP was innovative in the 1980s, but now, after almost 20 years of experience with participatory projects, more sophisticated techniques and practices have emerged (Chapter 2.4). This study is an exercise in exploring the different ways that participants understood the PFP. This thesis focuses upon the contested meanings of the PFP. It explains the ways in which meaning was created through public discourse and seeks to explain whether different levels of participation can be explained by adherence to different discourses about the PFP.

The study explores the meanings created and held by all agents involved in the PFP; farmers, media project officers at three moments in time: the ‘event’, the ‘echo’ and the ‘reflections’. The ‘event’ represents the project implementation period, 1984 and 1988. The ‘echo’ is the period of time following this up to the year 2000. The ‘reflections’ period was 2006-2008 when the interviews with participants of this study were conducted. However this is not a longitudinal study of the PFP. The moments in time were a convenient construction to order the study’s data. None-the-less the notion of ‘time passing’ is an important aspect of the study. While all agents are drawn into this study by their PFP involvement, their trajectories since the PFP are not understood to be solely a consequence of their PFP experience. They will all have encountered countless experiences over the intervening decades which would have shaped and impacted on their ‘journey of adoption’. However their reflections will contribute to the evolving interpretation of the PFP.

1.2 Research Problem

Natural resource management programs that aim to encourage the integration of environmental goals with farm management have been a feature of Australia’s response
to environmental degradation for the last twenty years (Webb, Cody, Harrison, Sincock & Mues 2004). As a result of this experience an understanding of the adoption process has emerged. It reveals a process with a non-linear response between input and outcome. This is explained, in part, by the complexity of the human dimensions and ecosystems involved (Rogers 2003). That is, people can generally agree there are problems but are unlikely to agree on what should be done about it and who should do it. This situation is thought to persist because concepts such as ‘sustainability’, ‘sustainable agriculture’ and ‘best management practices’ are normative and value laden concepts with multiple meanings (Webb et al 2004).

The nature of the adoption experience is now understood in terms of a learning process (Cary et al 2002). The experience begins with high uncertainty, but over time, with observation, trials and personal experience, the uncertainty decreases and confidence and expertise grow. It makes sense because as people learn more about a particular practice the risk of mistakes or outright failure are reduced. For example, introducing a new pasture species to the existing pasture mix requires an understanding of that species’ response to the soil, climatic conditions, weed control and grazing management practices. All these aspects interconnect and need to be understood before proceeding with something as apparently simple as adding a new species of pasture. This creates ambiguities in the adoption process, as people may modify or abandon an innovation as they proceed. As a result, learning is never finished and adoption is never complete (Cary et al 2002). Hence it is characterised as a journey.

Agri-innovation projects are short term and not designed to partner a farmer for duration of the journey. This means that there is an emphasis in programs to encourage learning. But learning also has a non-linear response as it is subjective, personal and unique. For example a decision to retaining outmoded farm practices is not matter of a deficit of knowledge which can be rectified by learning, but may be a reasoned outcome that meets the goals of the individual (Barr & Cary 2000). This is a pity because measuring a deficit of knowledge would be easier than measuring a farmer’s goals which are not always articulated for outsiders. For example, a national survey of farmers found that those who expressed pro-environmental views also tended to be less concerned about external influences such as inducements through new funding opportunities (Reeve
2001). These views are privately held and can be fundamental to the nature of an individual’s journey of change.

This is a problem for natural resource management practitioners as communication is used to facilitate participation and the learning experience. For example communication is used among participants in their initial discussions and exchange of ideas. This is referred to as ‘discovery’, a process whereby individuals and organisations discover the problem and develop solutions (Flora, Gasteyer, Fernandez Baca, Banerji, Bastian & Aleman 2000. There is potential for conflict over goals and agendas during this process. As Kai Lee (1993) argues in The Compass and the Gyroscope, communication is the key process for ensuring that the conflict that results from different understanding and meanings in a natural resource management issue remains ‘bounded’ or confined and, therefore, manageable. It is also likely communications that rely on normative terms such as ‘sustainability’ that has multiple understandings, may inhibit the expression of conflict.

The journey of changed practices intersects micro and macro scale terrain. Hierarchies of worlds such as economic, political, individual and social are shaped by localised climatic and biophysical realities. Even if the terrains could be accurately described, showing causation from a change in input would be difficult to trace as the response is individually experienced. As farm practices are culturally or traditionally accepted ways of operating, changes can require a change in mindset – a cognitive terrain that is just as challenging to explore as the physical and operational terrains.

An ‘iceberg’ model has been proposed that describes the cognitive terrain. Doppelt (2008) suggests that the tip of the iceberg represents the observable behaviour. The powerfully influential part of the iceberg is submerged, unobservable to outsiders. This is a metaphor for systems thinking in which behaviour is an expression of core belief: the vision people have of how things are. Mediating between core beliefs and behaviour are forms of thought organisation that he refers to as mental frames; systemic structures and patterns, which ‘select’ behaviour in daily life. Doppelt argues that the environmental challenges we face today are a disjunction between core beliefs about nature and the human impact on nature. This is illustrated using a diagram of an iceberg.
Change must be directed below the level of daily events to address the core beliefs and resultant mental frames and patterns that they support.

In order for an event to make sense it has to fit the frame about how the world should be. It does not, if something is different with the ‘normal way of the world’, the loss of sense can be puzzling or troubling. Then people go through a process to resolve this situation to compose a plausible story about what is happening to feel comfortable (Howden 2009). Events that occur around an individual combine with this internal cognitive map and from this each person creates their own experience.

This is why the methods used by natural resource management practitioners are inclusive processes - designed to capture peoples’ core beliefs or vision of the world and how things should be by fostering participation. An example of such a process is stakeholder analysis. In explanation of stakeholder analysis the Effective Engagement Planning Tool (Department of Sustainability and Environment 2008) recommends assessing the participants by four criteria: interest, legitimacy, power and relationships. These are psychosocial parameters that can result in participation being differentially perceived and expressed among individuals. By itemising the psychosocial parameters
considered important to the interactions among members, the stakeholder analysis is an attempt to expose the disjunct between core beliefs about nature and farming practices. However communications among members of a group carry more than technical information, it also carries messages about what is considered to be natural or how things should be (Dryzek 2005). This is why communication is considered to *structure* the complex pro-environmental consciousness. (Kollmuss & Agyeman 2002).

Processes that identify key agents, such as a stakeholder analysis, have the advantage of fostering cooperation through the revelation of multiple perspectives. The engagement requires an inclusive and cooperative approach yet this does not necessarily lead to consensus. That uneven outcomes are frequently reported from projects with inclusive processes suggests that consensus is not a given. Instead the differences, rather than the similarities, may structure the interactions between agents.

A useful heuristic device, the ‘social interface’ draws a focus toward agents’ navigation of change by examining interactions where conflict, discrepancies and differences arise between agents (Long & Long 1992). This is different to understanding the individual cognitive journey or the journey through hierarchical terrains. Instead it examines the manoeuvring among actors. The Longs regard the outcome of an agricultural intervention as a joint creation – rather than a pre determined response by the change agent or project sponsor. This is an actor-oriented approach to understanding the journey of change which the Longs used to explain unintended outcomes from agricultural projects. The patterns of action and meaning that arise in the performance of an intervention project are a joint creation of the actors themselves. Not a discrete injection of knowledge from the project sponsor. This is important because it re-aligns the agents as potential equal partners in the outcome. People process their own experiences, have their own memories and take account of the experiences of others in social, rather than discrete, phenomena. From this conceptualisation, knowledge is not a unit of input awaiting transfer to the participants; rather knowledge is transformed. An explanation which locates uneven outcomes as a consequence of a social phenomena which integrates, but does not wholly depend on, particular characteristics of the sponsor, project methods or individual characteristics.
The Longs’ interface perspective aimed to deconstruct the intervention process to understand it as an ongoing, socially constructed and negotiated process. The conflicting and intersecting lifeworlds of actors is evident in their interactions as they bridge, accommodate, isolate or contest action from a mix of social, evaluative and cognitive standpoints. Thus the ‘social interface’ aims to elucidate the types and sources of social discontinuity and linkages present in such situations and to identify the organisational and cultural means of reproducing or transforming them. This approach allows an understanding of differential responses of local groups by showing how the interactions between them and local actors shape the outcomes of an intervention (Long 1984).

The Longs’ focus on the differences between actors was observed in the field. This study has used the concept of a ‘social interface’ to section the adoption journey. It confines it to the case study and then examines the conflict in communications resulting from this. The reason for focusing on communications rather than observable behaviour is that the PFP, used as the case study, is not taking place now. It can be examined from its recovered communications and landscape works. As the study is interested in uneven outcomes from participation, these communications offer a better prospect of finding differences. The landscape works would be a useful focus for ecological or resource utility change.

These two opportunities for investigation are familiar targets for agri-innovation programs. This is shown in Figure 1.2. There are two types of targeted relationships. One is a one-way connection, a biophysical relationship which the farmer exploits in order to farm (see A in Figure 1.2). This is a technically based connection which is the target of production oriented agri-innovations which would locate an examination of the consequences of the bio-physical changes resulting from the PFP activities (Röling & Wagemakers 1998). Alternatively, the connection between a farmer and conservation decision-making regarded to be socially situated and is therefore understood as a many-to-one relationship (the journey of change). This web of connections includes the social and personal connections between farmer and farm and is targeted in programs that aim to change decision-making. This complex set of relationships is the focus of this study.
(see B in Figure 1.2). This connection is understood to be activated and groomed by a learning experience (Rogers 2003).

The communication among the agents at site B takes place in order to perform a particular project. The PFP ‘social interface’ is sectioned from the relationships at Site B. This study therefore uses the communication of the PFP agents to explore how they interpreted and implemented the practices required. This is not about consensus, but the outcome of diversity and conflict inherent in an intervention (Long 1984). In such a milieu, knowledge is transformed and learning can occur. This is important for participatory natural resource management programs which have become more sophisticated at creating the conditions to foster the learning process. Most recently it has been found that establishing trustworthy relationships is essential for creating a climate in which people will learn (Kilpatrick 2007). Trust allows the conduct of open communication and can advance the relationships among actors which may lead to ongoing social cooperatives such as communities of practice (Lave & Wenger 1991). This study does not critique the PFP methods to judge the conduciveness of its climate for interaction and open communications. Rather it is the manoeuvring of agents in the act of participation that is of interest. The Longs’ heuristic of the ‘social interface’
offers a concept to capture the communications of PFP agents as they sought to find and explain the meaning of their practices.

The PFP was a deliberate intervention. It was funded and promoted externally and the farmers, project operatives and others were participants in its program. This is not a spontaneous outcome by a group seeking a better way to farm, nor did they form a group to continue together beyond the life of the PFP. As such, it matches the Longs’ situation – a discrete input which, as a result of multiple agents, will be understood, embraced and interpreted differently, and the outcomes may not match those initially anticipated.

This study has adopted an actor-oriented approach to understand how discrepancies, interpretations, knowledge and power are mediated, perpetuated and transformed in an intervention. This does not privilege agents over context, but takes a holistic view of the interactions by exploring the agents’ perspective of the experience. Such an approach requires a methodology that counterpoises voices, experiences and practices of all the relevant social actors (Long 2002). The activities and roles people undertook for the PFP were not the result of unrestrained choice but the result of accommodating the multiple contesting perceptions of all the actors involved. This tempers the actor-oriented perspective of change to be meditated by a myriad of individual, social and structural constraints.

The struggle for meaning among actors that is captured through the communication reflects a core concept of discourse theory which holds that ‘individuals are discourses; they enter and constitute the mind.’ (Harré & Gillett 1994 cited in Dryzek & Niemeyer 2006, p.2). This subliminal function of discourse can be used to process the meaning of events, and through communication, also signal to others the significance of an event. The signalling via discourse provides a means of conceptualising the presence of contested agendas and differences between agents at the ‘social interface’ between farmers and an agri-innovation program. The struggle for space to manoeuvre, the battle over images, relationships and resources are performed in interactions among agents. Central to this is how actors give meaning to their experiences. In this study this is addressed by examining the communications of multiple PFP agents.
1.3 Research Aims and Objectives

This study uses discourse analysis to explain uneven patterns of participation among the many individuals and groups that participated in an agri-innovation project. The communications of farmers, project officers and the media are used to form the PFP ‘social interface’ bounding the complex web of connections between a farmer and the land. The project selected as the case study is the Potter Farmland Plan (PFP). This was an innovative project in which a selected group of fifteen farm families were involved in replanning their properties to align ecological principles with the farm enterprise. The project was non-prescriptive, farm specific and individually interpreted. Importantly it did not recommend a specific activity as a panacea to all environmental degradation. The holistic approach and equality of relationships between project staff and participating farmers was at the time a new approach to extension. The works undertaken on each farm, such as revegetation, stream protection and landclass fencing were closely followed in the media and showcased at numerous open days inspiring other farmers. Indeed the project achieved a high public profile generating wide interest among farmers, state extension staff, agricultural consultants and even the non-rural public. This interest and the frequent media reporting generated a public narrative: a story of the PFP.

The public narrative, however, may be more fragmented than it appears. This is because participation in the PFP was experienced differently by each of the participating families. One obvious difference, as stated in described in Chapter 3.3, was the different levels of funding allocated across the farms. This meant that the farms had different types of works completed at different rates and intensities. This funding variability was used to explain uneven participation between the farmers at the time of the PFP. This study seeks a more nuanced explanation for uneven participation by examining the assumptions and beliefs embedded and communicated in the language used by all the agents involved in the PFP\(^2\). This approach offers an interpretation of the subtle interactions that took place at the ‘social interface’ to articulate the different meanings

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\(^2\) This study is not an evaluation of the PFP. Others have undertaken different investigations and reporting of the PFP. Refer to: Cary, Beal & Hawkins 1986; Bail 1987; Campbell & Mathews 1988; Campbell 1991; Schlapp & Scholfield 2008. A description of other outcomes that trace their genesis to the PFP is provided in Chapter 3.4.
that grew around this project. This is directed with four research objectives, each with a set of focused questions.

Research Objective 1: To identify the elements of the public narrative of the PFP and explain how it was created.

1.1. What are the elements of the PFP narrative?

1.2. What relationships and networks helped to establish, authorise and maintain the PFP narrative?

1.3. What role did the media play in influencing the public narrative?

Research Objective 2: To identify the elements in the narratives of the participating PFP farmers and explain how their narratives were created.

2.1. What are the elements of the narratives?

2.2. To what extent were the elements in the public narratives shared by PFP farmers and how did this affect their participation in the project?

2.2. What factors explain the different patterns in the narratives of the PFP farmers?

Research Objective 3: To explain the structure and characteristics of the discourses that linked the various PFP narratives.

3.1. What assumptions underpin the different narratives about the PFP?

3.2. To what extent do the assumptions extend the narratives into wider discourses?

3.3. What are the characteristics of the discourses and how are they activated and transmitted?

Research Objective 4: To use the patterns of discourses to explain uneven patterns of participation and outcomes in the PFP.
4.1. What is the relationship between discourse and participation and outcome?

4.2. To what extent is discourse analysis able to explain uneven participation and outcomes?

The logic linking research objectives focus questions and data sources to the techniques of analyse are summarised in Figure 1.3. The research approach reflected in these choices is discussed in the following section.
FIGURE 1.3: FRAMEWORK OF RESEARCH OBJECTIVES

Research Objective 1:
To identify the elements of the public narrative of the PFP and explain how it was created.
1.1. What are the elements of the PFP narrative?
1.2. What relationships and networks helped to establish, authorise and maintain the PFP narrative?
1.3. What role did the media play in influencing the public narrative?

Research Objective 2:
To identify the elements in the narratives of the participating PFP farmers and explain how their narratives were created.
2.1. What are the elements of the narratives?
2.2. To what extent were the elements in the public narratives shared by PFP farmers and how did this affect their participation in the project?
2.3. What factors explain the different patterns in the narratives of the PFP farmers?

Research Objective 3:
To explain the structure and characteristics of the discourses that linked the various PFP narratives.
3.1. What assumptions underpin the different narratives about the PFP?
3.2. To what extent do the assumptions extend the narratives into wider discourses?
3.3. What are the characteristics of the discourses and how are they activated and transmitted?

Research Objective 4:
To use the patterns of discourses to explain uneven patterns of participation and outcomes in the PFP.
4.1. What is the relationship between discourse and participation and outcome?
4.2. To what extent is discourse analysis able to explain uneven participation and outcomes?
1.4 Research Approach

This study utilises a discourse analysis to investigate agents’ communication to discern patterns that can characterise uneven participation in the PFP. As described in Section 1.2, a methodological entry point for examining the dynamics and transformation social practices is the ‘social interface’. This is the space where actors struggle over meanings and in the process potentially transform social action. The possible diversity of agents’ lifeworlds is immense and that such a struggle could result in any semblance of coherence is remarkable. In the first sentence of the Introduction Chapter of *The Politics of Environmental Discourse*, Hajer states:

> Over the past few years ‘the ecological crisis’ has come to occupy a permanent place on the public agenda. It has become an issue whose importance goes without saying. One has only to refer to ‘the ecological crisis’ and everybody nods meaningfully as if one knows what is being referred to. (Hajer 1995 p. 1)

Is the meaningful head nodding a signal of consensus or itself part of the social process in play? Hajer and Long regard this as part of the play. Hajer proposed narratives on social reality - story lines that succeed in combining diverse elements to provide a set of symbolic references. Thus fragmentation is avoided and a ‘coherent discourse’ emerges to shape human action (Hajer 1995). Long proposed exploring discontinuities at the interface to explain the capacity of actors to process experiences, learn from others and to make behavioural choices (Long 2002). From my own experience this focus on differences resonates with the topic of land degradation. There are diverse views, perplexing outcomes from participatory programs combining with an overarching view that environmental problems are serious and must be tackled\(^3\).

However there are no set methods for undertaking an exploration of this terrain. A discourse approach provided consistency with the interface perspective to conduct an exploration that focused on differences. Hajer’s ‘argumentative interaction’ and Dryzek’s taxonomic approach to authentic communication have informed the research approach and the subsequent development of the analysis techniques. Discourse can be synonymous with discussion. However from a social science perspective the commonsense understanding of discourse is reconsidered in the light of meanings conveyed

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\(^3\) Refer to Section 2.4.4
without utterance. Discussions, to social scientists are regarded as superficial without this contextual background, which builds discourse as, an ‘ensemble of ideas, concepts and categorizations (Hajer 1995, p. 44). The aim is to understand why a particular understanding gains prominence and others are discredited.

This was explained in Foucault’s concept of discourse which focuses on the internal rules that function to structure behaviour:

> There are not on the one hand inert discourses…and on the other hand, an all-powerful subject which manipulates them, overturns them, renews them; but that discoursing subjects form part of the discursive field – they have a place within it. (Foucault 1968 cited in Hajer 1995, p. 48).

For Foucault discourses are about prohibitions as they make it impossible to ask certain questions, they imply exclusionary systems because they authorise certain people to participate and they come with forms of internal discipline which maintains the order and rules that determine the conditions under which they can be evoked (Hajer 1994).

Hajer studied environmental policy making as a socially accepted set of practices through which we face the ecological crisis. He traced the regulation of conflict over acid rain in the 1980s to build a conceptual understanding of how policy making not only regulated a physical problem but also to manage the latent social conflicts which brought it to public notice. This reflected a path from Foucault’s theoretical concepts to devise, what he called ‘middle range’ concepts to describe the interactions between discourses and relate them to the role of individual strategic action.

For Hajer a discourse analysis should do two things. Firstly, it should illuminate the way in which social and cognitive commitments are reproduced: and secondly, it should help us to understand how discursive ‘interpellations’ take place, or the moments where the routine practice is interrupted. Such moments are also described as ‘inter-discursive transfer points’ where actors exchange positional statements and draw new discursive relationships (Harré & Gillett 1994). The application of this discursive approach offered a guide that would use the tensions of the interface as the data to explain how the diversity among agents coalesced or retreated from the PFP. The PFP represents a micro scale intervention in comparison to the sweep of Hajer’s work on acid rain or
indeed Dryzek’s work on global environmental discourses. However both have demonstrated a means of investigating the global environmental problematique through analysis of difference. In this study the problematique is uneven outcomes from the journey of adoption of changed farm practices - a significant shift in scale but one which also recognises the importance of multiple problems and multiple definitions in a social construction of conflict.

Therefore the interactions between agents are of interest in this study. The PFP provides the opportunity to explore the interactions among agents with different ideas, concepts, and objectives, as an example of an experience of the adoption journey. This means that the PFP event is not the subject of a historical interpretation but that the agents’ communications arising from the PFP are subjected to the discourse analysis.

The data used in this has a historical trail as the documents from the ‘event’ and ‘echo’ periods represent the 1980s and 1990s. The documents are not used as though they are transparent communications from the past but are used to identify the patterns of meaning they contained. The third period, ‘reflections’, is made up of the PFP farmers’ recall of their experience. Like the documents, such oral histories are also understood to be subjective and context specific as described in the following quote.

> memory is not a pristine objectification simply to be brought to the surface and articulated as historical knowledge. It is rather a personal and cultural artefact, a pool of metaphors and analogies necessary to make sense of the present. (Smart 2006 p. 15)

Indeed, as Smart goes on to explain, memory is constantly under construction so that subsequent events can reshape and alter recollections. As a consequence of this dataset of documents and memories, language is understood as more than just a passive tool. Language, in this study is regarded as an integral part of actors’ reality, a social practice of its own that can influence the perception of interests and preferences. As a result the terms ‘text’, ‘narrative’ and ‘discourse’ are used frequently in this study. Discourse analysis takes place in language and the term text is therefore used to describe the data resulting from any social practices in which,

> social signs which can be read, (or) signs which indicate ... a number of things are happening in any social situation. (Gore 1990, p.103)
Narratives are stories built from text with a sequence of events that conclude with an outcome. Reissman (1993) has described narratives as stories that are deliberately selected by the teller for a specific audience. As a result, and recognising Smart’s caution on the previous page, it is understood that there may be many versions of the same event.

1.5 Significance

This study is significant for at least three reasons. First, it provides a much needed technique for explaining uneven outcomes in agri-innovations programs. In the eight years to 2008, the Australian government spent over $850 billion to address environmental problems. Of this sum, 20% was directed into programs that encourage learning and decision making for improving natural resource management strategies on farms (Commonwealth of Australia 2008). Accountability for such large sums has resulted in an evaluation ‘industry’ (R. Lane, 2009 pers. comm., 27 February). To date, however, there has not been a method for explaining the uneven outcomes evident in so many programs. This thesis is significant as it posits and tests a non-judgmental way of exploring uneven participation by interpreting the communications in an agri-innovation program to influence changes to farming practices.

The second area of significance relates to agricultural extension. One of the key objectives of extension strategies in natural resource management is to develop a culture of continuous learning (Webb et al. 2004). This is likely to be encouraged through the whole gamut of activities from information access and technology transfer, to one-to-one information provision, and through processes such as group facilitation and structured education and training (Black 2000). One Australian organisation active across this range of activities is Land & Water Australia (L&WA). In the Annual Report 2005-2006, the organisation reports managing 258 research projects totalling $27.1 million in funds (Land & Water Australia 2006). This level of involvement in research and development has required the organisation to consciously build a commitment to knowledge generation and dissemination. One of the lessons L&WA has learned from this involvement is that the project managers must have a ‘deep understanding of the knowledge needs of the target audiences for the program, and a nuanced understanding of the adoption context for those intended end-users’ (Campbell & Schofield 2007,
The Knowledge and Adoption Strategy (2007), produced by L&WA emphasises the processes that maximise the likelihood of generating new knowledge and incorporating this into the end users’ world view. Notwithstanding the importance of process in achieving this, language deployed within the processes can facilitate or impede the process itself. This study contributes to this ‘continued learning’ in agricultural extension through an enhanced understanding of the needs of the target audience.

The third area of significance relates to the process of adoption and ways of studying it. This study has trialled a means of ‘listening’ to the extended reflections about agents’ interactions to identify the discourses of the PFP. That is, it provided insights to a journey of adoption that is understood to be opaque, subjective, practice specific and ongoing (Wilkinson 2008). The discourse analysis techniques used in the study are anchored to the PFP setting. Thus, the patterns of meaning are taken from the communications that occurred in the performance of the PFP. The different roles that agents performed are therefore combined to result in a multi authored story.

1.6 Thesis in Overview

The research is reported in the eight chapters. The first chapter introduces the topic and sets out the research logic. Chapter two covers the literature reviewed for this study and presents the theoretical framework that guides the research process. Chapter three explains the PFP case study and introduces the reader to the motivations and ambitions held by agents of the project. Chapter four outlines the research design and implementation steps used in the study and explains the conduct of the study. Chapter five presents the findings of the first two analyses. The first is the Storyboard technique which identifies the PFP public narrative and the second is the Plot Analysis which identifies the farmers’ narratives. Chapter six presents the findings of the Dryzekian discourse analysis that explores the assumptions that underpin the narratives forming discourses of the PFP. Chapter seven explores the utility of the discourses and how they were reproduced by the actions of agents. Chapter eight presents the conclusions of the study. This is presented in two sections. The first section summarises the research findings according to the research objectives and focus questions. The second section presents the implications of the findings for extension practice, research and policy.
2 Literature Review

2.1 Introduction

The purpose of this chapter is to review the wide range of literature relevant to an understanding of uneven participation in agricultural innovation projects that seek to support the adoption of sustainable farming practices. This literature may be divided into four sections. The first of these is the literature on the degradation of land and water resources in Australia and the second, explores the response of governments to the situation. The third section examines the development of agricultural innovation and adoption methods. The final section outlines the approach that has been selected and developed for undertaking this thesis. This approach explores the relationship between meaning-making in the PFP and recognises role discourse plays in shaping human actions, for example, in relation to participation and adoption of innovations.

2.2 Land Degradation and the Rise of Sustainable Farming Practices

2.2.1 History

Land and water degradation from agricultural practices has created serious environmental problems in Australia (Australian State of the Environment Committee 2001; Commonwealth of Australia 2006b; ABS 2007; Victorian Catchment Management Council 2007; Commissioner for Environmental Sustainability Victoria 2008; OECD 2008). These problems have been traced to the removal of vegetation and the introduction of European livestock into the Australian landscape, which began in the 1800s. This set in train a cascade of interconnected processes which impact beyond the farm boundary even today (SCARM 1998). The most prominent of these processes are: erosion, soil salinity, soil structure decline, siltation, water quality decline and vegetation and biodiversity loss. Collectively these processes are referred to as land and water degradation. These problems have been exacerbated by other pressures on the environment, such as invasive species, urbanisation, mining and climate variability (OECD 2008 ). The primary interest of this
thesis however is with agricultural pressure on the environment and the promotion of conservation farming practices to ameliorate this.

Early responses to land degradation from agriculture were shaped by Australia’s reliance on the agricultural sector to deliver social and economic outcomes. Thus, successive governments encouraged the intensification of agriculture and rural population growth through a number of closer settlement schemes (Lockie & Bourke 2001). Unfortunately, social and economic hardship marked many of these settlement schemes. This was a result of under-capitalisation, variable rainfalls and fluctuating prices which made farming difficult. One of the responses to this was to introduce tariff protection and collective marketing schemes to stabilise agriculture (Dovers 2000). However, by the 1980s, the protectionist policies had been disbanded and the agricultural sector was exposed to globalised markets (OECD 2008). Together with the declining yields as a result of land degradation, this led to pressures to change the productivist ‘business as usual’ approaches to agriculture that had dominated until the 1970s. This trend was accelerated by a growing concern for the environment among the Australian public (Cork & Delaney 2005) and laid the foundation for a more conservation-minded agriculture.

These changes reflect the history of changing attitudes to the Australian environment. Heathcote (1972) and Fien (1988) have described this history in terms of a number of visions of the environment: the Aboriginal vision, the pioneering vision, the national development vision, the management vision, and the ecology vision.\(^4\) The Aboriginal vision reflects a mythological and functional regard for the environment. The land provided food, clothing and shelter and was created by ancestral beings, with supernatural powers. These ancestors still live in the environment in spiritual form, continually generating life. After the arrival of Europeans, a pioneering vision informed by their agrarian-industrial culture evolved. For these people the environment needed to be ‘improved’ to look like English countryside, and was deemed valuable only insofar as it was productive. A national development vision emerged in the second-half of the nineteenth century and prevailed

\(^4\) While described here as linear, elements of all visions may be identified at different periods. See Heathcote (1972) and Fien (1988) for details.
until the end of the Second World War. This vision grew out of the pioneering vision in that it also retained an emphasis on opening up the land and exploiting available resources. However, the expression of this had a developmentalist basis in the expansion of railways and large irrigation schemes that were an expression of the promise to populate the interior of the country and provide virtuous work for people on farms (Hutton & Connors 1999). The grandiose schemes floundered on economic instability over the 1930s although ideas of a rural utopia that motivated them had taken hold (Cranston & Zeller 2007). It was also during this time that a pride in the Australian landscape and a ‘bush’ culture developed (Heathcote 1972). For example the stories of ‘Dad and Dave’ in 1899 and a succession of films by Charles Chauvel, such as ‘Heritage’ and ‘Sons of Matthew’ in 1949 were popularist constructions of bush culture, depicting life on the land as a noble penury and nature as unyielding (Cranston & Zeller 2007).

Following the Second World War, a management vision emerged to reflect a period of rapid economic growth. Elements of the national development vision remained in that economic growth was based upon the exploitation of natural resources such as forests, minerals, and water and soil nutrients. The benefits of agricultural research emerged at this time. The introduction of myxomatosis controlled rabbit numbers and allowed for an increase in stocking rates while mechanisation opened up new tracts of land for cultivation, thus expanding the scale of farming (Laut 1988). This period saw the introduction and development of new species of plants and animals, and the expanding use of pesticides and fertilisers, which promised a productive agricultural future (Laut 1988). At the same time foreign investment in mining and rapid technological development caused ‘progress’ to intrude into new and once remote places. Land development schemes, tropical forest destruction, coastal sand mining and the flooding of Lake Pedder for energy production intensified environmental concern, particularly in urban Australia and transformed the social environment of both rural and urban Australia (Hutton & Connors 1999). The fifth vision, an ecological one, emerged from these changes in social attitudes. This vision has more in common with the Aboriginal vision in that it regards people and the natural environment as one, and questions whether the environment should be perceived solely in
terms of resources to be exploited for economic growth in order to raise material standards of living (Fien 1988). The drive for sustainable agriculture emerged from this vision.

Holmes (2006) provides a similar account of the cultural evolution of Australian landscapes by identifying seven ‘modes of occupance’ based on different human uses of rural space. These are described as: productivist agricultural, rural amenity, small farm, peri-metropolitan, marginalized agricultural, conservation and Indigenous. According to Holmes, the shift between modes has been driven by cycles of agricultural overcapacity, the emergence of a non-agricultural amenity in rural areas, and a growing societal awareness of sustainability and preservation issues. The seven modes of occupancies and five visions of the environment are ways of understanding the patterns of transition and heterogeneity in the Australian landscape. However, the mix of productive and marginalized agriculture, which has dominated Australia’s use of the landscape until quite recently, is now shifting to accommodate an increasingly complex mix of land uses (Barr, Read & Sturgess and Associates 2004). The social and environmental implications of this increasing heterogeneity are reflected in the challenge for the agricultural sector and governments to respond to the demands of sustainability.

2.2.2 Sustainable Agricultural Practices

The problems of land degradation and changing societal expectations have brought about significant changes in farm management. Australian agriculture operates in a difficult natural environment with high levels of risk from natural climatic hazards (Australian Bureau of Statistics 2007), on soils with low fertility, poor water holding capacity and being prone to erosion in the presence of invasive non-native species (OECD 2008). Agricultural activity occurs on nearly 60% of the Australian landmass with livestock grazing accounting for 57% of this (OECD 2008). Since 1990 the average farm size has increased by 23% while the number of farms fell by 25% (Productivity Commission 2005). These numbers reflect the struggle to remain profitable. A New South Wales farmer describes the reality of this struggle:
Each year it should be the goal of every producer when doing their budget, to reduce costs of production. And each year your costs of production need to be less than the year before. If you don’t think you can do this then you can actually plot on a piece of graph paper the day you will go broke. (Litchfield 2006, p.176)

The struggle to reduce the costs of production has been matched by the need to simultaneously increase production. This has resulted in an increase in agricultural productivity (23% from 1990-92 to 2000-4), which has helped to offset the deteriorating terms of trade and kept agriculture’s contribution to GDP in Australia at a relatively stable 4% for the last decade (OECD 2008).

Despite the harshness of these economic realities, the devastating environmental impact of productivist agriculture has increased the need for the sector to develop more benign or beneficial practices. This area is subject to ambiguity and misunderstanding because concepts used to describe these practices, such as ‘sustainability’, ‘sustainable agriculture’ and ‘best management practices’, are normative, value laden concepts with multiple meanings (Webb et al. 2004). At its most basic, however, the term ‘sustainability’ refers to those agricultural innovations and management practices that conserve the natural resource base (SCARM 1998). Farmers often speak of the need for farming to also be economically sustainable also. This is because farms are businesses and profitability matters. While profitability depends on many factors, research on wool production, for example, indicates that most (80%) of the variability in the returns to equity is the result of price variability (Counsell & Vizard 1997). This is an external business risk that cannot be addressed by introducing more sustainable farm practices. Moreover, sustainable practices or management systems are unlikely to show a benefit to farm profitability in the short to medium term. Indeed, not only do they take many years to yield benefit, many benefits may only be accrued further down the catchment (i.e. off-farm). As a result, in agricultural terms, the concept of ‘sustainability’ must encompass the need to be economically viable, as well as meeting the needs for food and fibre in an environmentally benign way. As these objectives can be achieved in many different ways, sustainable agriculture is regarded by researchers as a flexible response to the demands for food and fibre production and the need to protect soils and water (Cary et al 2002, p.5).
The ‘National Collaborative Project on Indicators’ has developed a list of sustainable management practices for Sustainable Agriculture (Dore 1997). These include: the maintenance of soil cover, the application of fertiliser to pastures, the retention of vegetation along stream frontages, the control of pest and weeds, and the use of deep rooted perennial pastures (Cary et al. 2002). Specific practices have also been identified for different types of farming. For example, sustainable practices for cropping enterprises include: reducing tillage, stubble retention, and the use of crop or pasture legumes in rotations (SCARM 1998). For dairy enterprise, these include the use of effluent disposal systems and effluent disposal to pasture. While all such practices provide a useful measure of performance, the application of different practices is, necessarily, context specific. For example, fertilising pastures will build soil fertility, but unless streamsides are revegetated, this could lead to nutrient leaching into waterways, which is detrimental to water quality. A further complicating factor is that sustainable farming practices often need to be adopted at a regional or at least catchment scale. This means that a single farm with a committed individual implementing extensive works and management systems to address environmental issues serves as an inspiration to others but cannot necessarily change catchment problems.

As a result, an emphasis on practices to meet a definition of sustainability has proved problematic. A sustainable state of resource management is not a fixed or steady state. Rather it is a ‘shifting target’ that is easier to assess in hindsight than it is to project the impact of a practice into the future (Wilkinson & Cary 2002). In addition the relevance of particular practices are localised, specific to enterprises and time sensitive as the benefits may take many years to emerge.

2.3 Response of Australian Governments

There had been 100 years of cumulative land degradation, intensified by droughts and floods before governments were moved to respond early last century. In Victoria, the pressure to act was said to have been triggered by a 1938 inquiry into the incidence soil
erosion in the State (Victorian Government 2007). The report documented massive soil loss across the state.

There is no doubt that, since the occupation of this country by human beings, and more particularly, since the advent of the white man, the erosive action of nature has been greatly accelerated. This was only to be expected when a new country was being rapidly developed, and its natural resources exploited in order to support the increasing population - without regard being paid to the menace of accelerated erosion which was not then appreciated. (Soil Erosion Committee 1938, p.2)

This report became the impetus for the Soil Conservation Act, the Soil Conservation Authority and the establishment of regional advisory committees. By today’s standards the commitment to these issues was minimal; however it did set a template for future government involvement in natural resource management. Since this time, the scale and nature of governments’ involvement has changed. This is discussed in the following two sections

2.3.1 Nature of Natural Resource Management

Responsibility for environmental policy is shared between the six state governments and the Commonwealth. While all the states have ministers and departments responsible for the environment, each has a different administration as a consequence of political and historical factors (Gilpin 1980). Eventually this changed. In 1971, a federal portfolio of the Environment, Aborigines and the Arts, became the first indication of a possible coordinated national response to the environment. After a change of government the following year, a separate Department of the Environment was created. This was part of the Whitlam Government’s reform program, which included the dismantling of agricultural subsidies that had built up over the previous two decades. This has been described as a paradigm shift for the agricultural sector and coincided with the end of ‘agricultural exceptionalism’ in the United States, (Skogstad 1998, p. 473) and Australia (Argent 2002, p. 106).

Agricultural exceptionalism holds that the farming industry is different to other economic sectors. This is premised on the understanding that farmers are subject to weather and commodity price vagaries, and are therefore a special case. In addition, an understanding
persists that the boarder national interests are served by the agricultural sector (Daugbjerg & Swinbank 2006). Agricultural exceptionalism is characterised by favourable institutional, economic and policy settings. In Australia, agricultural exceptionalism was dramatically superseded by an ideology of economic rationalism (Cocklin & Dibden 2005). This reordered the economic and social environment through trade liberalisation policies, the removal of trade barriers and the dismantling of statutory marketing arrangements (Argent 2002).

The paradigm switch to a less favourable operating regime, took place at the same time that the broader community had begun to show concern for environmental issues, with implications for the delivery of natural resource management programs. Landcare, was one program that became an expression of community action for the environment (Landcare Australia 2008). The rise of Landcare coincided with a rapid downturn in the rural sector in the 1990s, which occurred in a climate of diminishing institutional concern for the farm sector. The response was to actively promote the virtues of self-reliance which complemented one of the core ethics of Landcare: volunteerism (Lawrence 2005).

The volunteerism approach suited the times, but some have argued, it simply allowed government to devolve its responsibilities to regional communities (Lockie & Higgins 2007). In so doing, governments could avoid the implication that the problems the communities were struggling to address had roots in 200 years of unintended consequences of federal policies for national development and (Vanclay & Lawrence 1995).

The shift to communities and individuals also implied that sustainability could be understood as an economic problem to be addressed through improved business management (Higgins & Lockie 2002). Another criticism is that a volunteerism approach did nothing to motivate change (Vanclay & Lawrence 1995). One of the tenants of volunteerism expressed in the Landcare movement was ‘land stewardship’, a reference to a deep attachment between farmer and the land. Although the land stewardship ethic resonates with many farmers (Curtis 2000) it has been found to fail to motivate people to change to farm practices (Barr & Cary 2000).
Nonetheless, the practice of natural resource management in Australia has been influenced by the acceptance of volunteerism as expressed in Landcare. This can be seen in the evolution of approaches to natural resource management shown as a timeline in Table 2.1.

The timeline is sectioned into decades across the top and categories on the left side. The first category ‘government emphasis’ summarises the national agenda with respect to natural resources. This shows that in the 1950s, a period of government support for agricultural productivity prevailed and an authoritative style of science typified the agricultural extension services. In the 1970s, as community concerns for environmental issues became more apparent, the extension services responded by assuming a knowledgeable, solution based approach. By the 1980s, in the face of the multiple challenges arising from environmental degradation and community concern for environmental issues, the extension style shifted to a participatory approach in which sustainable development and the encouragement of social capital, that is a shared responsibility between community and governments, became part of the extension model (Lawrence 2005).

**TABLE 2.1: TIMELINE OF NATURAL RESOURCE MANAGEMENT**
(Adapted from Cork and Delaney 2005, p.37)

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<tbody>
<tr>
<td>Gov. emphasis</td>
<td>Age of possibilities</td>
<td>The 'Lucky Country'</td>
<td>Emergence of environmental issues and community concerns</td>
<td>Natural Resources Management</td>
<td>Ecologically Sustainable Development</td>
<td>Complex interdependencies</td>
</tr>
<tr>
<td>Place of science</td>
<td>Authoritative Science</td>
<td>Science has answers</td>
<td>Science is part of the answer</td>
<td>Limits to science</td>
<td></td>
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<tr>
<td>Ideology</td>
<td>Agricultural Exceptionalism</td>
<td>Economic Rationalism</td>
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<tr>
<td>National goal</td>
<td>National development (1900-1960)</td>
<td>Modern environmentalism</td>
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<tr>
<td>Demographic</td>
<td>Suburban growth</td>
<td>Communities</td>
<td>Urban renewal</td>
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The evolution of natural resource management shown in the timeline depicts an increasing expansion of agents and issues included in government emphasis toward the environment. By the turn of the century environmental issues had moved from an early concern in the 1940s with soil erosion, to the connection of soil erosion with tree decline in the 1980s, to a concern now with ethical and moral judgments on resource use. The growing awareness of the complexity and scale of the issues coincides with an ideological shift from economic rationalism and an emphasis on self-reliance to a socially contexted interpretation with less prescriptive responses. This, in turn, led to an increasing use of participatory approaches for program delivery and research. Participatory approaches have an inclusive ethos of shared goals and agendas underpinned by a respect of iterative learning and research loops (Ashby 2003).

As a result of this change there are now more extension staff working as facilitators, (focused on group cohesion and action), than as technical experts, (focused on productivity) (Coutts, Roberts, Frost & Coutts 2005).

This shift to a social interpretation in the evolution of natural resource management approaches has recently attracted criticism. From a practitioners’ perspective, it has been noted that program sponsors have attempted to control the processes by which stakeholders arrive at a consensus or agreed outcomes. While this is useful in providing stable benchmarks for evaluating outcomes, it has had the effect of obscuring the concept of sustainability behind rhetoric of unity (Wallace, 2003).

In a similar vein, but at a more strategic level there has been recent criticism of the regional model has permitted devolution of federal response natural resource management delivery which was intended to capture local level participation in policy. The regional model is one of the most significant institutional changes in recent years and a recognition of the wide public concern for the environment and its management (Beeton, Buckley, Jones, Morgan, Reichelt & Trewin 2006). However one of the criticisms of the arrangement is that the rhetoric of inclusive planning and community involvement is over shadowed by the federally determined measures of accountability. The effect is to marginalise the very
people in the catchment regions who were encouraged by the rhetoric to become involved (Marshall 2004).

### 2.3.2 Scale of Natural Resource Management Activity

Federal financial support for the environment has recently escalated. Beginning frugally in 1976/77 with Commonwealth grants of $400,000 to 23 voluntary conservation bodies (Gilpin 1980), it grew to billions of dollars during the 1990s. In 1993/94, the federal government committed M$830 to the National Landcare Plan. By 2008, $3.4 billion had been invested through the two flagship funds: the Natural Heritage Trust and the National Action Plan on Salinity and Water Quality (Commonwealth of Australia 2008).

Over all, the on-ground activities and social capacity building programs associated with these escalating investments have contributed to impressive rates of adoption of more sustainable farm practices. Nearly half of all broadacre farmers are now part of a Landcare group, membership of which is demonstrably linked to increased adoption of sustainable management practices (Hodges 2006). Engagement in natural resource training activities in general is linked with adoption of changed farm practices (Australian Bureau of Statistics 2006). The same report noted that Australian farmers, on average, spend about 9% of the estimated value of agricultural operations on Landcare related works.

These changes reflect the general patterns of adoption of the practices and management systems considered necessary to minimise and ameliorate land and water degradation. The promotion of these changes to the agricultural sector is the subject of the next section.

### 2.4 Agricultural Innovation and Adoption

This section will describe the adoption of changed farming practices to address environmental issues and promote sustainable land use. It will discuss the issues surrounding the adoption of changed practices and provide a view of extension approaches in Australia.
The types of practices that are considered to address environmental issues range from organic farming without chemicals to high input farming with modifications. Australia has taken the high input model to focus on maintaining or improving productivity and minimising the impact on the environment (Tonts 2005). This includes practices such as, minimum tillage and rotational grazing to retain soil cover, removing land from production to create buffers, and restoration of land through revegetation.

2.4.1 Definition of Adoption

Adoption is not easily defined. It refers to the process of someone hearing about a new practice and then their moves to implement, modify or trial the practice (Wilkinson 2008). Wilkinson has observed six types of adoption: (i) step wise (ii) partial (iii) niche (iv) complete (v) dis-adoption, and (vi) a paddock-by-paddock basis. From this he concludes that adoption is a fuzzy term for a continuous process. There is no point of adoption. This presents a conundrum for project sponsors who seek to claim the benefits of an intervention.

Non-adoption and partial adoption are frequent outcomes of the process of adoption (Pannell, Marshall, Barr, Curtis, Vanclay & Wilkinson 2006). This is because the amelioration of land and water degradation is contested. The farmer is not a passive recipient and non-adoption may be the best outcome. Indeed, non-adoption is not the cause of the land and water degradation present today. For example, it was the adoption of some of the past recommendations, such the inclusion of subterranean clover in the pasture mix and superphosphate that has created the soil acidity problems in some regions today (Wilkinson & Cary 2002).

Adoption and the practice to be adopted are linked so that an understanding of adoption processes requires an understanding the human dimension and the relative value of the technology or practice to be introduced.
2.4.2 Factors Affecting the Success of Adoption

The factors affecting the success of adoption process are perceived to be essentially about the human dimension and the technology or management practice to be adopted (Pannell et al. 2006). The human dimension includes learning processes, social context, the goals of the farmer and family, and perceptions held toward the innovation proposed. The technology to be adopted must be superior in some way to the existing technology. For farmers to perceive whether or not this may be so they require time to trial and experiment with the technology, building confidence to make modifications. This is understood to reduce the risk of change. Both aspects interact so that issues of trust and credibility are central to reducing uncertainty through learning and communication and increasing knowledge through trialling of the new technology (Pannell et al. 2006).

There are many factors considered important to the adoption on changed practices. For example, experience with the introduction of no-til cropping in Western Australia found the following factors were important: higher education level of the farmer, involvement of a farm consultant, years since the farmer had been aware of the practice of no-til, the advent of a dry year, a reduction in the price of glyphosate (a herbicide essential in a no-til regime). Those factors found not to be important were: the promise of soil conservation benefits, the possibility of lower risk of soil erosion and involvement in a Landcare group (Pannell 2008). The importance of factors changes as the practice or innovation studied progresses. Each new technology or practice has its own adoption story.

2.4.3 Extension Experience

Extension is the vehicle that delivers support and encouragement for the adoption of sustainable farming practices. Extension has been described as ‘capacity building in individuals and communities’ (Coutts et al. 2005, p. 1). The activities of extension are designed to induce considered change in behaviour by increasing a community or an individual’s stock of awareness and knowledge. Australia’s extension practitioners have formed a group known as SELN, the State Extension Leaders Network. This group describe their activity as ‘the process of enabling change in individuals, communities and industries
involved in the primary industry sector and with natural resource management’ (State Extension Leaders Network 2008).

The process of enabling change is fits four main strategies. They are the (i) ‘top-down’ transfer of technology approach, (ii) participatory ‘bottom up’ approach, (iii) one-to one advice and (iv) formal education and training. Since the 1980s there has been a change in extension ideology away from the ‘top-down’ technology transfer, to extension methodologies that emphasise information flows, adult learning principles and participation by stakeholders (Röling 1988; Chamala & Keith 1995; Black 2000).

The ‘top down’ approach was the dominant model of agricultural extension from the 1960s (Rogers 1962). This model entails the application of scientific research and new knowledge. During this period the conventional model of extension was known as the ‘diffusion’ model. This focused on those farmers thought to be potential ‘early adopters’ in the expectation that their practices would be copied by their peers. The model divided farmers into various categories according to their perceived receptiveness to adopt a new practice (Black 2000). It is largely discredited for not acknowledging farmers experience, assuming farmers are a homogenous group and for ignoring the political and social context in which people operate (Black 2000; Vanclay 2004). The evolution of extension strategies follows a similar pattern to that depicted for natural resource management approaches shown in Table 2.1.

The architect of the theory of Diffusion of Innovations, Everett Rogers, noted during the 1990’s that a fundamental shift had occurred in the practice of extension. He revised his model of adoption to a ‘convergence’ model that recognises a ‘multi-authored’ communication process between farmer and scientists (Rogers 1995). The convergence model seemed to be an attempt to merge other theories of extension that arose in the 1980’s, without advancing its application with new insights.

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5 This is discussed further in Chapter 3 p 61
The new theories were referred to as the ‘bottom up’ approaches. They differed from the traditional approach by placing farmers at the heart of the change process. This led to the development of ‘farmer first’ approaches to extension (Chambers et al. 1989) followed by other system approaches. The system approaches were process oriented, and so acknowledged that extension was not about removing barriers to adoption but equipping people to cope with change. The key to these approaches was engendering ownership of the problem thorough the processes of engagement. The Agricultural Knowledge and Information Systems (AKIS) was one such system (Röling 1988) expanding the issues by considering that a farmer’s social and farm physical systems involve others. This integrates the social and physical, ethics and profits, which constrains and shapes farmers decisions. Röling called for an understanding of the interaction between actors and agencies in these systems to facilitate the two-way communication required. This means that people must come together to build the platforms for shared learning that permit an exploration of the multiple perspectives on the problem and find a way to negotiate a collective path forward (Röling & Wagemakers 1998).

These systems are typically inclusive and reflexive approaches that typify the PFP project model. In the PFP the farmer was regarded as an equal partner in the process of change and social processes were understood to be important to sustaining an enduring change in practice. Now, participatory approaches and action learn have emerged as a logical extension of the systems approach. They aim to develop social capital and build community and individuals capacity to respond to change (Coutts et al 2005).

While the early ‘bottom up’ approaches were criticised in the 1990s for relying too much on farmers to solve problems they have never encountered before (Vanclay & Lawrence 1995), the more recent approaches relying on processes to reach consensus at community level are also criticised. Agents are understood to have differential access to resources and support (i.e., stakeholders are not equal), (Gray, Dunn & Phillips 1997), which leads some groups to suppress conflict or diversity (Carr 1997, p. 209). Dovers (2000) predict that multiple methodologies will be used more frequently as agents understand that there are many explanations and no certainties in understanding natural systems.
Indeed others have found this to be the case. The legacy of the development period of extension theory development is apparent today. In Australia five main extension strategies have been identified (Coutts et al. 2005). They can be traced to the theories of extension developed over the last thirty years. These are (i) group facilitation, (ii) technological development, (iii) learning model, (iv) information access, (v) consultant model. The group facilitation strategy aims to raise participants’ planning and decision-making skills. The technological development model is solution focused to specific technologies or management practices. The learning model is the use of education or training programs. Information access model refers to the centralised (online) provision of information and the consultant model is the one-to-one relationship between the consultant and community or individual.

Now, project sponsors are engaged in multiple strategies. It appears that early models of extension theory are not retired, rather, realigned to meet the circumstances. For example, activities for group facilitation were found to include learning for targeted training. This is a traditional ‘transfer of technology’ learning model within a participative project (Coutts et al 2005). Other researchers have described this as pluralism, as the theories, methods and tools of extension are harnessed to meet a more diverse client base (Pannell 2008). The challenge for the practitioner is finding the appropriate process for the situation (Fulton, Fulton, Tabart, Ball, Champion, Weatherly & Heinjus 2003).

This section has described the evolution of extension theory that began with linear technology transfer and has diversified into multiple strategies of extension in use today. This development mirrors the evolution of natural resource management responses described in the previous section to have expanded into collaborative approaches. It has been described as a paradigmatic shift from teaching to learning, transfer to participation, passive to active and individual to social as agriculture moved from knowledge that was tangible to recognising multiple realities that are socially constructed (Allan 2005, p. 6). The existence of a ‘multi authored’ communication between agricultural scientists and the farmer and appreciating the co-production of knowledge that results from this interaction, has served to highlight an enigma. That is that peoples’ stated concern for the environment
does not necessarily translate into behaviours that reduce their impact (Kollmuss & Agyeman 2002). This has confounded our understanding of the journey of adoption and is the topic of the next section.

2.4.4 The Environmental Enigma

The ‘environmental enigma’ (Lawrence et al. 2004) is a term coined to describe the situation where, despite national attention, awareness and concern, the problems of land and water degradation, at most scales, are still evident (Coutts et al. 2005; Beeton et al. 2006). From the perspective of extension practice this was problematic. Despite the advances in delivering support for the adoption of sustainable practices it had been noted that there is a reluctance to implement practices inconsistent with an individual’s goals (Barr & Cary 2000; Reeve 2001; Marshall 2004; Vanclay 2004; Pannell et al 2006).

The environmental enigma is a signal that articulation of goals is problematic. This has been touched on in Chapter 1.2 where I describe three explanations for the ambiguous and non-linear nature of the journey of adoption. Evidence for this has been found in the agricultural extension environmental. The gap between stated concerns and resulting behaviour to ameliorate environmental problems is known to be weak and cannot provide the necessary insight to adoption behaviours (Lawrence et al. 2004). Researchers have noted that almost any parameter that can be measured has been found to correlate positively with adoption (Curtis et al. 2001; Curtis 2008). Hence money, social approval, practices which are consistent with personal integrity and meeting a balance between work and leisure, all rate positively with adoption. These are uniquely individual parameters and belie a universal set of parameters to predict the outcome of an adoption program.

The enigma defies simplistic input-output models of adoption which is why this study has focuses on a sample of the web of connections linking farmers to the land that was identified in Figure 1.2. Likewise, in the field of adoption practices three broad approaches have emerged. These are focused on cultural understandings, economic circumstances and the features of the innovation to be adopted (Cary et al 2002). There has been increasing
interest in the cultural approach, traced to the explosion of participatory extension practices in natural resource management as discussed in the previous section (Chapter 2.3.1).

A cultural approach takes the position that the decision maker is part of complex network of family and social groups that influence the process of adoption; the avenues for research are extensive. Generally the work seeks to identify features of the person and their social world, which are significant in terms of adoption (Cary et al 2002; Pannell et al 2006; Pannell 2008).

Two models of behavioural change have been used to contextualise an individual’s behavioural choices with broader social influences: the Land Management Appraisal model (Cary et al 2002), and the Theory of Planned Behaviour (TpB) (Ajzen 1991). The Land Management Appraisal model (shown in Figure 2.1) describes the adoption process. It shows how macro and individual scaled influences such as global economic factors and belief systems, combine to influence behaviour. This work has been used as an explanation of the complexity of adoption processes (Cary, et al. 2002; Fenton, MacGregor & Cary 2000; Webb et al. 2004). The model shows the flow of influence and counter influence, depicted by the arrows. It can be seen that the process of adoption is not a sequential or step progression, but that the inputs, outputs and outcomes co-exist and redirect influence back into the system. For example the goal of sustainable land management is likely to be informed and reshaped by influences outside the specific topic of conservation farming practices.
The model is useful as a description of the process of change but the heart of the model, which they describe as the ‘black box’ remains mysterious. The model does not hint at the processes that may be involved in ordering and sorting the inputs to the system.

The second model does try to get inside the black box. Theory of Planned Behaviour (TPB) was developed by social psychologist, Icek Ajzen and found application in psychology and health as well as in environmental behaviours (Ajzen 1991). The TPB model describes factors that are regarded to underpin behavioural determinants: attitudes, subjective norms, perceived behavioural control. Attitudes are formed from an analysis of the expected value and outcome of behaviour. Subjective norms are balanced by expectations of an individual’s particular referent group and the individual’s motivation to meet expectations of that group. The perception of volitional control balances the belief an individual holds about the factors which obstruct or enhance their chances of actually performing the behaviour with their perception of their own ability to overcome such factors. This is shown in Figure 2.2.

![Figure 2.2: Model of Planned Behaviour](From Ajzen 1991)
This Model of Planned behaviour locates the factors that lead to action in the adopter’s mental framework which as a whole is an action driver. It cannot capture the whole story as habit, impulse, and other components of the ‘iceberg’ framework for thinking also drive action (Doppelt 2008). The model is however an advance on the progressive scaling up, or acquisition of knowledge and awareness which has been used to describe the process of change. A well known change model by Rogers describes the innovation decision making process as:

the process through which an individual (or other decision-making unit) passes (1) from first knowledge of an innovation, (2) to forming an attitude toward the innovation,(3) to a decision to adopt or reject, (4) to implementation of the new idea, and (5) to confirmation of this decision (Rogers 1995, p. 161).

The five stages chart a progression of activities sequentially encountered during the adoption process. Seligman in instead argues that a different perspective of the adopter’s mental mechanics would provide better insight to the complexity of the change process. This is where change takes place - at the cognitive level, in the mechanics of thought.

<table>
<thead>
<tr>
<th>Individual Decision Making Stage</th>
<th>Sensemaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>• Need-based identity construction</td>
</tr>
<tr>
<td></td>
<td>• Pursuit of stimuli to mentally frame technology and adopters</td>
</tr>
<tr>
<td>Persuasion</td>
<td>• Plausibility belief construction to frame possible outcomes of adoption or rejection</td>
</tr>
<tr>
<td></td>
<td>• Reconstruction of identity to reinforce or resist adoption</td>
</tr>
<tr>
<td></td>
<td>• Seeking of social guidance/reinforcement for decision</td>
</tr>
<tr>
<td>Decision</td>
<td>• Actions that can be identifiable as adoption or rejection, leading to enactment of environment</td>
</tr>
<tr>
<td></td>
<td>• Partial or vicarious trial adoption enables retrospection</td>
</tr>
<tr>
<td>Implementation</td>
<td>• Much stimuli from experience with the technology</td>
</tr>
<tr>
<td></td>
<td>• Reinvention through evolutionary sensemaking</td>
</tr>
<tr>
<td>Confirmation</td>
<td>• Reinvention through evolutionary sensemaking</td>
</tr>
<tr>
<td></td>
<td>• Action and retrospection lead to confirmation or disconfirmation at all stages of the decision making points.</td>
</tr>
</tbody>
</table>

(From Seligman 2006, p. 115)
Seligman’s (2006) work compared the adoption of IT systems in a workplace with Rogers’ five stage decision frame, not agri-innovations. However he makes the point that the journey of change is subjective: a cyclical process of taking action, extracting information from stimuli resulting from that action, and incorporating information and stimuli from that action into the mental frameworks that guide further action. The unknown or new frontier exists in people’s heads.

Entering this frontier to study an actual change situation has not been encouraging for complex sets of behaviour. The predictive capability of Azjen’s TPB model has been tested in a study of riparian management along a section of the Fitzroy River, Queensland. The study examined intentions to manage riparian zones and the beliefs people held regarding these intentions (Fielding, Terry, Masser, Bordia & Hogg 2005). The researchers found that farmers with strong intentions to manage their riparian zones differed significantly in terms of their belief compared to landholders who had weak intentions to manage their riparian zones. People with strong intentions to manage riparian zones were more likely to hold a belief that the cost–benefit outcome would be positive. They would also consider that the activity was appropriate and well supported by the broader community and minimise any obstacles, which might prevent the works proceeding. Conversely, those with low intentions to manage their riparian areas also identified obstacles preventing them taking such works. For this particular task (restoring riparian lands) the pre-existing values played a critical role in the final evaluation of the practice itself. This was regarded as the individual normalising their own behaviours. Norms and beliefs are sometimes only justifications that protect a person from confronting the relationships between self-efficacy, attitude, and intention (Seligman 2006).

However, aspects of complex sets of behaviour, such as the example of specific riparian management activity, did find application for the TPB model. Other researchers have observed outcomes that also support aspects of the model. For example, the term ‘social desirability’ has been used to describe why individuals provide answers, which they believe will meet the researchers’ expectations (Vanclay & Lawrence 1995). The researchers also refer to other examples of respondents seemingly ‘blind-sided’ by their view of landscape.
This has also been called the ‘proximity effect’ (Barr & Cary 2000) and applies when respondents claim that the landscape has always looked the way it does, or that the problems are real but exist only on other people’s farms. Some have noted a fatalistic approach if the issues appear insurmountable (Vanclay & Lawrence 1995). These are social responses that complicate behaviour despite the genuine concern expressed for environmental issues.

A survey confirming this was conducted across the region in which this study is conducted (south west Victoria). The researchers found that the values held by individuals did influence their perception of sustainability issues (O’Toole, Wallis & Mitchell). The complication resulting from such non-linear outcomes between pro environmental behaviour and action, led to the description of an ‘environmental consciousness’ (Kollmuss & Agyeman 2002). This is a holistic rather than reductionist approach to capturing the processes at play in the journey of adoption of conservation farm practices. The approach in this study is to accept this complexity and understand the process of change as one mediated by both individual characteristics and socio-network requiring the study to accommodate multiple mental frames and perspectives of actors in a social space (referring to the ‘iceberg’ Figure 1.1).

This understanding of uneven participation requires a non-reductive approach to farmer behaviour. Such an approach has been demonstrated by using the stories farmers tell about other farmers (Vanclay et al 2007). This narrative approach has not been applied to adoption behaviours directly but it does offer another entry to the life world of a farmer. Its usefulness is that it effectively by-passes references to beliefs, land stewardship and sustainable farming to allow stories, or as the researchers have described them, scripts and parables to transmit meaning. The scripts are like urban myths; well known and told as though from direct experience. Through the transmission of these stories a person can tell others what sort of farmer he or she is and also learn, through cautionary tales, what sort of farmer fails and progresses. This both creates and reproduces different types of farmers in a generalised culture of farming. This approach is a non-prescriptive way to explore farmer
behaviour. It does not impose a focus or identify what is considered to be farmer behaviour but rather works with the material participations provide to detect patterns of interaction.

In another approach, from the field of agricultural development interventions the issue of actor diversity and differential outcomes has also arisen. This led to a focus on actor lifeworlds and the intervention as an interlocking of groups of actors to a contest on a ‘battlefield’ of knowledge. The ‘battlefield’ conveys an image of a contested arena in which actors’ understandings interests and values are pitched against each other in a struggle over social meanings and practices. The outcome is the emergence of different kinds of negotiated orders, accommodations, oppositions, separations and contradictions (Long 2002). This concept is integral to an actor-oriented approach and acknowledges the existence of multiple realities to question the ontological realism that a ‘real world’ is out there waiting to be discovered. The clues to understand the ‘paradox’ of participatory development are to be found on the ‘battlefield’. This concept is discussed further in the following section.

This section has described three research approaches that attempt to understand the adoption of sustainable farm practices as a culturally shaped process. The approaches represent a way of ‘reading’ the emergent meanings associated with the practice of farming and recognise that these meanings are formed from a flux of influences from diverse domains: cultural, economic and personal.

The focus of this study that interprets the patterns of meaning at the ‘social interface’ (see Chapter 1 Figure 1.2), a conceptual site created for the PFP. The presence of different agents with conflicting perceptions transforms the knowledge at the site to generate multiple perspectives and therefore multiple understandings of what took place.

2.5 An Approach to Explaining Uneven Participation

That uneven participation should occur among participants in agri-innovation projects is not in itself a surprise. Indeed the cultural approaches recognise that there will not be a neat set of universal parameters available to explain adoption outcomes. With the inclusion of
ever more agents in the extension processes and the recognition of contested goals for environment, outcomes have increased the diversity of both people and goals or ambitions so that now the social relations governing peoples’ participation are regarded as important to facilitating change.

They (farmers) are influenced by values and institutions, which embody the norms, ways of doing things, conventions and ‘rules of business’ of the day, and these, in turn, determine patterns of natural resource use and management. Relationships and inter-relationships which stakeholders have with each other and the wider community, generally, reinforce these behavioural norms. Any analysis of behaviour must therefore, address the structure and operations of relationships and ways in which people operate in groups at all levels. This is particularly so given the many externality issues in NRM. (Synapse Research and Consulting and Capital Ag Consulting 2001, p. 2 cited in Kilpatrick 2005, p.3).

One of the ways of operating is to communicate: that is to learn to talk. This is the talk of insiders that signals a connection to the prevailing social network and makes participation legitimate (Smith 2008). While Smith refers to learning communities in his description of active talk he noted that the process of active participation could be hindered in the presence of power relationships that inhibit entry and participation to a community of practice. Dryzek (2005) also grapples with this when he refers to ‘authentic communication’ and the need to find ways to represent the non-human world in the structures of human decision-making. He aims for a form of democratic experimentation to listen to communication. This study has used diversity expressed among the PFP agents as an opportunity to explore the patterns of meaning in communication. This is undertaken by interpreting the communications of the PFP agents as discourses to uncover the talk that gave the PFP meaning.

A discourse approach is useful in this because there are a plethora of environmental discourses, or perspectives on how environmental issues should be tackled. The patterning of this plurality is reflected in the increasing diversity of approaches to natural resource management discussed in Section 2.3.1. This generates an image of a struggle between ideas and perspectives resulting in some ideas becoming prominent and some emerging briefly only to suddenly disappear. This process was used by Foucault to describe
discourses and the struggle between truths (Foucault 1980). The power vested in particular discourses and can be seen in this struggle as agents align with, and give legitimacy to, different discourses.

Struggle is not the only way there is to understanding the process resulting in an ordering and hierarchical pattern of ideas and perspectives. Other contributions to explain how one idea seems to make more sense than another have come from the paradigms, ideologies and narratives. These are ways of making sense of the patterns of meaning and can explain the dominance of a worldviews. For example, Kuhn (1962) argued that scientists construct paradigms, which define the rules as well as the problems for science to investigate. Paradigms, therefore can also define new rules and new problems. An example of this is an understanding of the reasons that a culture of justification of domination of human by other human and of nature by humans has emerged as a dominant force in human civilisation. This was explained by reference to the role of agriculture in generating food surpluses in the civilisations of Mesopotamia, Egypt, Crete, Indus valley and China based on an intensive agriculture which freed some individuals in a society to specialise into religious and political positions or craft and trades (Sunderlin 2003). This created elite in societies who could accumulate power, social status and capital. Sunderlin has used political ideologies to classify approaches to environmental problems. He identified three: class, managerial and individualist ideologies, each one constructing a reality about the environment and what corrections, if any, are appropriate.

Narratives have also been used to understand the meanings of actions of governments, environmentalists and multinational companies. Hajer (1995) examined narratives which he called storylines, to account for policy responses to growing community concern about acid rain. Hajer regarded environmental controversies as an argumentative struggle rather than semi-static play. In this struggle the roles assigned to scientists, industrialists, environmentalist and policy makers mix and change as they try to make others see the problems according to their point of view and in the process to position others in a specific way. He considers that argumentative interaction is a key moment in the formation of discourse and can be traced through the manoeuvring of actors through conventional
understandings, social practices and changing contexts for a specific practice. In this process storylines were instrumental in drawing together disparate elements that could reshape how the problems were understood and therefore what should be done about them.

Hajer has applied his discourse practice to the emergence of a discourse of ecological modernisation to track the changes in the publics’ conception of environmental problems. In so doing he regards discourse as broader patterning that underpins sets of narratives with a specific context. Ecological modernisation theory recognised the ecological crisis as evidence of a fundamental omission in the workings of the institutions of industrial society. Yet unlike the radical movements, this discourse suggests that the problems can be solved in accordance with the workings of the main institutional arrangements of society. Environmental management, according to the discourse of ecological modernisation, is a zero sum game. For example the Dutch policy format in response to acid rain was shown to have arisen out of an apocalyptic discourse, which held that the problems were so massive that they could only be handled in a particular way. While this collected social support it effectively obscured the fact that acidification was an intelligible problem with a few technically feasible solutions. The apocalyptic discourse obscured the scenarios and hindered debate. While ultimately Hajer aimed to develop a process that enabled actors a choice, others have used the presence of conflict and cooperation differently.

For example competition is a conflict which is seen as an exercise in power. Karen Litfin (1994) showed this through a detailed analysis of discourse to reveal the role of scientific knowledge in politics. She traced the development of the policy for ozone mitigation and concluded that the scientific consensus did not automatically inform policy. Rather, the non-linear progression toward a policy was the prism through which the available knowledge passed, therefore pre-empting the resulting policy options. That is, the process was more influential in the outcome than the knowledge used to inform it.

In another use of narratives to explain prevailing worldview Carolyn Merchant describes one, that she regards, has dominated mainstream western culture since the 17th century: the story of the recovery of Eden (Merchant 2003). This is the story of upward progress, of
reclaiming the earth as the lost Eden. The tools of science capitalism and technology have been used to construct the story by converting nature (‘female’) into a garden and civilized society and indigenous peoples into modern culture. The counter narrative challenges this with a story of western decline, as many environmentalists see the loss of wilderness, not as progress, but part of the desecration of women and indigenous people: victims of the patriarchal culture. Merchant calls for a new narrative that brings ‘nature to the table’ and allows natures ‘voice to be heard’ (Merchant 2003, pp. 227-228).

These examples show that some type of order was bestowed on complexity through the dominance of a paradigm, ideology or a particular story about how things should be. The examples also show that a particular perspective can gain legitimacy, so that it seems to be common sense.

The examples however, are broad, representing global issues, and this study is small in scale – a single agri-innovation project. However the broad scale is relevant and has been shown to intersect at the level of an agri-innovation program. This was shown in an examination of the discourses prevalent in the experiences of participants of a stakeholder consultation process in the Northern Forest Lands Council US (Webler, Tuler & Krueger 2001). A discourse approach was used to describe the how participants characterise their experience of this process. The researchers identified five different discourses, which drew on wider ideological discourses such as: democracy, fairness, leadership and conflict. They concluded that the discourses emerged from conflict over the process itself (such as the use of consensus) as well as the goals that they participated in nominating. This slippage between process and goals was considered an important part of the overall process and one that the project managers had not anticipated. For many participants the process was not about the acquisition of skills but about their expectations of an appropriate process having been met.

Worldviews guide behavioural choices (Figure 1.1) and agi-innovations are an attempt to influence choices of sustainable farming practices. Understanding the worldviews of participants to an agri-innovation requires an understating of the conceptual clarifications
they use. A useful analogy for this is a chessboard. The existing order, of chequered squares and chess pieces, are seen as immutable, and solutions to the problems are to be found within this order. The rules of the game must be observed and therefore shape and determine the possible moves one can make. On the other hand those who seek to redefine the fundamentals, to alter the chequered pattern on the board or the way the pieces move are attempting to integrate the problems to the cultural, moral and economic systems (Dryzek 2005). That is, they attempt to overturn the rules and ways of thinking about how things are –to look outside the box. While the fundamental differences in approach have implications for consensus, learning and understanding they also represent an opportunity to find the sense or order that pattern multiple perspectives to confine and enable actors the space to respond.

People are situated within their significant social group, communities or ‘thought worlds’ with their own language and meanings through which they interpret information, events and experiences. This is relevant to adoption behaviours as that the decision to adopt changes is (i) influenced by an individuals perception of how the group perceives the changes (ii) is likely to be resited if it is perceived to negatively affect an individual’s autonomy, status or relationships with others in the group and (iii) the individual behaves differently outside the group (Seligman 2006 cited in Howden 2008, p. 10). As these behavioural decisions are social embedded they rely on narrative as a means of creation and interpretation. Indeed, the meet do makes sense of the constant stream of stimuli is seen as a primary organising process.

When we say that meanings materialize, we mean that sensemaking is, importantly, an issue of language, talk, and communication. Situations, organizations, and environments are talked into existence. (Weick et al 2005, p. 409)

Interactive exchanges of individuals to produce a point of view are brought to life though language. As such, language is a primary device linking meaning and action.

Metaphoric concepts have been used explore the meanings in language. Metaphors have been described as viruses which ‘infect different discursive context and spread meanings’
As viruses, they perform a type of social process that controls the production of discourses. Therefore, following a metaphor is one of the ways to investigate discourse. As an example Akerman unpicks the meaning of ‘natural capital’ a metaphor economist use to shift to a discourse on sustainable development with an ecological dimension. The metaphor is a linguistic device that offered common ground for communication between actors from difference social worlds. Despite this she regards that the use of this metaphor led to the dominance of calculative practices in areas, which had once been outside the realm of economics. That is, it was used to justify attempts to monetarise the value of other species.

In another example, the metaphor, the ‘balance of nature,’ was found to persist despite ecologist understanding that the systems are typified by dynamic states with unpredictable disturbances. Despite the shift by ecologist the metaphor of a ‘balance of nature’, a reference to a universal steady state, has been found to prevail (Jelenski 2005). It implies that the best way to re-establish natural biodiversity is to stabilise ecological processes. This is considered to be unhelpful as peoples’ perceptions of the problems and appropriate solutions are confined by an unrealistic metaphor.

These examples illustrate the power embodied in metaphors, which are used to position and define as legitimate one particular worldview. They do this by attaching implicit meanings of the metaphorical concept to the environmental problem and ‘infecting’ the problem with the concepts. Discourses can be differentiated along the lines of tension and conflict that existed between them. Metaphors are deployed in discourse so the use made of them will lead to the conflicts and lines of demarcation.

John Dryzek’s pragmatic approach to an analysis of global environmental discourses was adapted for this study. Differentiating discourses on the basis of tensions guided a divisionary process which operationalised the discourse approach. The rationale for undertaking this approach was informed by the nature of this study’s data and was used to refine the third analysis technique. This has been explained in Chapter 4.4. John used language to identify the assumptions that differentiate global environmental discourses by
drawing on text from a disparate and eclectic dataset. He used rhetorical devices such as, metaphors, stories of traditional practices, horror stories and reference to rights to highlight the tension and conflict of different worldviews.

While rhetorical devices were Dryzek’s tools of discourse analysis, they differed from those used in a structural linguistic discourse analysis. A structural linguist is concerned with the analysis of sentences and passages of text to reveal the underlying meanings (Fairclough 1999). Mixed datasets do not provide the uniformity required for this type of analysis. The focus on rhetorical devises in Dryzek’s approach helped to aggregate data from different sources. This approach requires a non-prescriptive framework whereby the researcher interprets the text to suit particular research interests (Wetherell, Taylor & Yates 2001). Responsiveness to the data in this way has been identified as important to the conduct of a discourse analysis (Fairlough 1992; Dryzek 2005; Gee 2005).

Similar to the data sets analysed by Dryzek, this study is based upon a disparate dataset. Unlike the global environmental discourses in Dryzek’s work, however, this dataset consists of memos, monthly reports, and minutes of meetings, media stories and reflective interviews with farmers and other participants of the PFP. This is the result of using informal text, produced at different times, for different audiences and purposes. Despite this diversity the dataset is bounded spatially and temporally to the case study. Such non-uniform data sets are a feature of the dynamic nature of adoption as a result of the interplay of multiple influences on decision-making, as well as the uncertainty of ecosystem responses to human activity (Barr & Cary 2000).

Discourses exercise power by orienting people to adopt certain practices valued in certain situations. Audiences are ‘hailed’ or recruited by these value stances as potential ‘authors’ who may adopt those stances (Althusser 1972). In the context of an agri-innovation, discourses can ‘hail’ individuals to undertake certain practices and the continuing interactions and commitments can turn the new adopter into an ‘author’ of the practices. Explanations of social mechanisms which ‘hail’ farmers to adopt different practices have
been provided by research into social norms (Phillips & Gray 1995), farmer identity (Vanclay & Lawrence 1995) and behavioural theory (Ajzen 1991).

The difference between these methods and a discourse approach is that discourse is non-reductive and action specific. Thus a discourse approach does not attempt to isolate a source of influence; rather, it seeks to represent the way participants made sense of their work and explain how some of the meanings became more prominent than others. This is relevant to the understanding of the adoption of changed farming practices, for as Pannell (2008) recently commented in a presentation on adoption change in Melbourne ‘when studying practice change among landholders, it is important to remember that each practice and practitioner has their own adoption story’.

2.6 Conclusion

This Chapter has outlined the scope of the damage caused by agricultural practices and the relationship between agriculture and Australia’s social and cultural development. It has discussed the responses by governments in Australia to address environmental problems. The response has largely been shaped by the promotion of self-reliance supported by an economic rationalist ideology. As a result there is a tension between the encouragement of a productivist agriculture and policies and programs aimed at meeting environmental objectives. This has shaped the approach adopted by natural resource practitioners and models of extension. The long history of extension practice in Australia has developed from a transfer of technical information from scientists to farmers to the more collaborative approaches of knowledge generation and sharing prevalent today. The delivery of these services has been transformed over the last twenty years in response to the growing realisation that the promotion of sustainable farming practices was linked to the relationship between human behaviour and the biophysical environment (Webb et al 2004). Over this same period, responsibility for extension services has expanded from state agricultural departments to a wide range of organisations such as industry, regional catchment bodies, private practitioners and philanthropic bodies (Productivity Commission 2005).
The consequences of this increasingly complex picture of environmental problems has resulted in an increasingly diverse administrative and program response. Over the years a variety of models have been proposed to explain the individual’s learning experience\(^6\). While the models helped identify the relationships between research and the adoption of innovation, and the processes involved in changing behaviour the implied notion of linear progress or compartmentalised learning loops in is often not seen in practice. Rather, the picture that has emerged is one of an evolving journey of innovation adoption with an undefined destination (Wilkinson & Cary 2002). Most significantly, as indicated in Chapter 1.2, researchers have come to recognise that the adoption of innovation is neither linear nor ever complete.

The Chapter concludes with an explanation of uneven participation in which an individual’s behavioural choices are understood to be consequent of their cognitive maps – mental models of *how the world should be*. This is significant as the intervention process is a multi authored interaction where the outcomes are not pre-defined by the project sponsor but the creation of those participating. The ‘battleground’ of intervention therefore is the space in which a cognitive map can be realigned in the process of readjusting to a disjunct between experience and prior expectations. The tensions and conflict arising from this provide the signals about how an individual has made sense of the experience.

The use of discourse in this study is explained to incorporate the multiple terrains of individual, geophysical and operational worlds. Other examples of hierarchies, such as paradigms and narratives, have been discussed. The discourse approach reflects the aim of the thesis, to understand the relationship between discourse and meaning-making in the PFP.

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\(^6\) For Rogers and Shoemaker (1971) proposed a five-stage model consisting of: Knowledge, Persuasion, Decision, Implementation and Confirmation. This was an adaptation of an earlier model proposed by Guba and Clark, the RDDA framework that was defined by: Research, Development, Dissemination, Adoption (Guba & Clark, cited in Achilles 2002).
3 An Overview of the Potter Farmland Project

3.1 Introduction

This chapter describes the Potter Farmland Plan (PFP). The description has been drawn from the documents recovered in the research process, published materials and interviews with research participants. The chapter begins with a background to the PFP to provide a context before describing the PFP in three parts. The first is the genesis of the project, which describes the political background and then administrative context for the project. The second section explains the implementation phases of inception, selection and the work’s program. The third section explores the legacy of PFP from the perspective of the participating farmers, the Hamilton region and the impact nationally.

The PFP aimed to encourage sustainable agriculture by demonstrating the different methods and practices possible. The project was an example of the ‘farmer first’ model of extension emerging at that time\(^7\). The project took place between 1984 and 1988 on fifteen farms in western Victoria. The Ian Potter Foundation (IPF) funded the project with a grant of approximately $750,000. The selected farms were, to various extents, replanned with new fencing with areas re-vegetated. The farms became a platform for extending a message of a land sensitive farming approach and the activity on these farms created intense interest among farmers, agriculturalists, academics and the media. The media continued to reiterate the messages, long after the project ceased operations.

The PFP project was summarised in a 1989 booklet titled ‘Potter Farmland Project 1984-1988’, by Andrew Campbell (PFP project manager) and Peter Mathews (PFP project facilitator). Andrew Campbell’s book ‘Planning for Sustainable Farming’, published in 1991 offers further details and reflections of the PFP. This section will not reiterate the operational details that are available in these publications. Rather, the information in these documents will be used in conjunction with archival documents, and the reflections of people involved providing a deeper insight into the project.

\(^7\) Refer to Chapter 2.3.1
3.2 Genesis of a Project

3.2.1 Background

During the 1960s and 1970s the Australian public became increasingly concerned with the problems of soil degradation, and government reports were publishing evidence of the extent of the problem. The Victorian Soil Conservation Authority (SCA) published a booklet detailing the promising outcome of works in the Eppalock Catchment Project (Soil Conservation Authority 1971). The Authority had implemented a cooperative extension approach to gaining landholders support in an entire catchment. This approach was also implemented in the Glenelg catchment and involved over 1000 farmers on the Casterton tablelands and Wando river catchment. The project success is described in the publication: Glenelg Catchment Project (Soil Conservation Authority 1981).

During the same time other state government departments were also acting on new initiatives. For example, the Institute of Australian Foresters produced a booklet of tree decline in rural areas titled Tree Decline in Rural Victoria (Kile, Greig & Edgar 1980). This was followed in the same year with a conference ‘Focus on Farm Trees’. The conference, held in Melbourne has been described by one of the organisers as ‘an idea whose time had come’, (Greig 2006), as it left a cultural legacy of cooperation. One of the outcomes of this legacy was that the Garden State Committee (GSC), which was influentially located in the Victorian State Premiers Department, led a consortium of organisations to form the first farm tree groups in Victoria. The farm tree groups each had state government representation from the Forests Commission, State Rivers and Water Supply, National Parks Authority or Department of Agriculture. A GSC position paper Strategy to Reverse Tree Decline in Victoria was prepared in 1983 to identify solutions (Garden State Committee 1983). This led to a demonstration project, Project Tree Cover’, in which GSC established demonstration sites on exposed and degraded sites across Victoria. These sites often occupied corners of paddocks and were fenced to exclude stock and revegetated with local species. In 1983 a publication, The State of the Rivers, provided the first description of
the health of Victoria’s waterways, effectively expanding the problems of land degradation from a soil erosion issue to include stream health (Victorian Government 1983).

Nationally the mood was changing too. The ‘National Conservation Strategy’ was released in 1983. This linked conservation and development to the future prosperity for both the environment and the economy (Cary & Webb 2000). The National Soil Conservation Plan was established in 1983 in the Commonwealth Government’s Department of primary Industries. This was recognition of the national dimensions of the problems of land and water degradation caused by past and present land uses and management practices. It also provided the first federal mechanism to distribute funds to the community (Cary & Webb 2000).

3.2.2 Political Context

The story of the genesis of the PFP has been told by project manager Andrew Campbell. Campbell recounts that the impetus for the PFP came after the Governors of the Ian Potter Foundation (IPF) viewed an ABC television documentary ‘Heartlands’. Coincidentally the program was shown the night prior to one of the Potter Foundation board meetings. The program, narrated by CSIRO scientist Dean Graetz, detailed the degradation and ecological imbalance over Australian Rangelands. The program was said to be the ‘topic of conversation’ in the meeting breaks. This collective concern galvanised the Board and was led by Sir Ian Potter (A Campbell 2006 pers.comm., 2 November).

Sir Ian and the IPF executive officer, Ms Pat Feilman, undertook to find an appropriate response for the Board’s concerns. Their enquiries in Melbourne academia alerted Professor Carrick Chambers, Chairman of the School of Botany at The University of Melbourne. Chambers explains:

About 1982, I had heard that Sir Ian Potter had been discussing, at a high level, at my university with senior staff ways in which he could invest his money in salt, other than in the Howard Florey Institute where he had already put millions. I said that my Department could do some work on salt, but that there is a much better way of making an impact on salting.
So I went to see them. Ian was suspicious of my ideas. A few understood, Pat Feilman, Sidney Sunderland and Sir someone else - all knights of the realm in that organisation! I remember there was a bit of discussion at the meeting, and then Ian Potter said; ‘You come back with 2-3 pages – tell us how you see this running and the relationship it will have to state government’.

I did that and went back again when they agreed to put in $750,000! That was a lot of money in those days. (C Chambers 2008, pers.comm., 19 June)

Chambers, as an executive member of the GSC, was uniquely placed to see the opportunity to expand the work of that organisation. The State Premier, Sir Rupert Hamer, had set up the GSC in 1976. The organisation was placed at the top of the state government in the Department of Premier and Cabinet. The GSC Chair, John Jack, was also Deputy Secretary of the Department of Premier and Cabinet. The GSC executive was made up of representatives from government agencies, academia and private organisations with the objective of stimulating activity across government, rural and urban communities. Toward this end GSC established cooperative projects with Country Roads Board, Heritage Victoria, as well as with garden clubs, ABC TV and Melbourne’s public gardens (J. Jack 2006, pers.comm., 23 August). The GSC was charged with increasing awareness of land degradation and providing solutions. Eventually the GSC’s mandate was extended to rural areas. Chambers recalls the moment:

Hamer was Premier. We had our meetings near to his offices. We were meeting there one day and he came to join us for a part of it. He arrived on time and said (this is how I recall it)

‘I’m delighted with what you are doing in country towns. It has all been great. But I want you to understand that it will take more than hanging baskets at Spencer Street Station and begonias in the street. I have been travelling a lot and I sense all is not well with the land. I’d be delighted if you could turn your attention to this’.

Three of us there felt like clapping! A few from the horticultural groups didn’t get what he was on about at all. But GSC changed direction. We got other departments involved, Lands, Forestry Commission. And we put in vegetation plots around the state. We’d choose sites on main roads, fence off paddock corners with native vegetation. Then we’d have open days to show farmers what could be done. We’d get the attention of the local paper, but that was about all. It didn’t go beyond local though. (C Chambers 2008, pers.comm., 19 June)
Farm Tree Groups were a fledgling example of this participatory approach to extension and became a proving ground for GSC methods. However the organisation’s ambitions were constrained through lack of formal funding or support channels, as Chambers explains:

The Farm Tree Groups had no financial support. We would advertise in an area, in the local paper. The Department of Agriculture was not interested at that time. We’d get a few people interested, a few enthusiasts would join us, we’d always invite the mayor and put on a nice lunch and 1 or 2 of us from GSC would go out and talk about the possibilities. But they were on their own. We helped as best we could. We’d explain the tax concessions for fencing for example. Some groups worked some didn’t. It’s hard to know what makes the difference. Enthusiastic people I think.
(C Chambers 2008, pers.comm.,19 June)

The location of the GSC inside government but outside the department structure, dealing with resource management issues, proved to be a bonus as well as a political dilemma. GSC’s Chair, John Jack describes its setting in political terms.

There was growing federal concern for environmental issues in the early 1980s but for ideological and economic reasons they wanted something outside government. Dick Hamer had been on a tour of New Jersey State in US and seen how they had integrated green environmental issues throughout the state roads, industry development and throughout state policy. Dick was impressed and within a year Victoria had the equivalent in the GSC. (J. Jack 2006, pers. comm., 23 August)

Sir Ian and the other Governors viewed these characteristics of the GSC favourably as their concerns could be directed into a project that could be housed in a manner which was complimentary to existing government structures. From GSC’s perspective the proposed project provided an opportunity to extend the participatory model of Farm Tree Groups to a wider audience. Such a project had the potential to meet the goals of both GSC and IPF. As Chambers explains:

We (GSC) had a model to show how the Farm Tree Groups could work and this was it. Potter was an example of that model but financed. There were tough conditions laid down though. The farmers had to be prepared to open their farms to others for a long time after Potter. (C Chambers 2008, pers.comm.,19 June)

Staff from GSC prepared the detailed project proposal with input from Feilman, Chambers, Jack and Middleton. Bill Middleton was a forester and naturalist who had managed the
Wail Nursery near Horsham for many years as an employee of the Department of Conservation Forest and Lands (CF&L). He was regarded as a renegade and now attributes his survival in the Department to the distance between Melbourne and Wail – ‘I could keep out of sight!’ (B Middleton 2007, pers. comm., 5 December). Middleton was the ABC radio’s ‘Western Victorian Gardener’ for sixteen years and, through this, was well known as a promoter for the preservation of habitat (Campbell 1991). Middleton describes his inclusion this way:

I was really the only one running around telling people to protect the vegetation and I was interested in ecology and the birds and the bees and things as I was the natural one, the only one, in the Forest Service. Well the only one in any service really, who would have been probably best equipped in those sort of things. (B Middleton 2007, pers. comm., 5 December)

The PFP logo was the same as that of the GSC. This could have been a cost saving measure or a deliberate co-opting of PFP for GSC objectives. Campbell, in conversation suggests the latter. None-the-less, the housing of PFP in GSC provided an immediate profile that was useful to attaining cooperation from other government agencies.

These early architects of the PFP (Jack, Feilman, and Chambers) then established an executive. The executive was made up of individuals from GSC, IPF, Land Protection Division of CF&L, Victorian Farmers Federation (VFF), University of Melbourne, Victoria Conservation Trust, and Department of Agriculture. A public relations consultant and a field advisor were also appointed to the executive.

3.2.3 Administrative Context

A Labor government was elected in 1982. This began a period of rapid change in the public service, re-orientating it as an agent of the new government (Chaffe 2006). This resulted in structural changes that altered the relationship between government and community by shifting responsibility from the agencies to the individuals. At the time a number of agencies were involved in provision of natural resource extension. In 1983 the CF&L was established as an amalgamation of Department of State Forests, the Department of Crown
Lands and Survey, and the Ministry for Conservation. The aim of the amalgamation was to consolidate public land management in one Department as a means of achieving better coordination of resources (Victorian Government 2007). At the same time the Department of Agriculture was re-named the Department of Agriculture and Rural Affairs (DARA), reflecting the Cain government’s concern for the social conditions of rural Victorians (Youl 2006).

The amalgamation of these Departments, with their different cultures, was a tumultuous time for many staff. Those at the Soil Conservation Authority who were moving from the oversight of the Ministry of Conservation into the CF&L had, prior to this time, been directly involved with managing land degradation under the 1949 Soil Conservation and Land Utilisation Act (Gilpin 1980). The Soil Conservation Authority was described as a rigidly hierarchical organisation in which length of time served ordered the promotions (Jack pers.comm., 23 August). A number of years were spent in a form of apprenticeship described as ‘opening gates’. A former officer of the Soil Conservation Authority explained:

It was good training; before you could get to do other work you spent years ‘opening gates’. This gave you time to be schooled in the complexity and nuances of extension with farmers (L312 2007, pers. comm., 26 November).

The amalgamation is recalled as a time of job losses and cultural change. As one person from that time explained:

Under Joan Kirner the old Soil Con was dying on the vine. I became a spare parts person. The younger ones could be flexible but it wasn’t an easy time. (12:26/11/2007)

Middleton explained the tension that emerged between PFP and the established agencies as an unofficial turf war.

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8 The Ministry of Conservation was itself the result of an amalgamation in 1973 of the Soil Conservation Authority, Land conservation Council, Environment Protection Authority, Royal Melbourne Zoological Gardens and the National Parks Service, Fisheries and Wildlife Division - all concerned with the conservation and environmental protection, management and utilisation of land and aquatic resources (1990, p. 27-29).

9 This form of referencing is applied to participants of this research project who were either PFP farmers or people who were involved during the PFP operations in the 1980s and who wished to remain anonymous in this study. This is explained in more detail in Chapter 4.4.1.2.
You see we were coming into what the Soil Conservation Authority thought was their territory and their area of expertise but we were doing something different. There was a frostiness and jealousy from them as they thought they had been doing it for years. But they hadn’t, we were trying to develop something new, we were hoping to. It wasn’t only to plant trees, it was reorganising the whole show. (B Middleton 2007, pers. comm., 5 December)

Jack, as Chair of GSC, was convinced that the Soil Conservation model was paternalistic. The concept of works crews carrying out work on people’s farms, did not fit the empowerment model of extension emerging at the time, nor did it fit with the ethos of the new labour government (J Jack 2006, pers. comm., 23 August).

The new head of the amalgamated CF&L epitomised the cultural change. Professor Tony Eddison, an English academic, ‘whose credentials were never quite clear’, was given the job by Minister Joan Kirner to manage the amalgamation (Youl 2006, p. 74). Campbell describes a conference at which Eddison addressed staff reassuring them their jobs would be safe: ‘it was like Darth Vader coming to talk!’ (A Campbell 2007, pers. comm., 19 May). He was anything but reassuring and to compound the situation the cultural changes engineered in CF&L coincided with changes to the theory and professional delivery of farm-based extension.

Since the 1960s the theory of agricultural extension had been dominated by a ‘diffusion theory’ proposed by Everett Rogers (1962). Rogers described adoption process of social transmission that was a function of the time of exposure (to the new practice), and an individual’s predisposition to learn. He simplified this to ‘adopter categories’ that formed a continuum starting with the reluctant laggards and moving through to the superior group of innovators and early adopters. The theory was first used to describe the adoption of a hybrid corn variety in the US and was rapidly extrapolated to other forms of innovation (Rogers 1962; Rogers & Shoemaker 1971; Rogers 1983; 1995; 2003). Agricultural extension professionals could speed up the rate of adoption by working with the early adopter groups. The theory came under increasing scrutiny due in part to the censorious labelling and the privileging of scientific knowledge (Röling & Wagemakers 1998; Black 2000). These developments have been discussed in Chapter 2.3.
During the 1980s another model valuing knowledge outside traditional scientific institutions, in particular farmers’ knowledge, emerged (Röling 1988; Chambers et al. 1989). This model legitimised local knowledge and elevated farmers from mute recipients to partners in a process. In many ways the PFP was a model representation of the cultural changes CF&L were trying to achieve. It was inclusive, with an executive and local advisory group, took a farmer first approach and had a wider landscape view of the problems. But in the early 1980s the changes accompanying this shift were just beginning to impact on the cultures of traditional extension organisations.

3.3 Implementation

Introduction

The PFP progressed through distinct stages. The initial consultation phase effectively formed the project and gained the support of enthusiastic farmers and community supporters. This was followed by a farm selection phase, a planning phase and an on-farm works phase. Throughout the time the PFP maintained a public profile through field days and tours and representation in the media. This section outlines the main phases of the project.

Creswick Consultation

The first facilitation meeting took place at Creswick Forestry School near Ballarat, Victoria in 1984. Invitees to this consultation included farmers, bankers, accountants, government officers, academics, educators and the PFP Executive group (Campbell 1991). Of the more than forty farmers invited only twenty-one were able to attend (84_PFP310). The farmers were selected by government state agency staff at CF&L, and were likely to be their favourites (J Cary 2008 pers. comm., 15 July), or at least those who were likely to be open to the proposals. Chambers recalls more detail:

They all turned out, smart in their tweeds, but all nervous. Pat Feilman was there and all the others on the Executive. Before they came we had

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10 This form of referencing has been applied to documents used in the research. The system is described in detail in Chapter 4.4.1.1.
arranged aerial photos of their properties, which showed a bit of the neighbour’s property too. We didn’t want any ‘cold comfort farms’ – those that are clearly rundown. These properties were to be models. But the most brilliant thing of it all was Andrew, who unbeknown to us had flown over the farms and taken photos of the properties, carefully taking them without roads or buildings so they were not easily identified. He showed his slides of horrific erosion, salting – they (the farmers) sat liked stunned mullets! He said, ‘didn’t you recognise your properties?’ So he went through them again telling them whose place each slide was taken from. They couldn’t believe it! It was a rude awakening. After that they were all chattering and on-side, everyone was relaxed. (C Chambers 2008 pers. comm., 19 June)

A farmer accepted to participate as a PFP farmer, recalled it this way:

I wasn’t very keen to go. I remember Andrew Campbell and Bill Middleton came out to see me. We were shearing then and I was classing. They said ‘Oh we want you to come to a school in 2 weeks’ and I was shearing and it used to take 5-6 weeks in those days and I said ‘Oh I don’t think I can do it I’m flat out here’. They said ‘We want you to come, we want you be there’. So I went and when I got there and saw the enthusiasm of the people there who were involved. I had no concept of the Potter Foundation then and what their intentions were, I don’t think anyone did. I don’t think they even knew at that point. (1.50:12/07/06)

The Creswick attendees decided the criteria for selecting participating farmers and the requirements of participation and chose the project’s name. The name ‘the Potter Farmland Plan’ was chosen in recognition of IPF involvement and the word ‘farmland’ was to embody the ecological approach of the project (Campbell 1991).

The meeting had generated a sense of excitement among the farmers present. They all nominated to participate. Three public meetings were held in January 1985 in the three geographic areas targeted by the project in the Hamilton region11.

In keeping with the philosophy of participation, a local advisory board was set up with individuals representing the Victorian Farmers Federation, Department of Agriculture and Rural Affairs, Conservation Forest and Land (CF&L) and the Glenelg Farm Tree group as well as participating farmers. Individuals in this group seemed to be involved differentially. Middleton appeared to be the most consistent and prominent member of the group. One

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11 See Campbell’s account of the selection (Campbell & Mathews 1989)
person recalls a rebuke from the PFP executive after voicing opinions different to those of the PPF.

I was told I was an obstructionist! (SC_2: 6/11/07)

The PFP Executive appeared to be focused on rapid implementation. This was most likely to be a realistic assessment of the situation. They had a sponsor’s commitment of $750,000 to spend over three years to establish demonstration farms and undertake extension programs. It was an ambitious program.

Selection

The Executive group scoped possible field locations for the project. GSC’s experience with the activities of the Glenelg Farm Trees Group was persuasive in choosing western Victoria (C Chambers 2008, pers. comm., 19 June). The sixteen demonstration farms were selected from forty-five applicants who indicated their interest following attendance at one of the three public meetings held in the area. The selection was based on the geographic location, and evidence of problems such as soil erosion and tree decline, (See Figure 3.1). The farms were a mix of sizes and the farmers were considered to be good farm managers. Once selected the PFP farmers were thought of as a collective or group and they did attend some meetings together.

In the first five months after becoming operational, the PFP had an office. This was accommodated in the back room of the CF&L office, Hamilton. It had appointed a works supervisor (John Marriott) and selected sixteen farms (see Figure 3.1). One family, the Tishlers, withdrew soon after selection leaving fifteen farms, which remained with the project until the end. The reasons the family gave for withdrawing reflect the determination of PFP’s mission. As Jan Tishler explained:

We had been planting trees continuously since the Soil Conservation days for shelter, erosion etc. But they (PFP) wanted to be near the road and so fence an area which wasn’t applicable to our idea of soil conservation. It was sad because we had already hosted so many groups, but we said ‘No’. (J Tishler 2007, pers. comm., 12 September)
The PFP connected with the active farmer who at that time tended to be the adult male of the household. This became clear during the conduct of the study as few of the women of these farms felt they could contribute to a study of the PFP. This is discussed in a description of the research participants Chapter 4.4.2.

A Planning Method

A method of farm planning used by Soil Conservation Authority extension officers to manage problem areas on farms was adapted to the whole farm in the PFP. The PFP officers drew preliminary plans leaving them with the farmers ‘for a few days to make any alterations or additions he feels would improve the plan from a farm management view point’ (85_IC9:3). These early plans were used to decide funding allocations made on the basis of maximising the impact of the demonstration. For example, an increase in the allocation to the McDonalds in the Glenthompson area was made for this reason:
Production of plans in the Glenthompson area has emphasised the outstanding demonstration value of the McDonald/McCullock plan compared with the other selected farms at Glenthompson. I feel that the impact of the project in the Glenthompson area could be enhanced by diverting some of the funds….. treating a badly degraded catchment more thoroughly (85_IC9:2)

The farmers’ recall of the farm plan development indicates that the early plans drawn by the PFP officers were accepted as final.

The development of these farm plans was an important component of the extension message of the PFP. They were used to depict the farmers as authors of their destinies, and as a tool to capture ownership of the problems and solutions (Campbell 1991, p.31). It was also a pragmatic means of ‘integrating conservation and production in the pursuit of economically sustainable farming’ (88_IO1:4).

The speed with which most of the plans were prepared was driven by the operational demands of the project and the pressure on the PFP officers to have something to show. Campbell explains;

> There was a conflict between resources, workload and time frames. It wasn’t a question of project design, but the parameters that John Jack had put in place. I know now, but didn’t then, that I should have said ‘This needs five years, and 18 months before any on-ground works begin’. But I didn’t do that. (A Campbell 2007,pers.comm.,19 May)

The process of farm planning with benefits for learning and engaging participants was experienced by only a few of the PFP’s most prominent farmers. None-the-less, the process became a feature of the project as the PFP promotional video states:

> If the Potter Farmland Plan has a single message, it is that positive action using the farm planning process can result in increased productivity, while working within the limits of the land. (Keddie & Feilman 1990, p. 6)

On-farm Works

The demonstration activities entailed extensive works such as realigning fences to land types, fencing streams to exclude stock, and revegetation. Indeed the PFP became synonymous with trees. Techniques for direct seeding, mid-paddock fencing and tree guarding were a feature of the project.
TABLE 3.1: SUMMARY OF ON-FARM WORKS

<table>
<thead>
<tr>
<th>Works</th>
<th>Measure</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube stock planted</td>
<td>~110,000</td>
<td>Estimates</td>
</tr>
<tr>
<td>Trees direct seeded</td>
<td>47 ha</td>
<td>IPF =$274000</td>
</tr>
<tr>
<td>Fences built</td>
<td>164 km</td>
<td>Farmer = $260,000</td>
</tr>
<tr>
<td>Pasture established</td>
<td>126.25</td>
<td>Total on works = $534,000</td>
</tr>
<tr>
<td>Dams constructed</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Troughs</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Tank</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

(Figures from Campbell and Matthews 1988)

The works program was an accelerated program to ensure that the farms could operate as show cases during the four years of project operations. The works program was said to represent ten years of work if the farmer were to undertake it without the financial support of the PFP (Campbell 1991).

Off-Farm Works

The PFP extended the same consultation process used at the initial Creswick Consultation in December 1984, to other groups as a means of expanding its influence. The PFP held seven consultations between 1985 and end of 1987.

1. Monash University Consultation April 1985: a consultation with a range of government and private interests to consider how to make the farmers’ task of dealing with land degradation easier.

2. Monash University Consultation November 4 1985: a follow up with government department staff to talk about the department’s multiple failures in the area and how they could be remedied.

3. Hamilton Region Consultations: fifteen groups of local people met during 1986 and this led to identifying a need for the region having an integrated development approach. An organisation Hamilton Region 2000 emerged from this process.

5. Tasmania, June 1987: As a result of interest from a group of Tasmanian farmers who had visited the PFP demonstration farms, a workshop was arranged in the midlands. The PFP provided a consultation, along the lines of its initial Creswick consultation, for the group.

6. Tullamarine Workshop, 1987: this was a preliminary to the approaching national conference to identify ways to leverage regional natural resources for economic development.


The list of consultations testifies to the ambitions of the PFP to initiate social and administrative change from the platform of its model farms.

Funds and expenditure

The PFP was funded by the IPF between 1984 to 1988. Initially it was a three-year project but a fourth, transitional year, was approved late in the third year. It has been difficult to confirm the exact expenditure on the PFP. The IPF recently confirmed that $700,000 was paid into the Victorian Conservation Trust fund to be dispersed to the PFP executive and operations. Other payments could not be confirmed at the time (K Fay 2008, pers. comm., 14 July).

<table>
<thead>
<tr>
<th>Activity</th>
<th>PFP $</th>
<th>Farmers $</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-farm works</td>
<td>274,618</td>
<td>(262,161*)</td>
<td>536,779</td>
</tr>
<tr>
<td>Admin salaries etc</td>
<td>213,591</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicity media materials</td>
<td>20,342</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>508,551</td>
<td>262,161</td>
<td>770,712</td>
</tr>
</tbody>
</table>

*This was estimated matching contributions. Figures from Campbell and Mathews 1988.
3.4 Legacy

Introduction

The PFP’s iconic status, and the prominent roles undertaken by some of its personnel, ensured a continuity between the PFP and the development of educational and sustainable agricultural organisations in the Hamilton region and nationally. This section provides a brief description of the PFP legacy.

The PFP families and their Farms

Farming has changed over the past twenty years. The collapse of the Wool Industry in 1989 in particular had a severe impact on the Hamilton region which had been considered the Fine Wool Capital of the world (Garden 1984, p. 243). This led to changes in farm enterprises. Most notably has been an increase in the area of cropping and blue gum forestry plantations. At the same time farm size has tended to expand gaining economies of scale (Schirmer, Loxton & Campbell-Wilson 2008)

Consequently, since 1988, some of the PFP farms have been incorporated into larger farms, some sold or leased long term for blue gum plantations while others have expanded their hectares through purchase or leasing more land.

‘Helmview’ and ‘Willandra’ have been sold to a larger property owner (‘Jigsaw Farms’). ‘Benowrie’ was also incorporated into a larger farm and half of it has been planted to blue gums. ‘Darryn Rise’ has been sold twice as part of neighbouring property amalgamations. ‘Barnaby’ has also been sold twice in the intervening years. The farms remaining as independent properties are:

- ‘Warooka’ and ‘Wyola’ at Melville Forest,
- ‘Satimer’ and ‘Barnaby’ at Wando Vale,

\(^{12}\) Darryn Rise is now called ‘Wellaway’
‘Reedy Creek’ at Glenthompson.

A survey of nine PFP farmers who remain on the original farms or who have bought an original Potter farm was undertaken this year. The survey aimed to compare the landscape changes that have occurred between 1988 and 2008 (Schlapp & Scholfield 2008). This has found that the farm enterprises have adjusted to the economic and climatic changes taking place. Cropping is now a significant percentage of the enterprise mix on the surveyed farms and there has been a shift from wool production to prime lambs since the 1980s. Most of those surveyed have continued to plant trees and consider they have addressed most of the problem sites on their farms (80-100%). Interestingly the farmers have maintained an education/experience continuum and report that their knowledge of soils, vegetation and farming practices has improved over the last twenty years. The nine respondents to the survey were found to have changed their farming enterprises to adapt to the economic climate and on the whole increased farm production (Schlapp & Scholfield 2008).

The PFP works on the farms surveyed resulted in the establishment of 643 hectares of revegetation, representing 6% of the total area of the PFP farms. Since then further plantings of 168.85 hectares have been established. Due to increases in the size of some holdings the increase still represents 6% of the total area. Most respondents reported an increase in birds and wildlife during the period, although few have maintained written records and none have comparative records. Observations made from the 2003 aerial photography reveals similar amounts of planting and protection of environmentally sensitive areas has occurred on neighbouring properties. The authors noted that the variation in the extent to which this has occurred is similar within the PFP group surveyed as it is across the region.

In the Hamilton Region

The project generated activity in the Hamilton area as the demonstration farms attracted many people interested in land management issues. The PFP also stimulated property-planning courses, which were run initially by Glenormiston Agricultural College. Then in
1992, growing out of the National Landcare Program, farm planning was endorsed nationwide (Campbell 1991).

The number of visitors to Hamilton during the PFP was noted by businesses in Hamilton. One of the PFP executives recalls an exchange with a motel operator when he attempted to pay for his room.

      Under no circumstances do you or your people pay, you are filling my motel every week! (C Chambers 2008, pers. comm., 19June)

The Project Manager’s Report for April 1985 flagged the need for state agency cooperation in monitoring the physical landscape and ecological changes, as the PFP resources were not adequate to measure the landscape impact of the project. This problem was never overcome as this quote from Campbell shows:

      If I were to do it again I’d get stronger buy-in from the Departments. It wasn’t John Jack’s style. He was the head of the Premiers Department. He gave orders. On reflection now I wasn’t referential enough to those who had been in the area before, the Departments and families like the Fentons. (A Campbell 2007, pers. comm., 19 May)

Perhaps as a result of this fragile relationship an effort to locate a fulltime position inside CF&L floundered when the PFP funding ceased. One reason offered for this is that the single focus status of PFP would have been diluted by the addition of the departmental responsibilities (J Marriott 2008, pers. comm., 14 July). Another related to the desire for influence which was central to the PFP narrative and a view that this might be compromised within a state agency.

Nationally

The development of a number of organisations has been attributed, at least in part, to the influence of the PFP. These include the formation of some key regional organisations including: Hamilton Environmental Learning and Awareness, Hamilton Region 2000, Rural Industries Skills Training and the Secretariat for International Landcare.

Hamilton Environmental Learning and Awareness (HEAL) was an independent non-profit organisation external to government. It commenced in 1989 as a direct result of the
publicity generated by PFP to coordinated visits by groups of farmers, students and others to the demonstration farms as well as other sites in the region. An evaluation of HEAL’s tours found that for those who held environmental concerns, visits to the farms reinforced their attitudes towards tree planting, farm planning and reversing land degradation (Cary 1994).

Hamilton Region 2000 was established in 1987 towards the end of the PFP. The organisation endeavoured to build on the PFP achievements to develop a long-term strategy for the Hamilton region. The organisation was formed and then chaired by Peter Mathews, the PFP facilitator and John Jack the PFP executive chair.

Rural Industries Skills Training (RIST) was established in 1992, also as a result of the PFP example (RIST 2008). The organisation was created to deliver training opportunities to rural communities and has grown to become a leading provider of outreach education.

The Secretariat for International Landcare (SILC) began by conducting farm tours for interested South Africans. SILC was incorporated as a non-profit organisation providing a ‘professional gateway’ to landcare in Australia. The personnel had previously been involved in the PFP and RIST.

To Landcare

Direct links between the PFP and Landcare have been identified by historian Pamela McLeod (McLeod 2008, p. 24). In her assessment of the PFP archives in Hamilton she noted ‘several direct links between the Potter Farmland Plan and Landcare Australia: through project manager Andrew Campbell and his subsequent tenures as national landcare facilitator and as CEO of Land and Water Australia, and also through the Secretariat for International Landcare’ (McLeod 2008, p. 24). In the same report McLeod draws attention to the listing of the PFP in the ladder of events that culminated in the formation of the National Landcare Program in 1989. Elsewhere the PFP has been described as having ‘accelerated’ and ‘shaped’ landcare in Australia (Marriot, Nabben, Youl, Polkinghorne
2006), and the IPF website claims that the PFP ‘project helped create the Landcare movement in Australia’ (The Ian Potter Foundation 2008).

Other Influences

The PFP achieved a remarkable profile in its four years of operation. Indeed, in his landmark, blockbuster book, ‘Collapse: How Societies Choose to Fail or Succeed’, Diamond described the PFP as ‘an imaginative initiative’ (Diamond 2005, p. 412). Similarly in the ‘National Geographic’ Australian bi-centennial issue, an article on agriculture featured a PFP demonstration farm and three generations of the family (Terrill 1988). The article described the family’s involvement with the PFP as ‘an example of a thriving and innovative approach to Australian agriculture’. The project came to prominence again in 1993 when two of the PFP farmers, Peter Waldron and Bruce Milne, were awarded the Medal of the Order of Australia (OMA) for service to farming and land care management (Commonwealth of Australia 2009).

An estimated 3,000 people visited the farms during the four years of the PFP (Campbell 1991). A consequence of this traffic was that some of the farmers gained a high profile and became synonymous with the PFP. The media covered the experiences of intense work, learning and landscape change. The repetition of this story generated a narrative that endured unchanged for 20 years. The narrative told of individuals farming in sympathy with the land and increasing their productivity as a result. It was the story of change in a time of change. The durability of the narrative in media and participant accounts can be traced to the timing of the project and the influence of the individuals assembled to administer it. An academic and researcher in agricultural economics for 30 years, John Cary has conducted two evaluations of the PFP (Cary 1994; Cary, Beal & Hawkins 1986). He has attributed the success of the PFP to the astute people involved.

Potter’s links into government were at the highest level and the operations manager Andrew Campbell was a consummate choice, competent and an excellent salesman of the message. (J Cary 2008, pers. comm., 15 August)

The fortunes of the PFP were shaped by both the popularity of the demonstration farms and the farmers’ credibility. The project linked the fortunes of the soil and ecological health of
the land with the fortune of the individual farm enterprises. The story was one of the farmers taking charge of their destiny and showing other farmers how to proceed. The government agencies responsible for land degradation were negatively cast. While the narrative promised more productive farming, the methods proposed by the PFP were, in the short term, said to be uneconomic without the funding assistance (Barr & Cary 1992, p. 90).

The PFP’s executive took the project’s legacy seriously as a letter from the PFP Executive Chair John Jack to Max Coster, principle lecturer at the Victorian College of Agricultural and Horticulture shows. Jack had just received a report ‘Potter Farmland Plan Review’ which noted the absence of empirical data (Loveday, Coster & McCutchan 1988) Jack’s response to his executive reads in part:

We asked the farmers to consider the possibilities of better planning and management of their farm in harmony with the ecology of the land with a view to enhanced sustainable production, and with a view to redressing land degradation. The government’s current approach was to get the farmer to look at his degradation problems and fix them. This doesn’t seem to be addressed (in the report) and in fact appears as though we did not succeed. Was it that the farmers were still seeing it as merely an attempt to overcome degradation? We see this as important as it is basic to the question of motivation of the farmer. (88_PFP13)

The issue of the PFP’s effectiveness highlighted in the Loveday report and queried by Jack in 1988, remains important today. The assumption had been that the method of consultation and planning introduced by the PFP was significantly and beneficially different to government extension. However the absence of empirical data to support the PFP story may have overwhelmed the project without the strong narrative of change that had developed around the PFP.

In the absence of empirical data evidence of the PFP’s success was inferred from the visual improvement in landscapes and the sheer numbers of people visiting the demonstration farms. The ubiquitous farm planning courses in agricultural courses today are noted in the PFP evaluations by Cary as a legacy of the PFP (Cary 1994; Cary et al. 1986).
However the PFP operated on many levels. Its rhetoric attempted to instil a land ethic in Australian farmers through social awareness and participation in local rural issues caused by land degradation. The broader social change sought and the PFP’s public profile resulted in the projects’ catalytic reputation. In his book on the PFP Campbell reflects on the endurance of the legacy.

The project did not just talk or publish brochures and papers. Ideas were put into practice on a large scale on real farms, and the story was told and is still being told by real farmers, from personal experience. (Campbell 1991, p. 193)

The Landcare Support Strategy (F.A.R.M. Advisory Service 2008), prepared by the Glenelg Hopkins Catchment Management Authority (GHCMA) included peoples’ significant landscape change stories. The project manager, Shelly Lipscombe, noted that a large number of these stories mentioned the PFP.

Mostly positive stories, though there were some negative ones about the selectivity of the funding. But I learnt from the experience that in this region Potter is important in people’s understanding of farming and land degradation. (S Lipscombe 2008, pers. comm., 14 July)

With this in mind, Lipscombe requested that the link between the PFP and Landcare be reinforced at the field day to mark the 20-year celebration of Landcare. The field day was held at a former PFP farm, which is now part of a number of farms purchased by Eve Kantor and Mark Wootton. Two of their six farms are former PFP farms; collectively the properties are referred to as Jigsaw Farms. Wootton and Kantor are philanthropists who saw in the initial purchase of the Milne PFP farm an opportunity to continue work begun by the IPF.

There were synergies on different levels for us. We could see Potter wanted a bigger stage and we connected with the stewardship idea. The philosophy of the Milne’s view of ownership as a spiritual rather than physical fact and the connection to philanthropy – it was a good story. (E Kantor 2007, pers. comm., 4 December)

The introduction and welcome by Eve and Mark to the approximately 400 people who attended the field day traced their property’s land management history from the PFP to the
present time. This is an example of the inspiring narrative of individual endeavour and landscape change being reiterated for new audiences.

Jigsaw farms are run on a high input, high stocking rate system. Protection of wetlands, stream frontages and vast areas of revegetation and forestry has been undertaken. Some locals interpret this as ‘PFP2’. However, Wootton considers the architects of the PFP were not productivity focused and that the links between his methods and the PFP are historic rather than developmental. He gives the example of labour units on Helm View.

During Potter there were three labour units (running Helm View) and now the same area is run with ½ a labour unit. Regardless of the enormous amount of work undertaken during Potter and afterward, the economics were not right. (M Wootton 2007, pers. comm., 4 December)

The quotes by Lipscombe and Wootton demonstrate that the narrative of the PFP is still meaningful to people, albeit for different purposes. Lipscombe used the narrative to reaffirm a course of action and Wootton used it as a counter to his own experience.

3.5 Conclusion

Today the public and private sectors are both active through Commonwealth and State Government programs, industry programs, regional natural resource management bodies, private practitioners and not-for-profit organisations such as Greening Australia (Productivity Commission 2005). This development was enabled through a series of radical administrative changes in government, triggered by an acknowledgment of community concerns that took place during the 1980s. These radical changes have been mapped directly to the development of Landcare (Poussard 2006). The PFP shared these times as an inspirational intervention with a strong narrative of change in which farmers were prominent.

Salinity and the processes of land degradation, which were the focus of concern in the 1980’s, are not under control. However now the issues of landscapes and rural livelihoods have converged and are overlayed by the impact of climate change. A new set of issues is taking shape. Communities demand multiple and at times conflicting outcomes from
agriculture for food and fibre production to the delivery of biodiversity and landscape integrity. The operations of Australian agriculture, in a time of variable rainfall, food security concerns and carbon constrained operations will trigger another set of policy changes and another set of concerns. The PFP has cemented a position in the formation of Australia’s response to the problem of land and water degradation. The persistence of the PFP narrative for over twenty years is remarkable, especially given the explosion of activity in managing natural resources in Australia since the 1980s.
4 RESEARCH DESIGN

4.1 Introduction

This chapter outlines the research design used in this study. This involves describing and explaining the methodology, method and techniques that were used. These aspects of the research design clarify the theory of knowledge and interpretive framework that guided the research (its methodology), the way in which the research was conducted (its method), and the various data gathering and analysis procedures (the techniques).\textsuperscript{13} Clarifying these aspects of the research design helps to establish the validity of the study. This is especially important in a qualitative study such as this one, which explores the experiences and memories of multiple participants in an agri-innovation that drew interest from other farmers, media and researchers during its implementation period, achieving national significance. Research on adoption processes has tended to focus on outcomes from an examination of the processes used to deliver the change. However change processes are now understood as social processes which may be, under certain circumstances, facilitated through learning and extension programs (Vanclay 2004). However, the depth and complexity of the subjective meanings that individuals hold and how these influence the process of engagement and adoption have received little attention to date.

This focus on subjective experiences locates this study within a qualitative paradigm. One of the major distinguishing characteristics of qualitative research is the fact that the researcher attempts to understand people in terms of their own definitions and experiences of the world (Crotty 1998). The focus therefore is on the subjective experiences of individuals, the subconscious processes which manifested in identifiable form for interpretation and analysis (Terre Blanche & Durrheim 1999). The process of adoption of sustainable farm practices is traced to the cognitive domain or ‘black box’ of participant decision making where it is beyond the reach of observers and often reflects decisions made at a subconscious level (Cary \textit{et al.} 2002). This is not because adoption behaviours call for

\textsuperscript{13} This distinction between methodology, method and technique is based upon van Manen (1991, p. 3-4) and differs from distinctions made by, for example, Cohen and Manion and Lather who integrate method and techniques into one component of research design.
the integration of sophisticated technological knowledge. Rather it is because they represent the intersection of myriad influences, and, thus, cannot be observed in isolation.

4.2 Methodology

There is no widely acceptable theoretical model of adoption behaviour to guide research studies in this area (Cary et al 2002). Instead, three broad empirical and exploratory approaches to understanding adoption behaviour are evident. These focus on the cultural, economic and innovation characteristics. A cultural approach focuses on language to understand meaning and identity. An economic approach explores behaviour within a rational economic framework, while an innovation approach examines the characteristics of the practice against a threshold of acceptability for adoption. Increasing interest in the cultural approach traces the expansion of participatory extension practices in natural resource management. These approaches have been discussed in Chapter 2.3.

The cultural approach is relevant to this study as it seeks to integrate agency and structure to explain behaviour of individuals or groups. Sociologist, Anthony Giddens, proposed a theory he called ‘structuration’ to overcome determinism and bridge both actor and structure. He argued that social science should be focused on social practice rather than an individual experience or structure alone (Giddens 1994). Agency in this study is located in the practices of participating farmers who were part of the Potter Farmland Plan. This means that how structure determines action, or how a combination of actions make up a structure are not as important as ‘how action is structured in everyday contexts and how the structured features of action are, by the very performance of an action, thereby reproduced’ (Thompson 1989, p. 56). Thompson uses the theory of structuration to explore relations of power and domination and ways in which meaning serves to sustain relations of domination.

Meaning is also an essential precursor to action. Making sense of a situation involves turning the circumstances into a form that can be comprehended explicitly in words. The meaning becomes a ‘spring board into action’ as well as the retrospective development of plausible images that rationalise what people are doing (Weick et al 2005, p. 409).
We see communication as an ongoing process of making sense of the circumstances in which people collectively find ourselves and of the events that affect them. The sensemaking, to the extent that it involves communication, takes place in interactive talk and draws on the resources of language in order to formulate and exchange through talk symbolically encoded representations of these circumstances. As this occurs, a situation is talked into existence and the basis is laid for action to deal with it. (Taylor and Van Every, cited in Weick et al 2005, p. 413)

Language is the medium through which relations of power and domination are sustained. Philosopher, Pierre Bourdieu argued that language is an instrument for advancing or blocking access to stocks of social capital. This process of acquisition or restriction to social capital shapes the experience of daily life (Lane 2000). However, in acting to increase stocks of social capital people do not act in obedience to rules, but to socially regulated patterns that occur without conscious understanding of the wider implications.

Language is not only an instrument of communication or even of knowledge, but also an instrument of power. One seeks not only to be understood but also to be believed, obeyed, respected, distinguished. (Bourdieu 1977, cited in Thompson 1984, p.131)

For Bourdieu, the act of communication itself holds meaning more than the content and process of communication. The meanings of an act of communication in this study are thus understood as the subjective domain of adoption of changed practices. Working in the field of agricultural extension, Normal Long (2002) observed uneven impacts from innovation projects. He attributed this to differential knowledge. In ‘Battlefields of Knowledge: the Interlocking of Theory and Practice in Social Research and Development’, Norman and Ann Long (1992) conceptualised the focus of study as the ‘social interface’ or a zone of interaction between agents and stakeholders engaged in an innovation project. This was because knowledge produced during an innovation was not discrete to the event but formed by an interplay of social, cognitive, cultural, institutional and situational elements; hence the ‘battlefield’ as a metaphor for the ‘social interface’. The Longs consider knowledge formed through this interplay to be partial, provisional and contextual. This goes to the heart of the epistemological standpoint utilised in this study, namely that there are multiple social realities that generate different understandings and interpretations of experiences. As a site of engagement and contested views the ‘social interface’ represents the multiple
layers of the subjectively formed realities influencing the process of adopting sustainable farm practices.

The exploration of these subjective realms requires an interpretive research approach which emphasises the meaning that is created through social interaction as the basis for knowledge (Lincoln 1990). According to Crotty (1998) the aims of an interpretive approach are to look for ‘culturally derived and historically situated interpretations of the world’ (Crotty 1998, p.67).

4.3 Research Method

Interpretive research methodologies provide for a range of strategies for generating and interpreting data (Denzin & Lincoln 2000). The selection of a methodology is guided by the nature of the research interest (Silverman 2006) A pragmatic approach to doing this is provided by Tesch who suggests the selection should be guided by the research interest in mind. She has identified four foci of interpretive research. These are: the characteristics of language, the discovery of regularities, the comprehension of the meaning of text or action, and reflection (Tesch 1990, p. 71). These are shown in Table 4.1.

**TABLE 4.1: TYPOLOGY FOR QUALITATIVE RESEARCH**

<table>
<thead>
<tr>
<th>The research interest:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics of Language</td>
</tr>
<tr>
<td>Content analysis</td>
</tr>
<tr>
<td>Discourse analysis</td>
</tr>
<tr>
<td>Ethnographic communication</td>
</tr>
<tr>
<td>Structural ethnography</td>
</tr>
<tr>
<td>Symbolic interactionalism</td>
</tr>
<tr>
<td>Ethnomethodology</td>
</tr>
</tbody>
</table>

(modified from an example by Tesch 1990, p. 59)
Two of these foci of interpretive research are particularly relevant to this study: the characteristics of language and the comprehension of meaning. This is because the study aims to understand the interactions taking place at the social interface by uncovering the meanings created and transmitted by individuals and groups that participated in the PFP. The interpretation of meaning is through the characteristics of language. This approach to the analysis was chosen because the data available for this study includes documents (text and images) produced at the time of the project as well as post event reflections from participants. The data therefore represent a mixed genre from different points in time. The characteristics of the language used will reveal how meaning was transmitted. For this reason case study and discourse analysis methods were chosen to frame the study.

One other approach that could be valuable for a study on subjective meanings at the social interface is the phenomenological approach. This is the study of actors’ perception of reality. Such an approach would be useful for real time data gathering. That is, research which occurs simultaneously with the practises and phenomena of the study. In this study the PFP is a past event, agents lives have changed since the time of their involvement. Indeed six of the farms have changed ownership. The PFP event can only be represented through the documents produced during its operation and through the agents’ reflections. Using Tesch’s pragmatic approach, the mix of historical data and current reflections in this study led to the selection of a discourse analysis. This section of the research presents an overview of the two methods and an explanation of why they were selected.

4.4 Case Study

A case study is an intensive, in-depth form of qualitative investigation that is conducted in order to portray the range of perspectives that constitute the ‘whole’ of the phenomena or practice being studied. It is likened to a behind-the-scenes picture of a real life situation (Pegram 2000). As such, it presents a story about something unique or interesting. The stories can be about individuals, organizations, processes, programs, neighbourhoods, institutions, and even events (Yin 2003). In this study the story is about the PFP and this identifies the relevant actors as those who took part in the PFP. Case studies allow for a
multi-perspective to be examined between actors, groups of actors and the interactions that took place during the making of the case study story. This is a salient point in the characteristic of case studies, which makes them particularly suited to an interpretivist methodology.

Case studies can involve multiple techniques for data collection and analysis (Yin 1994). The case study ‘story’ can be built by using combinations of data collection techniques such as surveys, interviews, document review, and observation. The multiple data types are important for these situations as they provide rigour to the data and a means of triangulating the findings (Yin 2003). According to Yin there are five sources of evidence used in case studies: document recovery, interviews, direct observations, participant observations and physical artefacts (1994).

This research uses two of these sources; document recovery and interviews. This resulted in a diverse collection of primary and secondary data. Similarly, a wide range of techniques may be used to analyse the data collected within a case study. These include grounded theory, textual analysis, and discourse analysis (Yin 2003). This research uses three techniques from a discourse analysis to focus on the meanings communicated at the conceptual ‘social interface’. The purpose of this section is to outline the data collection and data analysis techniques that have been used in this study.

4.4.1 Data Collection

This section outlines the two procedures for data collection that were used in the study. These were document recovery and participant interviews. A brief outline of the procedures and issues involved with these two types of data collection will be discussed. Data collection resulted in a collection of materials representing a wide range of stakeholders, including participant farmers, non-participant farmers, project funders and staff, journalists, and others. Some material dates to the time of the PFP while other material has been recently generated by journalists or by this study from the interviews. The collection of data from different actors, produced for different purposes and at different points is a feature of this dataset.
4.4.1.1 Document Recovery

This section discusses the nature of documents, techniques for managing them and some criticisms of using documents in research. A broad definition of a document is a written text where writing is the making of symbols representing words (Hodder 2000). As a result, documents can cover a wide range of types: personal documents such as letters and diaries, official documents from state institutions or organisations, newspapers, magazines, photographs and internet material (Bryman 2004). The advantage of using documents is that they are mute or non-reactive with the research process and so provide a heterogeneous set of data that are ‘out there’. The research process involves recovering, assembling and then analysing the documents for the particular research interest.

There are two risks in documentary research. Firstly, there is the potential for the researcher to give a selective interpretation of a document and, secondly, conducting a selective document recovery process thereby biasing the study (Bryman 2004). These risks have been addressed in this study by detailing the document recovery process. Omissions in the document collection, which may become apparent in later years, can be attributed to the time, availability and accessibility of documents rather than deliberate bias by the researcher. This study subjects the images to the same analysis as the written materials, informed by the interpretivist paradigm of this study and are discussed in Chapter 5.1.4.

A thorough and unbiased document recovery process is required to accumulate a breadth of samples, which allows a comprehension of the whole through an analysis of the selected parts (Collier & Collier 1986). Total reconstruction of a case study through documentation is almost impossible and decisions about what is relevant to the research objectives has to be made early. The case study approach to this study provides clear boundaries for relevant documents: they are those materials produced within the PFP implementation group, and by others providing a commentary of the PFP. Not all documents are relevant. I made the decision to focus on communication documents (e.g. memos, letters, minutes and reports) because the demonstration aspect of the PFP was to persuade farmers of the benefits it showcased. Communicating the message then, represents the PFP core business. As it happened these documents were the most prevalent in the collections.
Seven sites, which hold the PFP material, were identified after discussions with PFP agents. These were formal archival stores and individuals records. Informal material was collected from some research participants during visits to their homes for the interviews. Documents were either photocopied or photographed and the original returned to the archive. The document search followed different procedures at each site. For example, the Garden State Committee (GSC) role in establishing the PFP and providing the housing for the ongoing executive function identified it as a potential site of relevant documents. As a former state government administrative group the GSC material was traced to the Victorian Public Records Office (VPRO). The online facility located the overarching departments, which housed the GSC between 1983 and 1988 providing four folder numbers. The documents in the folders were not digitised and I visited the VPRO site at North Melbourne to manually search the folders. Relevant documents were photographed with a digital camera.

The search of the Ian Potter Foundation archives was less formal. The archive consisted of six boxes of documents, some in files but most loose sheets. A room was made available to me for a day to sort through the material and copy documents relevant to the research. Similarly informal was the process at the Handbury archive (located at RMIT Hamilton).

More limited archival searches were required at the ABC Archive and Hamilton Spectator. Both archives required specific search dates to sample documents, limiting the search to specific documents and thus eliminating chance discoveries. The online FACTIVA database is searchable by matching word queries but dates back as to 1990, and is therefore outside the study period as the PFP took place in the early 1980s. Table 4.2 summarises the document recovery process.
### TABLE 4.2: LOCATION OF DOCUMENTS

<table>
<thead>
<tr>
<th>Site</th>
<th>Date of Visit</th>
<th>Origin</th>
<th>Type of document</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Record Office of Victoria at 33 Shiel Street North Melbourne</td>
<td>20/9/07</td>
<td>Garden State Committee documents</td>
<td>PFP records</td>
<td>12</td>
</tr>
<tr>
<td>Ian Potter Foundation 101 Collins St Melbourne</td>
<td>7/3/07</td>
<td>PFP Executive documents</td>
<td>PFP records</td>
<td>147</td>
</tr>
<tr>
<td>Handbury Archives (RMIT Hamilton Office, material contributed by Milnes and DSE/DPI, Arthur Rylah Institute at Heidelberg Victoria)</td>
<td>2006-2008</td>
<td>PFP field operations</td>
<td>PFP records and maps</td>
<td>126</td>
</tr>
<tr>
<td>PFP farmer records (Cumming, Beggs and Waldron)</td>
<td>2006-2007</td>
<td>PFP field operations and PFP executive communications</td>
<td>PFP records</td>
<td>121</td>
</tr>
<tr>
<td>ABC Archives and Library Services at <a href="http://www.abc.net.au/archives">http://www.abc.net.au/archives</a></td>
<td>2006-2008</td>
<td>ABC programs – Countrywide and Landline</td>
<td>TV coverage</td>
<td>3</td>
</tr>
<tr>
<td>State Library of Victoria Newspaper Collection</td>
<td>2007</td>
<td>News</td>
<td>Newspaper coverage</td>
<td>15</td>
</tr>
<tr>
<td>Hamilton Spectator Archives(Hamilton Historical Society Gray Street)</td>
<td>2007-2008</td>
<td>News</td>
<td>Newspaper coverage</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Recovered</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>427</strong></td>
</tr>
</tbody>
</table>
The seven sites yielded 427 documents. Once duplicates or incomplete documents were discarded 140 documents remained for research (refer to Table 4.4). Four criteria for assessing the quality of documents have been applied in this study; authenticity, credibility, representativeness and condition (Scott 1990, cited in Bryman 2004, p.381).

(i) Authenticity: The source of documents must be genuine and directly relevant to the case study. Primary documents, those produced by agents engaging in the practice under study, are considered authentic.

(ii) Credibility: The documents must be read in the context of the case to detect alternative agendas or omissions.

(iii) Representativeness: The documents must cover the gamut of activity associated with the case, or the study area and not favour a particular aspect. This relies on a document recovery search that is unbiased although the researcher needs to remain sensitive to the fact that some material may not have been found.

(iv) Condition: This calls for a general critique of the documents collected to judge the value of the content and the condition.

The list describes each criteria and Table 4.3 summarises the status of the source of a document against the criteria. The authenticity of documents is a measure of quality of the source or archive. A document was considered to be of high quality when the source was a formal archival in the possession of agents directly involved with the PFP. The credibility is also judged to be high as the documents were not produced for this research but produced during the conduct of the PFP. In this sense they represent the ‘chatter’ from the 1980s, trailing off through the 1990s and finishing in 2000. Assessing the representativeness of documents and source was based on the number of documents retrieved against the number that may exist. That is, an estimate of the total number of documents ‘out there’ against those actually assembled for the research. A four-year project would have yielded many thousands of documents rather than 427 recovered by this search and the value of the missing documents is not known. This tempered the assessment to ‘unknown’ and increase the importance of making the document recovery
process transparent to allay concerns that the material was selectively collected. The final criteria are the condition of all documents. This was judged to be good as those that were incomplete had already been discarded.

**TABLE 4.3: SOURCED OF DOCUMENTS**

<table>
<thead>
<tr>
<th>Site</th>
<th>Authenticity</th>
<th>Credibility</th>
<th>Representativeness</th>
<th>Meaning/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Record Office of Victoria</td>
<td>High</td>
<td>High</td>
<td>Unknown. The GSC material was sparse and fragmented</td>
<td>Good</td>
</tr>
<tr>
<td>Ian Potter Foundation</td>
<td>High</td>
<td>High</td>
<td>Good. Held meeting minutes and formal correspondence</td>
<td>Good</td>
</tr>
<tr>
<td>Handbury Archives</td>
<td>High</td>
<td>High</td>
<td>Unknown. The documents recovered from other organisations. An assessment of significance is currently underway by Heritage Victoria</td>
<td>Varied</td>
</tr>
<tr>
<td>PFP farmer</td>
<td>High</td>
<td>High</td>
<td>Unknown. Confined to few documents retained in files.</td>
<td>Varied</td>
</tr>
<tr>
<td>ABC Archives</td>
<td>High</td>
<td>High</td>
<td>Unknown. Specific date search requirements limited finds</td>
<td>Good</td>
</tr>
<tr>
<td>State Library of Victoria</td>
<td>High</td>
<td>High</td>
<td>Unknown. Specific date search requirements limited finds</td>
<td>Good</td>
</tr>
<tr>
<td>Hamilton Spectator</td>
<td>High</td>
<td>High</td>
<td>Unknown. Specific date search requirements limited finds</td>
<td>Good</td>
</tr>
</tbody>
</table>

The documents were sourced between 2006 and 2008. Documents from research participants’ private files continued to be found during 2008. For example, late in the research process, one family remembered having video recorded news items in which they featured the PFP works on their farm. They had located twelve videotapes that I went through to find the relevant segments. Another family found newspaper clippings of stories about their farm dating back to the 1990s. These late items were valuable additions to the collection. Some participants recalled specific media stories but were uncertain about the date of publication and I was unable to locate them at the archives.

In his book on the PFP Project Andrew Campbell notes that in the four years of the Project he and the project’s support officer, John Marriott, had conducted 165 farm tours and spoken at 129 functions. This generated high levels of media interest which they often found difficult to meet (1991). Table 4.4 shows the break down of these
engagements. This shows that over the period of the PFP operation 97 separate
engagements were held with TV, radio and print media. However, only 29 of these were
able to be located for this study. For example, I knew that some of the TV media had
been taken from the footage of the film ‘On Borrowed Time’ and used from time to
time on ABC Countrywide program, (N. Innal 2007, pers. comm., 3 December). This
was not found and the key reason for this is the restricted date search query at the ABC
archives.

TABLE 4.4: PFP EXTENSION ACTIVITIES
(Source Campbell 1990, p.159)

<table>
<thead>
<tr>
<th>Year</th>
<th>TV and RADIO</th>
<th>NEWSPAPERS AND MAGAZINES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
<td>State/National</td>
</tr>
<tr>
<td>1985</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1986</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1987</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1988</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

Organising the Documents

The documents were numbered for research purposes with a code made up of
Year/Source/Item number.

(1) Year: the year in which the document was produced recorded by the last two
digits (e.g. 1994 =94)

(2) Source: four codes were used identifying the source of the documents. These
were:

- ‘GSC’ for documents found at the VPRO attached to that
  organisations activities.
- ‘PFP’ for all documents produced by the PFP agents including from
  the IPF, PFP farmers and the PFP
• ‘MEDIA’ are all the materials reproduced in print, television or film and includes images
• ‘L-PFP’ is assigned to all documents produced by the PFP agents after 1988

(3) Item number: all codes finish with a number that places the document into a sequence for easy retrieval.

For example a code 84_PFP:9 reveals the document was produced in 1984 by PFP agents and is the ninth one in that sequence. Appendix 3 provides a list of all the documents and codes used in the study.

Images in the media documents were an important part of the analysis. Narratives that persist overtime have often acquired a collective authority from photographic records (Tagg 1992, p. 102). The PFP narrative was pictorially represented in the images used to illustrate the articles and may provide insight to the persistence of the narrative. Images used in this study are referred to by the document code in which they appear. This means that at times a specific text reference will carry the same code as a particular image. The relatively few media documents (27 in total) meant I was familiar with each image and did not find the need to separately code them. Referring to Scott’s (1990) criteria for assessing documents mentioned above, the authenticity of media documents can be hard to ascertain because the author’s ability to present an accurate picture is unknown. However this presents a useful line in the research process because the distortions, errors or prominent positioning can be the object of analysis. Table 4.5 summarises the results of the document recovery process.

**TABLE 4.5: RESULTS OF DOCUMENT RECOVERY**

<table>
<thead>
<tr>
<th>Code</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 7 sites</td>
<td></td>
</tr>
<tr>
<td>PFP</td>
<td>97</td>
</tr>
<tr>
<td>MEDIA</td>
<td>29</td>
</tr>
<tr>
<td>L_PFP</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>140</td>
</tr>
</tbody>
</table>
4.4.1.2 Interview

The second source of data was from research participant interviews. Interviews are used to enable the researcher to gain explanations and information on material that is not directly accessible: perceptions, attitudes and values, matters that are difficult to obtain by alternative methods. The interview approach is particularly relevant to interpretivist models that work within the human perspective and aspire to be attentive to the meanings created by the participants (Cohen, Manion & Morrison 2000).

There are a variety of styles of interviewing, ranging from structured to semi-structured (Robson 1993). The structured interview is organised around preset questions. The participant is asked to respond in a set sequence. The semi-structured approach allows the interview to flow following leads that the participant opens up. The first interview type employed in this research is described as semi-structured interview and the second interview is structured. The advantage of using a semi-structured interview is that the interviewer is in control of the process but retains the flexibility to follow new leads as they arise (Bernard 1998). The second interview was an opportunity to check the facts collected during the first meeting and provide an opportunity for the participant to change their information.

Interviews used in a discourse analysis are different to interviews used in other research approaches (Potter & Wetherell 1987). This occurs because a discourse analysis values difference and inconsistencies in the interview data. To encourage inconsistencies the participant is encouraged to lead the story telling. The tendency to smooth the narrative to make coherent what in reality were unconnected events is a strong inclination for people telling their story (Riessman 2008). To guard against inadvertently instilling the participant with my own research objectives or pre-emptively narrowing the themes I believed would be fruitful I adopted a conversational approach. The interviewer, in this approach, is actively engaged in drawing the diversity of responses. This has its challenges. As Riessman (1993) explains, the potential loss of control and concern for the relevance of data are significant barriers for the researcher in remaining faithful to this approach.
Some researchers suggest using artefacts to aid peoples’ recall of events (Riessman 2008). Others suggest an ‘active interview’ approach whereby the participant and interviewer walk around the farm so that features of landscape or farm activity could trigger recall and help the participant relax into the interview, (Riley & Harvey 2007). To focus on the PFP I brought three artefacts along to the interviews:

(i) The PFP reports detailing activities planned in the PFP farms;

(ii) A list of the activities completed and species of trees planted;

(iii) Recent aerial photography of the Victoria’s south west region.

Participants were made aware of the items but none showed any interest in them.

4.4.2 Summary of Data

The relationship between the documents and the interviews of research participants to the public and PFP farmers’ narratives is shown with a time dimension in Figure 4.1. The PFP was operational from December 1984 to the December 1988. The bulk of the documents used in this study were produced during this active period. Other materials were produced after this time, by the media and former internal agents of the PFP, providing an important part of the study.

![Figure 4.1: Data Flow from Moment - Text - Outcome](image-url)
4.4.2.1 Description of Research Participants

Participants for this research project were drawn from two groups organised according to their location to the PFP: internal or external. Internal agents are members of the PFP farm families and the PFP project officers, executive and advisory board members. External agents are those outside the operation but present at the time of the PFP and involved in agri-innovations, media or farming. This group includes state agency employees, agricultural consultants, facilitators, media personnel and farmers.

(1) Internal PFP agents – PFP farmers

This group is made up of people who operated within the PFP, the family members of the PFP farms, project officers, executive and advisory members.

1a. PFP farm family members

Fifteen families were selected to participate in the PFP. The process and their responsibilities are described in Chapter 3.3. The extent to which the PFP farmers participated in the project in the 1980s differed. A sketch of the changes for the PFP families and their farms can be seen in Table 4.6 (A) the PFP families, (B) the PFP farms. An important point to note about the PFP farmers is that many of the women in the partnership did not consider that they could contribute to a study on the project. When they did participate they tended to provide material that fell outside the parameters set by this study. They tended to tell another story, not clearly part of the PFP narrative. At the time none of these women were engaged in out-door work where the PFP was most obviously experienced. Therefore their direct experience of the PFP was as supporters - organising food for visitors and assisting with tree planting.

This was not the intention. One of the outcomes for the farmers attending the Creswick consultation was to raise awareness of the issues of land degradation and to ‘involve women’. This was an item on a list of actions, which included:

- Inform local PMS about the project
- Introduce project at service club meetings
- Signs on farms indicating involvement in the project need to be visible from the road
- Involve women (84_PFP:4)
I recall that at field days in the 1900s on the PFP demonstration farms that the days opening and closing remarks always included an acknowledgment of both the husband and wife by name. This was new at the time, similar to the ‘welcome to country’ introductions we have now in recognition of the traditional owners of the land. This acknowledgment may have passed for involvement at that time but the women’s experience of the PFP seemed to be more often as outsiders as the following quotes demonstrate.

They got my name wrong on some things. I’m not one to promote myself but I felt dis-empowered, even by Potter. (2.25:27/7/07)

I always felt self-conscious. I worried about the food. There were always so may people associated with Potter and I had three under three at the time. (3.25:21/07)

At the time of Potter I was inexperienced and not confident to get up and talk to a group in case I got it wrong and it would be a problem for the family. (3.15:26/7/06)

Women were hard to interview for the research as they considered they had nothing to offer a PFP research project. One woman was an exception to this and did not feel herself to be an outsider of the project. At the time of the PFP she took part in media interviews with her husband and was a guest on a talk show during the post Potter years.

The PFP did not cause women to move to the peripheral. The rules of engagement had already been established prior to the PFP and they were observed during it.

My father- in-law didn’t think it was the place for women. (1.65 27/6/08)

I was busy with the children. (1.25: 26/6/08)

I was always included, even if I was in the kitchen when they had their planning meetings, I would be called in for it, or encouraged to stay and get involved. I was always made to feel part of it. (2.65: 27/6/08)

The farm was my mother-in-law’s territory. It had nothing to do with me. (2.25 25/7/08)

These quotes reveal the existence of powerful demarcations. These pre-existing conditions seemed to determine how the women experienced PFP. The exception to this was the one woman who did not feel marginalised and also reported feeling an equal
member of the farm partnership. This may also be a reflection of a masculine narrative of farming which described by others (Alston 2005). Feminist researchers have identified the dominate worldview of farming persists as though there is a singular rural discourse as the reason that women and other men who reside on the peripheral continue to be excluded (Pini, Brown & Simpson 2003).

One of the interesting aspects of the contribution women did make to the interviews was that it generally fell outside the topics nominated in my ethics application to conduct the research interviews. As a result, their material, which was often related to family and family relationships, was mute. I was conscious that this did not adequately deal with the contribution of women. Indeed, I realised later that my interview focus on the PFP experience may have effectively excluded the women a second time from actively participating by excluding their material from the analysis. Had I changed the approvals to include family matters, I felt I would have shifted away from an investigation of the processes of adoption of changed farm practices. However, I do not underestimate the overarching role these matters take in a family farming business.

For example, I can note from my observations that the influence of the women appeared to be ‘off stage’, in relation to the PFP which is why they failed to find a foothold in the public narratives. Rather, their narratives appeared to be potent at the level of the family-farming story. During the interviews I became aware that they exerted a considerable influence on farming praxis.

I wasn’t going to have the next generation, and all those problems. It wasn’t going to happen. (3.15:5/6/07)

This (the farm) is a business. It’s just a business. (3.25:22/08/07)

Both quotes are from women whose farms have been sold. The women seemed to take responsibility for managing the family relationships, especially between their children and husbands. In many cases when farms had been sold it seemed to be the wife who led the decision. For reasons of health or family conflict, the wives I spoke to had considerable influence. There is not a public discourse on managing family relationships or family members with deteriorating health while keeping land management practices up to speed. The health issues are more often connected to drought or financial difficulties and told as welfare narratives. The de-traditionalisation
of women’s roles over the last two decades would have had most impact on the generation behind the PFP cohort who are now over fifty years of age. This is reinforced in a study on the future of farming which found that farm women are increasingly likely to identify as a joint farm manager or are more likely to be employed in professions outside agriculture (Land & Water Australia 2005). The role of women in relation to natural resource management participative programs has not been explored in this study.
### Table A: About the family

<table>
<thead>
<tr>
<th>% area covered by PFP activity</th>
<th>n=</th>
<th>Actively farming after 10 years</th>
<th>Actively farming after 20 years</th>
<th>Farm succeeded to next generation (or in process of)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-30%</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>6 of the 8 families in this group continue to farm the same property after 20 years. 2 families have sold</td>
</tr>
<tr>
<td>31-90%</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3 of the 4 families have sold and left farming. 1 is in the process of passing the farm onto the next generation.</td>
</tr>
<tr>
<td>&gt;90%</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1 of the 3 families remains on the farm with a passive role in relation to farming leased their property</td>
</tr>
</tbody>
</table>

### Table B: About the farm

<table>
<thead>
<tr>
<th>% area covered by PFP activity</th>
<th>n=</th>
<th>Enterprise is grazing /cropping</th>
<th>Farm holding (of original PFP families) same (ha) as in 1984</th>
<th>Farm holding (ha) increased</th>
<th>New owner</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-30%</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2 farms have new owners who are engaged in grazing /cropping</td>
</tr>
<tr>
<td>31-90%</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1 farm was sold for hardwood plantation. 2 for grazing/cropping enterprise</td>
</tr>
<tr>
<td>&gt;90%</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1 farm was sold for hardwood plantation and 1 for grazing/cropping enterprises</td>
</tr>
</tbody>
</table>
1.b Administrative and operational group members

The second group of Internal PFP agents are those people who had a direct involvement in the PFP in an executive or field function role. An executive group was responsible for overseeing the financial and strategic direction of the PFP. The members of this group were linked to business, government and academia. Another component of this group was people who were part of the PFP Local Advisory Group providing oversight of the implementation of the project. The prominent members of the Local Advisory Group were also members of the executive. Two staff members performed the PFP operations: project manager, Andrew Campbell and field officer, John Marriott. Campbell was also present for the meetings of the PFP Executive group and Local Advisory Group meetings.

Members of this group were contacted by telephone. Many were no longer in public life. Those who participated include the PFP executive chair, John Jack; farmer representative, John Diprose; field advisor, Bill Middleton; and Local Advisory Group participant, Bill Sharp. The PFP staff members Andrew Campbell and John Marriott participated in the interviews. The interviews with people in this group were held in homes, offices or a café – places which they chose as convenient for the meeting.

(2) External agents – State Agency Staff, Media, Farmers

The second group of people participating in the interviews had operated outside the formal structures of the PFP. None-the-less, they were integral to the development and extension of the PFP. For example, the state agency staff were involved in the provision of agricultural or soil conservation advice to farmers during the time of the PFP. Some of the same people hold similar advisory roles today. Others in this group had no experience of the PFP but through their positions today are relevant to the study to clarify information. An example of this is staff at the Glenelg Hopkins Catchment Management Authority. The state agency group are made up of Peter Dixon (Department of Primary Industries), Greg Campbell (Department of Sustainability and Environment), John Langford (former Soil Conservation advisor, retired), and current on-farm facilitators, Julia Schlapp (Department of Primary Industries) and Shelly Lipscombe (Catchment Management Authority).
Others in this group are farmers who were prominent at the time (John Fenton) or those who now own a PFP farm (Adrian and Helen Lyons at ‘Daryn Rise’ and Eve Kantor and Mark Wootton at ‘Willandra’ and ‘Helm View’). This group provided a context to the results and have been quoted in the discussion for that purpose.

The Table 4.7 presents the research participants by group and lists the number of potential participants, the number of actual participants and the hours of interview material.

<table>
<thead>
<tr>
<th>Research Participants</th>
<th>Potential number of people</th>
<th>Number of research participants</th>
<th>Hours of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal to the PFP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a. PFP farmers</td>
<td>29</td>
<td>26 (10-individuals 8 – couples)</td>
<td>49</td>
</tr>
<tr>
<td>1b. PFP administrative and operational groups</td>
<td>18</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>External to the PFP</td>
<td>many</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>

Summary

The result of these data recovery and interview processes was a dataset made up of interviews, professionally written media, images, video recordings, TV programmes and PFP management communicative documents. As a dataset this material is referred to as the ‘PFP corpus’. Table 4.8 provides a summary of this material. The PFP corpus thus, represents the perspectives of a wide range of people, those involved with the PFP implementation, those who worked alongside and those who reported on the project. The PFP corpus extends from 1983 to 2006 with the bulk of documents representing the active phase of the PFP operation. The stages prior to and post PFP have also been included to provide scope for capturing transformations over time. The collection of data from different actors, produced for different purposes and at different points in time provided to allow the study to capture some aspects of change over time. This was considered to be a useful basis for reconstructing the story of the PFP from the different perspectives.
4.4.3 Data Analysis

This section explains the techniques that were used to analyse the PFP corpus described in the last section. Three techniques were used; the Storyboard technique to uncover the PFP public narrative, the Plot Analysis to uncover the farmers’ narratives and a discourse analysis to understand how the narratives connected and created meaning for the agents involved. In this study the term ‘narrative’ is used to describe stories that have plots and tell one version of an event. The term ‘discourse’ is used describe multiple stories and explore the workings of these combinations. This section presents a background to conducting textual analysis before describing the three techniques.

Analysing text

Literary theorists have differentiated between stories, narratives, discourses, and texts on the basis of the structure of language using grammar, characterisation, plot or subject matter (Mills 2008). However, for many, the term discourse represents a shift from the structure of sentences toward an analysis of the coherence, cohesion and context of texts (Mills 2008 p. 8). Thus a discourse approach to textual analysis seeks to connect language to the social world of the speaker. Interpreting language, therefore, is a surrogate for interpreting an individual’s reality. According to Castiglione and Warren language or text removed from its context is meaningless:

…from the perspective of those who are represented, what is represented are not persons as such, but some of the interests, identities, and values that persons have or hold. Representative relationships select for specific aspects of persons, by framing wants, desires, discontents, values and judgments in ways that they become publicly visible, articulated in language and symbols, and thus politically salient. (Castiglione & Warren 2005, p.10, cited in Dryzek & Niemeyer 2006, p. 2)
This quote shows how a multiplicity of perspectives can be fundamental to individuals’ social and personal identities and are conceptualised as separate discourses. Indeed the complexities of an individual inner world are given expression in discourses providing a behavioural guide. Dryzek and Niemeyer conceive of this multiplicity within an individual as a construction of discourses.

A discourse can be understood as providing one way to navigate a complex world, embodying specific assumptions, judgments, contentions, dispositions, and capabilities. It enables the mind to process sensory inputs into coherent accounts, which can then be shared in intersubjectively meaningful fashion. (Dryzek & Niemeyer 2006, pp.2-3)

The disparity and inconsistency within a narrative and between narratives is the level at which a textual analysis can proceed. This understanding of narrative, as representing but one possible version, is consistent with the research methodology and approach to the interviews detailed in the previous section. This is the level at which the discursive characteristics of the data can be analysed as it is the link between the mediating influences of individual, social and cultural territory discussed above. This study has taken the data both from interviews and documents to be textual data representing the PFP discourses.

Selection of a Discourse Analyses Technique

Discourse analysis is one type of textual analysis. Discourses work with differences to enter the mental world of people though the text generated in social practice (Harré & Gillett 1994). As such, a discourse analysis cannot provide absolute answers to specific problems. Its authority lies with the power to expose hidden motivations behind a text: activating the assumptions and making them explicit. Discourse analysis is considered a product of the postmodern period in that it claims to work at the level of belief systems (Silverman 2006).

A discourse analysis provides a collective: a ‘set of methods and theories for investigating language in use and language in social contexts' (Wetherell, Taylor & Yates 2001, p.1). There are two main approaches to discourse analysis: a content oriented analysis and a language orientated approach, (Meyer 2001, p.25). A content oriented analysis is concerned with the social conditions in which the language is
generated rather than discursive action embedded in it (van Dijk & Teun 2001). In this form of discourse analysis, context is crucial and whole text, (rather than a single sentence, word, or sound) is important as 'the basic unit' of analysis (Kress 2001, p.35). A language orientated approach, on the other hand, is concerned with the relationship between language and other elements of social life through an examination of grammatical and semantic analysis (Fairclough 2003). A language oriented approach has been used in this study.

The selection of the type of language-oriented analysis is made in reference to the research problem and the type of data to be encountered. It is consistent with the theoretical perspective taken in this thesis that the site of transformation is at the ‘social interface’ where actors struggle over meanings thorough the routines of everyday life. Even so, discourse analysis does not prescribe techniques but offers heterogeneous methodology through three unifying assumptions. These are described as:

- An emphasis on the way versions of the world and inner psychological worlds are produced in discourse.
- An emphasis on participants’ constructions and how they are accomplished and undermined.
- An emphasis on the way a text selectively works up coherence and incoherence, presenting a reality.

(Potter 1996, p. 202)

In the absence of a set procedure to guide a discourse analysis, the practitioner must refer to the three points that Potter emphasises to judge the applicability of a technique and understand its value and limits. The first two points have their roots in robust or transparent data collection procedures. Are the study participants relevant to the action of the case study? Have the interviews been conducted in a way in which the participants are leading the conversations, presenting what they feel to be relevant, not what they think I want to hear? The data collection procedure, described in the previous section, attests that at least these points have guided the development and conduct of the data collection processes. The third point Potter makes is that the researcher must judge the extent to which the analysis can provide insight. Discerning differences in the PFP
story between agents is a fundamental purpose of the analysis, which consists of three different analysis techniques.

The development of this study’s analysis techniques was also informed by the work of researchers in the environmental field. Most notably has been an influence by the work of Maarten Hajer (1995) and in particular his explanation of narratives having ‘emblems’, the symbolic images which ‘carry’ the story. For Hajer narratives are ‘storylines’ that make the complex and unknowable seem coherent. The work of John Dryzek (2005) has also provided guidance for this study. Dryzek’s work on global discourses was organised around a method of differentiation, which was similar to taxonomy for organizing conflicting stories. Other techniques have been taken from William Labov’s (1972) work on narrative structure, and Catherine Kohler Riessman’s (1993) work on meaning. Both were influential in developing techniques of analysis for this study.

4.4.4 Description of Analysis Techniques

This section summarises the three techniques for data analysis used in this study: the Storyboard, Plot analysis and Dryzekian Analysis. The first two techniques were used to create the public and farmer narratives and the third technique was required to understand the meanings that linked the narratives. Table 4.14 shows the link between each of the three techniques with the research objectives as well as data source and collection method and considerations about data reliability.

4.4.4.1 Technique 1: Storyboard

The purpose of the Storyboard was to provide a quick assessment of the narratives in the documents to identify the public PFP narrative. This was important to inform my second structured interviews and assist the document recovery search.

The Storyboard technique approximates a practice of visually representing a story by placing symbols on a board. I have employed this technique with school students as part of a river health program I conducted with the Department of Primary Industries. The technique is a practical way to convey ecological awareness for students who may not have a background in the area. It involves the students reconstructing the particular
reach of river visited during a field trip. The reconstruction is achieved by the students selecting symbols to represent features of the aquatic and terrestrial features noted during the field trip. The reconstruction is then used to ‘test’ scenarios to explore how the river may respond to different external events. The result can be visually represented and in this study, to convey the passage of time, the storyboard has been shown in concentric semi-circles (refer to the illustration in Figure 5.2).

The Storyboard technique was refined for this study after an example by Silverman (2006). According to Silverman the intention of a discourse analysis is to look beyond agents’ roles to the ‘sphere of action’ and the ‘motives for action’. He poses two questions: What is happening? Why is it happening? For Silverman, the action could be cognitive, physical specific or unknown and the agents and their motives varied. The value of this work is that it avoids interpreting narratives in terms of alternative versions of reality. By adopting an internal analysis, the realities the text brings into play can be described. This avoids using commonsense interpretation of the action, which is listed among the potential shortcomings of discourse analysis (Antaki, Billig, Edwards & Potter 2002).

In this case, a commonsense approach could be based on what is easy to count, or, what I thought was relevant. To avoid this I have identified four elements to the storyboard construction. The first element is the ‘domain of impact’, the site of the PFP action. The second element is the motives assumed to be in play. The PFP was a change project and so the levers it intended to pull to achieve change are more relevant to this research than the agents’ motives for becoming involved. The third element is time, represented by the year in which the document was produced. The first element is the ‘domain of impact’, the site of the PFP action. The second element is the motives assumed to be in play. The PFP was a change project and so the levers it intended to pull to achieve change are more relevant to this research than the agents’ motives for becoming involved. The third element is time, represented by the year in which the document was produced. Aspects of these three elements are summarised in Table 4.9 while the detailed nature of the elements is elaborated on in Chapter 5.1. The elements frame the PFP story which can be visually depicted by a concentric semi-circle. The PFP agents can then be placed across the frame to ‘tell’ the story. In addition to ‘telling’ the text
and images were interpreted to provide an insight to the significant relationships and connections made by the PFP story.

As this analysis was intended to inform my subsequent data collection, and the material I already had was diverse and disparate, I had to ascertain what the agents thought the PFP was actually doing and where it was happening. If I were to find differences in attribution, it would hint that differences in the patterns of meaning the agents formed would also be different.
Selecting the Storyboard documents

The selection of the seventeen documents was an important moment in the research process. It was important that I not favour some documents over others, fail to recognise the significance of a document or give the impression that I had all the possible documents in my collection. I remained conscious of these possible errors in practice while proceeding to impose an order for the analysis. I selected documents that were prominent at the time of production, or intended to be prominent, and a further sorting was made to represent time periods. This provides a sweep from 1984 through to 2000. I had become familiar with the PFP through the data collection activities and used this understanding of the material to judge the validity of document selection. On their own the documents tell the PFP story from inception to reflections by its agents and media. Table 4.10 shows a summary of the documents by agent, code, description of the document and numbers recovered.

### TABLE 4.9: DESCRIPTION OF DOMAINS OF IMPACT

<table>
<thead>
<tr>
<th>Identify the Elements</th>
<th>Questions</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domains of impact.</td>
<td>Where is the action-taking place?</td>
<td>Text of documents</td>
</tr>
<tr>
<td>Motives harnessed by the PFP</td>
<td>What motives are assumed to be important?</td>
<td>Text of documents</td>
</tr>
<tr>
<td>Year of document production</td>
<td></td>
<td>Taken from document code</td>
</tr>
<tr>
<td>Agent Group</td>
<td></td>
<td>Taken from document code</td>
</tr>
</tbody>
</table>

### TABLE 4.10: SUMMARY OF STORYBOARD DOCUMENTS

<table>
<thead>
<tr>
<th>Storyboard Documents</th>
<th>Code</th>
<th>Description and Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project documents</td>
<td>PFP</td>
<td>Authored by the PFP officers 1984-1988</td>
<td>8</td>
</tr>
<tr>
<td>Legacy documents</td>
<td>L_PFP</td>
<td>Authored after 1990 by PFP officers and a PFP farmer reflecting on the PFP</td>
<td>4</td>
</tr>
<tr>
<td>Media documents</td>
<td>MEDIA</td>
<td>Print media between 1985 and 1995. ABC TV segment in 2000</td>
<td>5</td>
</tr>
<tr>
<td>Images</td>
<td></td>
<td>Referenced to the documents in which they appear</td>
<td></td>
</tr>
</tbody>
</table>
Internal PFP agents authored eleven of the seventeen documents. The media documents were chosen to cover the time period used in this study.
Description of the Storyboard Documents

The documents are described in chronological order. The document code displays the year, origin and number in the series. The identification of the domain of the PFP impact is underlined in the description. The domain is a generalisation of the content of the whole document. The intention with this technique is to find the similarities not differences in the story from agents’ perspectives and to do so relatively rapidly. A quote from the documents summarises the element of the domain of the PFP activity. The Storyboard documents are listed in Appendix 2. A summary of each of the seventeen documents appears below.

Document One

The first document in the storyboard series (84_PFP9) is a speech given at the Creswick Consultation by Professor Carrick Chambers from Melbourne University’s School of Botany (and also a GSC board member). This is significant because it was the presentation that launched the PFP. Attendees were a selected group of farmers, business people and government agency staff. Chambers, in this speech, outlined the problems of land degradation, painting a grim picture of an ‘un-Australian moonscape broken by rows of pines’ (84_PFP9:3).

Document Two

The second document was produced after the first six months of operation. This is an early Project Manager’s Report to the PFP executive (85_PFP5). The report provides an insight to the speed of the PFP field operations from its description of progress with farm plans and requirements for fencing materials and tree seedlings.
Document Three

This document is an example of the PFP social platform in action, which was encouraged by Peter Mathews, the project’s facilitator. Mathews experience for the job had come from working as a mediator in apartheid South Africa and as a high level UN negotiator (Campbell pers.com 2/11/06). Mathew’s enthusiasm is still recalled by many of the farmers I spoke to. The document contains the notes from the Monash Consultation held in November 1985 with state government agency staff and the members of the PFP executive to discuss the government’s role in managing land degradation.

It was against the background of the issues arising from this project (the PFP) that the discussion concerning the services offered by various government departments was focused. (85_PFP4)

This public critiquing of the efficacy of government services to land management is an example of the PFP project adopting the role of a provocateur.

Document Four

This document returns the story to the progress of PFP operations in August 1985. This is a report titled, The Potter Farmland Plan – Progress So Far, written by the project manager Andrew Campbell (85_PFP18). This attributed the PFP impact at a landscape level. An example of the text which emphasises this is reproduced below.

The concept of the whole farm planning embodied in the Potter Farmland Plan is an approach which examines the interactions between farm management and the physical landscape (85_PFP18)
Document Five

This is the first media document in the storyboard collection. It was written for the ‘Financial Review’, July 12, 1985 by David Osborne and titled Saving Australia (85_MEDIA3). The story finishes with the following lines:

The idea is that busloads of other farmers, bureaucrats and politicians will be able to travel to western Victoria to see what can be done to halt the degradation of Australia.

The emphasis of the article is evident in this passage. It describes the PFP as a project which will impact at landscape level and instigate social and administrative changes in advisory services and policy.

Document Six

This is the second year of the PFP and the social agenda is still active. The local community at Hamilton have become involved. This document contains the notes of a community consultation session where attendees were encouraged to discuss community responsibility toward farmers (86_PFP5). The following quote, taken from this document, shows the ambitious change the PFP architects had in mind.

The Potter Farm Plan is a practical situation against which one could test the adequacy of the services and assistance available (86_PFP5:1)

Document Seven

In 1987 in the ‘Farm’ magazine, January edition was a feature on trees (87_MEDIA1). One of the articles in this edition detailed the technical requirements for successful fencing and tree establishment in the context of a farm planning method. Farm planning became the PFP signature and was foremost in the extension messages.
Farmers from all states are finding a ‘pot of gold’ at the end of their tree growing programs. It comes in varying forms: salinity control, livestock shade and shelter hence improved production, landslip and erosion control …(87_MEDIA1 p3)

This expansive list of reasons for tree planting is still farm enterprise and functionally focused and has been assessed as impacting at the landscape level.

Eighth Document

This document is the last manager’s report - ‘Update August’ (87_PFP2). This is a newsletter sent to the PFP farmers, organisations and individuals who had an interest in land management. It reinforces PFP’s focus on land degradation, addressing predominantly the geo-physical level of the issue with follow on impact for the community. The PFP regarded extension as a case of modelling best practice as this quote taken from page one shows.

The Potter Farmland Plan is establishing 15 demonstration farms, to show in a practical way on real farms, how land degradation can be tackled at the farm level, and to provide a focus for community attention to land degradation problems and the potential for action.

Ninth Document

This media article appeared in The Hamilton Spectator titled ‘Land Loss by Degradation’ 30 April (88_MEDIA2). The article focuses on the land degradation as a looming disaster for primary production and the PFP as an impetus to farmers to take action.

Tenth Document
This document contains the minutes taken at the final meeting of the PFP Executive Group on December 12 1988 in the Astronomers Residence in South Yarra, Melbourne, (88_PFP10). The members’ comments were in the most part fulsome in their praise of the PFP as an exemplary model for extension. Two of the influential insiders, Bill Middleton and Pat Feilman, lamented the lack of government support for the post PFP phase.

**Eleventh Document**

This is a brochure: ‘Whole Farm Planning’ written by the PFP manager Andrew Campbell during 1988 (88_PFP4). This marks the final output of the PFP operational phase. The brochure was intended for a farmer readership and uses imagery of degraded landscape. The brochure promotes the message of repaired landscapes equating with long term profitable enterprises.

**Twelfth Document**

The storyboard document series now moves into the post PFP, or legacy phase. The first of the documents representing this phase is the Acknowledgment written by Pat Feilman for the 1990 booklet accompanying an educational video ‘On Borrowed Time’ (90_LPFP5). The text is more expansive about the factors contributing to land degradation of which tree decline is but one of the ‘interferences with the natural ecological system’. This is the first mention of ecological systems in any of the material to date.
Thirteenth Document

This document is a flyer produced to promote the video ‘On Borrowed Time’. (90_LPFP3). The video showcases ten farms, five of which are the most improved of the fifteen PFP demonstration farms. The text highlights the link between ‘winning the war’ against soil degradation to ensure farm productivity. This reiterates the earlier themes of landscape repair and profits. Reference is made to an ‘ecological framework’, and ‘fundamentals of ecosystems’ as the basis for whole farm planning. In other references to ‘sustaining the future’ and ‘alternative enterprises’ significantly updated the PFP as an integrated innovation impacting at the level of ecosystems and challenging traditional thinking.

Fourteenth Document

This document is the presentation delivered to the Landcare Conference held in Wangaratta in 1990. It was written and delivered by Bruce Milne, who was one of the PFP farmers (90_LPFP13). The presentation is based on his experience and portrays a journey from the confines of an enterprise-restricted view of the landscape into a social and industry wide view of land degradation. Milne recalled receiving negative feedback from this presentation from some farmers (Bruce Milne pers. com. 29/7/08). The PFP impact in this document is at the level of cognitive change and ecosystem integrity.

Fifteenth Document

The media interest in the PFP continued and is represented in 1991 in the ‘Good Weekend Magazine’, by an article titled The Tree and Man by Tony Stephens (91_MEDIA1). This is an effusive article, which represents the PFP farmers as heroes in challenging the traditional ways to find a sympathetic connection to the land. Governments’ complicity (highlighted
though poor policy and unrealistic expectations) in the problem of land degradation is presented as a major barrier to be overcome. This article locates the PFP impact at geophysical, ecosystem and cognitive domains.

Sixteenth Document

This document is the presentation given by former PFP project manager, Andrew Campbell at a 10 year celebration. At the time Campbell was a visiting fellow at the Centre for Resource and Environmental Studies at ANU. His perspective was partly a celebration of the PFP, and partly a reflection informed by his experiences in land management since that time (95_LPFP1). He regarded the PFP as a starting point in a journey, which is yet to be completed. The main impacts were levelled at cognitive and structural domains.

Seventeenth Document

The final document is taken from an ABC Landline program ‘Potter Plan’ which was televised nationally in 2000. (2000_MEDIA1). In a similar vein to the 1991 article ‘The Tree and Man’, this program also shows the PFP farmers as heroes of change, beneficiaries of both a bucolic pastoral idyll and increased farm production. The level of impact accorded to the PFP is at landscape and mind-set change.

This completes the description of the storyboard documents. The documents were selected to tell the story from inside as well as outside the PFP and across time.

4.4.4.2 Technique 2: Plot Analysis

The second analysis, the Plot, is concerned with identifying the core elements of the farmers’ narratives. The Storyboard approach described in the previous section was used to identify the public narratives. The storyboard technique was not applicable to the analysis of farmers’ narratives because of the difference between documents and the interviews. The documents are purposeful PFP communications while the interviews are a reflection on the PFP experience, which is personal and individualised. The
purposeful communications of the PFP was suited to Silverman’s approach of identifying the sphere of the action. However the interpretivist approach taken in this study acknowledges that the farmers’ reflections of the PFP would place them at the centre of the action. To understand the farmers’ narratives a broader and more nuanced approach to the analysis was required.

This was provided by the second analysis technique, the Plot Analysis. The word ‘plot’ refers to the core story or subplot of the story, or in this case the interview narrative. The technique I have used was informed by the work of linguists William Labov and Joshua Waletzky (1976). They developed a formal framework for the basic definition of narrative. Known as the L&W framework it provided a technique for understanding the temporal organization (within the story) and evaluation of narratives. The researchers regarded that the telling of a story transformed it into a sequence of events in which some aspects were highlighted over others. They regarded the plot as the key to identifying the underlying structure of the outcome of this transformation. Plots are described as the ‘referential core’ of personal narratives (Labov 1982) or the ‘canonical events’ (Bruner 1990) and can be used to understand new and unexpected elements. Riessman refers to the L&W framework as a type of ‘radical surgery’ on the narratives reducing them to the fundamental structural elements based on the principle that every story has a set of common elements.

A speaker connects events into a sequence that is consequential for later action and for the meanings the speaker wants listeners to take away from the story (Riessman 2008, p. 3).

This is an important consideration for the study. The conduct of the interviews avoided pre-empting what the story should be about. It was intended that the research participants would choose what they thought was important. The plots were intended to find a framework to consider their participation and how they portrayed it. Labov and Waletzky (1976) referred to this as the ‘functional elements’ that work with narrative structure to tell the story by a series of sequences. The story thus told has a beginning, middle and an ending. They used these naturally occurring elements to code a story by: abstract, action, evaluation, and conclusion. Refer to Table 4.11. The abstract of a narrative consists of passages designed for the benefit of the listener to ‘put them in the picture’. Once this is achieved the teller details the more complicated parts of the story.
and then evaluates it against a set of personal undeclared values. Finally the story is concluded when the teller makes the tale coherent within the context of their life experience.

This approach is relevant to my data because the interviews had yielded such disparate narratives with respect to the topics, agents and intentions discussed. I modified the functional elements, (as described by Labov and Waletzky in 1976) for this research to: orientation, action, evaluation, and reflections. The use of these terms is described in the Table 4.11.

**TABLE 4.11: QUESTIONS TO EXTRACT PLOTS FROM NARRATIVES**

<table>
<thead>
<tr>
<th>Plot Element</th>
<th>Questions asked of the narratives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>What was happening on the farm, with the family before joining the PFP?</td>
</tr>
<tr>
<td>Action</td>
<td>What did they actually do during the PFP?</td>
</tr>
<tr>
<td>Evaluation</td>
<td>What did the action mean to the farmer/family?</td>
</tr>
<tr>
<td>Reflections</td>
<td>What do they think about it all now?</td>
</tr>
</tbody>
</table>

The nature of peoples’ learning as a consequence of their participation in the PFP is an important consideration. This technique provided a method of understanding some of the impacts of the PFP on the farmers from their perspective and provided a summary, which I could take to the second interviews to clarify and validate the outcomes.

4.4.4.3 Technique 3: Dryzekian Analysis

The third technique used to analyse data in this study is the discourse analysis, which I have called the Dryzekian Analysis. This analysis is used to investigate the interactions between the public narratives (from the Storyboard) and the farmers’ narratives (from the Plot Analysis). This technique is a discourse analysis that moves from understanding narratives to identifying the patterns in the interaction of narratives; that is to the discourse of the PFP.

Discourses are described as ‘social action’ by which reality and meaning are created. Wetherell nominates three features of discourse: (i) it is constitutive, (ii) it involves work and, (iii) it is formed through cooperative production. A discourse is constitutive
in that it ‘builds objects, world-mind and social relations’ (2004, p. 16). It therefore does not transmit or reflect a stable or inherent reality. Secondly, discourses involve work, as it is a deliberate portrayal of an event or reality. This aspect of discourse has been described as ‘functional’ (Potter & Wetherell 1987). Many coexisting versions of reality are available to the speaker, who chooses only one, and draws on rhetorical devises to persuade others to this particular understanding. The third feature of a discourse is cooperation between people to create a shared version of a social event.

The term ‘discourse’ in discourse analysis is used in different ways in different fields (Silverman 2006). As a result, five broad categories of discourse analysis have been identified. They are: (i) linguistics, (ii) cultural, (iii) social, (iv) psychological and (v) critical linguistics (Mills 1997). These categories reflect the reach of discourse as ‘social action’. The reach poses a problem for researchers because there is no single theory that can be considered common to all the different approaches to discourse (Gee, Michaels & O’Connor 1992, p.228). This has created a situation where there is different terminology and a plethora of research approaches (Punch 1998). This is evident in the techniques used in this study. The Storyboard analysis is based on a form of descriptive analysis proposed by David Silverman (2005), the Plot analysis has been modified from a type of narrative analysis by William Labov and Joshua Waletzky (1976, 1972) while the Dryzekian Analysis has been adapted from a form of social analysis developed by John Dryzek (2005).

The techniques used for the Dryzekian Analysis are based on the work of John Dryzek (2005). Dryzek used tensions in environmental debates to connect and differentiate discourses. For Dryzek, a discourse is a ‘shared way’ of understanding the world in order to tell a story. Different discourses ‘see’ different things and so tell different stories. The tension arises when the different stories compete for the same space. In some instances the space is shared and in others the tensions are significant enough to cause a separation.

Dryzek has turned the presence of tension into a taxonomic procedure for understanding the fundamental differences between discourses. The fundamentals arise from the pre-eminence of human economic systems (industrialism) over natural systems. Dryzek’s classification begins with two broad dimensions. The first dimension concerns the
degree to which alternatives (promoted by a debate) diverge from the conditions created by industrialism. The departure is classified as either reformist or radical against the dominant discourse of industrialisation. This is the first division in the key and can be seen in Figure 4.2.

![Figure 4.2: First Division in the Taxonomic Key](image1)

The second dimension further defines this departure and the alternatives they propose by a classification of either prosaic or imaginative. Prosaic alternatives take the ‘political-economic chessboard set by industrial society as pretty much given’ and imaginative alternatives ‘seek to redefine the chessboard’ (Dryzek 2005, p.13). The second division is shown in Figure 4.3.

![Figure 4.3: Second Division in the Taxonomic Key](image2)
Using this approach Dryzek defined nine environmental discourses: administrative rationalism, democratic pragmatism, economic rationalism, sustainable development, ecological modernization, green consciousness change, green politics, survivalism and promethean. They are stories built from three structural elements: the entities or ontological position of the discourses, the relationships deemed normal within the discourse and agents who are recognized as part of the action. The two stages of structural division and the discourses are shown in Figure 4.4.

The point of this explanation is to reveal how Dryzek used basic structural differences in text to amplify, and then describe, different discourses present in world environmental debates. The usefulness of this approach to this study is in the

FIGURE 4.4: DISCOURSES IDENTIFIED BY THE TAXONOMIC KEY

Figure 4.4 shows the hierarchical divisions forming the structural differences in the analysis. The structural divisions provide a rough sketch of nine individual discourses, which Dryzek elaborates, with a summary of the characteristics of each. These are shown in Figure 4.4 according to the structural divisions which gave rise to them.
transparency of the method. In correspondence with John Dryzek about the application of the method to my study, he noted that industrialism might not, in all cases, provide a point of division (J Dryzek 2008, pers. comm., 23 December). However, the PFP extension material did promote higher returns and increased farm production, reflecting a profit driven agri-industrial model of farming. The point of division then became the agri-industrial model of western agriculture. Other researchers have also reported a link between the promotion of a sustainable agriculture and a high input model of agriculture (Tonts 2005; Cocklin & Dibden 2005).

The method of illuminating differences to perform these divisions is achieved by use of rhetorical devices in language. One such device is metaphor, which is a way of understanding one reality through another by describing one thing as like another. Metaphors such as ‘fight against salinity’, or ‘the cancer of land degradation’ puts land management practices in a particular light, as a military operation or a life and death struggle. Dryzek also uses other rhetorical devices such as references to tradition, established rights and widely accepted institutions that are used to present an issue in a particular light.

Metaphors have been used in natural resource management research before to describe stewardship (Foster 2005) and the effectiveness of mother nature metaphors in environmental discussions (Jelenski 2005). Metaphors have also been used to understand peoples’ intentions to undertake land management projects (Allan 2007). While these works found that metaphor is a valid unit of analysis the researchers did not build a contextual framework that linked the metaphors to actors and action as Dryzek’s method did.

It is considered important with this style of analysis that the researcher becomes familiar with the texts. One researcher claims that using metaphor as a unit of analysis requires a ‘craft skill’ and a thorough understanding of the data (Edley 2001). This is likely to be enhanced if the analyst is also the person who conducts and transcribes the interviews.

‘Gradually, one comes to recognize patterns across different peoples’ talk particular images, metaphors or figures of speech. This is a sure sign, as an analyst, that one is getting a feel for the ‘discursive terrain’ that makes up a particular topic or issue’ (Edley 2001, p. 199).
I have been the researcher and analyst for this study and have, as Edely proposes, become familiar with the data and peoples’ talk in relation to the PFP. This research will use a three step taxonomic approach to discourse analysis shown in Table 4.12.

**TABLE 4.12: THE THREE STEPS OF THE DRYZEKIAN ANALYSIS**

<table>
<thead>
<tr>
<th>Dryzekian Analysis</th>
<th>1 Preliminary work</th>
<th>Data</th>
<th>Devices used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Extract metaphors</td>
<td>PFP Corpus</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Assumptions</td>
<td>Whole documents</td>
<td>Metaphor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmers’ transcripts</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>Specifications of the Discourses (characteristics)</td>
<td>Passages of text</td>
<td>Metaphor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmers’ transcripts</td>
<td></td>
</tr>
</tbody>
</table>

**Step 1**

This step involved preparing the PFP Corpus and extracting metaphors from the text. The individual metaphors were organised into conceptual metaphor groups. This procedure is explained in Chapter 6.2.

**Step 2**

The purpose of this step is to identify the underlying assumptions of the narratives. This is the first division in the key and is performed by posing a question to the documents that make up the PFP corpus. This division, in Dryzek’s taxonomy, divides data according an implied commitment to the continuation with the current political economy. Where such a commitment is absent the result is labelled ‘radical’, where the commitment is present the label assigned is ‘reformist’. In this study, due to the different scale at which the analysis is being applied the question is:

(i) Does the PFP narrative represent a reforming or a radical departure from the existing agri-industrial economy?
This question seeks to identify the assumptions in the narrative toward the traditional or a status quo. The result of this division is two groups – Radical and Reforming. The groups are further divided by posing the second question:

(ii) Is the PFP a solution that is presented as a modification to the current systems or is it presented as a more creative attempt at change?

This results in four separate groups, which are the fledgling discourses of the PFP. The divisions just described are shown in Figure 4.5.

![Figure 4.5: Identifying Assumptions in the Dryzekian Analysis](image)

There are two important points to make about the data used in Step 1 of this Dryzekian analysis. First, the number of excerpts exceeds the number of documents as not all excerpts relate to each structural question. Second, a single document could provide a number of metaphors resulting in a number of excerpts that fall across the discourse
structures. The most prolific document for metaphors was a paper prepared for the Wangaratta Landcare Conference in 1990 by Bruce Milne. This paper had 109 metaphors spread over three separate discourse (90_L-PFP13).

For these reasons the splits in the key are made on the basis of whole documents. For example the Milne document counts as one contribution to the structural questions just as another single page document with one metaphor would also count as one. This was simple in the case of project documents because there tended to be a consistency in the message. Media tended to use diverse metaphors, shifting between ‘modify’ and ‘redesign’ within a single article. The decision between using individual excerpts as data to the key, or using a whole document position was one I took after experimenting with both methods. I eventually decided that whole document summaries provided adequate information to delineate the divisions required by the taxonomic key to form the rudimentary discourses. The individual excerpts would have greatly increased the time on this process without adding to the outcome. The rationale for this is that I am sufficiently familiar with this data, both from my experience in the agricultural field and with the data of the PFP project, to be confident of my own judgment. This is a similar rationale offered by Dryzek who anticipated this criticism of his method (Dryzek 2005, p. 11).

**Step 3**

The purpose of Step 3 is to describe the characteristics of the preliminary discourses. This step refines the discourses to expose the inner meanings that activate them. The groups are based on Dryzek’s three characteristics: entities, natural relationships and agents. I have altered this to consider the three attributes as a summation of the ontology of a discourse. For Dryzek, ontology equals entity: that is the things seen to exist in the world. However ontology can encompass more than just a description of what is there. A utilitarian explanation of ontology is as a ‘specification of a conceptualisation’. This definition applies to a reality, made of concepts and relationships that exist for an agent or a community of agents (Gruber 1993). The specifications are those elements of the text that bring the discourse to life or activate it in use. The entire discourse is an ontology equipped with its own concepts and relationships. I have used this explanation
of ontology to identify specifications of the discourse. The specifications that I have used are (i) reality, (ii) motives, (iii) relationships and (iv) agents.

(i) The realities of a discourse are fundamental to discourse differentiation. The nature of things that exist can vary between discourses, for example some may recognise land as a resource but not nature as part of the reality. Others may recognise institutions, humanity, as an interconnected human and natural world or a separate human world.

(ii) Motives are the underlying assumptions about how things work. These are the mechanisms which drive a process. Some discourses assume competition is an essential drive, others recognise cooperation as essential.

(iii) Relationships are the predominant or important connections highlighted between agents and the land, environment or project. The connections are the basis of the interaction agents have with the entity.

(iv) Actors, both individuals and collectives are the protagonists of the story told by the discourse. Discourses can promote and erase agents just by affording some a prominence in their reality and ignoring others. The significance is the discourse itself chooses its protagonists.

Step 3 uses excerpts from the Storyboard documents only. Once again this decision was made after experimenting with the alternative, the use of the entire collection of individual excerpts. The rationale is similar as that for Step 2. The Storyboard documents are significant PFP documents and expanding the data beyond them, in my judgment, would have created more data but not deeper insights.

This completes the three steps of the Dryzekian Analysis. A summary of the steps used in this technique is provided in Table 4.13.
### TABLE 4.13: ALIGNMENT OF THE STEPS IN THE DRYZEKIAN ANALYSIS TO THE RESEARCH AND FOCUS QUESTIONS

<table>
<thead>
<tr>
<th>Step</th>
<th>Steps in the analysis</th>
<th>Focus Question</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preliminary work</td>
<td></td>
<td>Extract metaphors organise conceptual metaphor groups</td>
</tr>
<tr>
<td>2</td>
<td>Assumptions</td>
<td>3.1 What assumptions underpin the narrative patterns?</td>
<td>1. Does the PFP narrative represent a reforming or a radical departure from the existing order?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2 To what extent do the assumptions structure the narratives into wider discourses?</td>
<td>2. Is the PFP a solution that requires modifications or an imaginative redesign to the current practices?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Label discourses.</td>
</tr>
<tr>
<td>3</td>
<td>Characteristics</td>
<td>3.3 What are the characteristics of the discourses and how are they activated?</td>
<td>Identify the ontological elements of:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reality- what exists?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Motives – what are the essential drivers of behaviour?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Relationships – nature of the connection between agents and the PFP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agents- those prominent and obscured by the discourses</td>
</tr>
</tbody>
</table>
### 4.4.5 Summary of Data Analysis Techniques

This completes the explanation of the three techniques of data analysis used in this study, the Storyboard, Plot and Dryzekian analyses. The first, the Storyboard technique is designed to provide a rapid feedback on the content of the documents and a description of the public narrative of the PFP. An explanation of the documents selected to make up the Storyboard account is provided. The second technique is the Plot Analysis. This was designed to gain an understanding of the similarities and differences present in the transcripts of the PFP farmers. It does so by making the functional elements of the plot visible. The functional elements are the basic components of the narratives that convey the essence of each narrative. The third analysis is the Dryzekain analysis. This shifts the focus from narrative identification to the patterns of interaction between narratives: the PFP discourse. The analysis used a structural approach to understand how agents used language to position themselves in the discourse and how that language contributed to the divisions. This involved identifying the assumptions that underpinned the narratives to delineate preliminary discourses. Further steps are explained which will refine the discourses to describe the characteristics of each.
### TABLE 4.14: ALIGNMENT OF RESEARCH OBJECTIVES TO DATA COLLECTION AND ANALYSIS

**Research Topic:** Finding Meanings in Uneven Outcomes: Differentiating the Multiple Discourses of the PFP

**Statement of the Problem:** Farm practices continue to have a negative affect on land and water degradation. Natural resource management programs that aim to encourage the integration of environmental goals with farm management have been a feature of Australia’s response for the last 20 years. Improved understanding of adoption processes has revealed a non-linear response between programs and subsequent landscape change due to the complexity of the human and ecosystems involved. This complexity creates a contested domain for understanding environmental issues. As a result, understanding the mechanisms by which farmers create and transmit meaning of their experience within a program of intervention will provide insights to the complex process of adoption.

**Major Research Aim:** To interpret the meanings of the communications among individuals and groups that participated in PFP case study to explain uneven participation.

<table>
<thead>
<tr>
<th>Research objectives</th>
<th>Focused research questions</th>
<th>Techniques data collection</th>
<th>Source of data</th>
<th>Techniques data analysis</th>
<th>Issues of Reliability, Validity and Ethics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.1 What are the elements of the PFP public narrative?</td>
<td>Document recovery</td>
<td>Public archives</td>
<td></td>
<td>Face validity</td>
</tr>
<tr>
<td></td>
<td>1.2 What relationships and networks helped to establish, authorise and maintain the PFP?</td>
<td>Preliminary interviews</td>
<td>Private collections</td>
<td></td>
<td>Articulation of research design</td>
</tr>
<tr>
<td></td>
<td>1.3 What role did the media play in the PFP public story?</td>
<td></td>
<td>PFP farmers</td>
<td></td>
<td>Triangulation</td>
</tr>
<tr>
<td></td>
<td>1.4 How were images used to support the PFP public story?</td>
<td></td>
<td>PFP project operatives</td>
<td></td>
<td>Prolonged field work</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Compliance with DSC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Human Ethics Approvals</td>
</tr>
<tr>
<td>2</td>
<td>2.1 What are the elements of the farmers’ narratives?</td>
<td>Document recovery</td>
<td>PFP farmers</td>
<td>Plot analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2 To what extent were the elements shared by PFP farmers and how did this affect their participation in the project?</td>
<td>Preliminary interviews</td>
<td>PFP farmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.3 What factors explain the different patterns in the narratives of the PFP farmers?</td>
<td></td>
<td>PFP project operatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research objectives</td>
<td>Focused research questions</td>
<td>Techniques data collection</td>
<td>Source of data</td>
<td>Techniques data analysis</td>
<td>Issues of Reliability, Validity and Ethics</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------------------------------------------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>3. To explain the structure and characteristic of the discourses that linked the narratives</td>
<td>3.1 What assumptions underpin the different narratives about the PFP?</td>
<td>Document recovery</td>
<td>Public archives</td>
<td>Discourse analysis</td>
<td>Construct validity</td>
</tr>
<tr>
<td></td>
<td>3.2 To what extent do the assumptions extend the narratives into wider discourses?</td>
<td>Preliminary interviews</td>
<td>Private collections</td>
<td></td>
<td>Articulation of research design</td>
</tr>
<tr>
<td></td>
<td>3.3 What are the characteristics of the discourses and how are they activated and transmitted?</td>
<td>Focused interviews</td>
<td>PFP project operatives</td>
<td></td>
<td>Link to theory</td>
</tr>
<tr>
<td>4. To use the patterns of discourse to explain uneven participation and outcomes in the PFP</td>
<td>4.1 What is the relationship between discourse and participation outcomes?</td>
<td>Careful reflection on the narratives, discourses, theory and practice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2 To what extent is a discourse analysis able to explain uneven participation?</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
4.4.6 Research Validity and Reliability

This section addresses concerns about qualitative research. The concerns are for the reliability of data, the validity or rigour of the interpretation of the ‘story’ and transferability or the application of the findings to other situations (Silverman 2006). The aim of this study is to understand the subjective realm, which influenced engagement and participation with an agri-innovation. The multiple influences on peoples’ behaviour in relation to changing to more sustainable farm practices has been described in Chapter 2.4 as dynamic and so often unpredictable. This is understood to be so because peoples’ perception of reality is unique, and generated subjectively in their minds. This is so for both the researcher and the participant, there are no neutral platforms from which we can observe the workings of the mind, unencumbered and uninterrupted (Denzin & Lincoln 1998). This is why researcher bias ‘distorting the logic of evidence’ is an important issue in qualitative research such as this study. The presence of bias cannot be eliminated, rather it must be confronted and the procedures of research made transparent. Lather offers four guidelines for doing this. They are: triangulation, construct validity, face validity, and catalytic validity (Lather 2003). In addition, I have used two other procedures to ensure trustworthiness in this study. They are: to provide a clear articulation of research design and procedures (Denzin & Lincoln 1998) and to demonstrate a prolonged engagement with persistent observation in the field (Lincoln & Guba 1985).

Triangulation

Triangulation requires multiple data sources, methods and theoretical schemes to seek counterparts and well as convergences (Lather 2003). Thus, triangulation is a technique for observing the phenomena of research from different perspectives providing a form of self-monitoring for the researcher. Triangulation was used in this study through the use of the multiple data sources and analysis techniques described in this chapter.

14 Catalytic validity refers to the extent to which the research process provides the participants with an opportunity to refocus and become energised by the experience (Lather 2003). This was not incorporated into this study because of the time-lapse between the PFP experience and this study (20 years).
Construct validity

Construct validity is based upon a dialectical relationship between theory and data. Denzin (1994) recommends a balance in terms of the use of existing theoretical frameworks. ‘Too much focus on existing theory can inhibit the researchers ability to ‘hear and listen to the interpretive theories that can operate in the situations studied’ (Denzin 1994, p. 508). Then on the other hand, too little focus on theory can lead to a ‘flood of concepts unattached to the empirical world’ (Denzin 1994, p.508). A balance between priori theory and research participants’ experiences was demonstrated in this study by the use of existing frameworks to develop the study analysis techniques. This required a trade off between the time constraints imposed by the study, my developing understanding of the field through the document recovery process and the formation of sequential and transparent research analysis.

Face validity

Face validity is a form of member checks’, a truthfulness of the data and interpretations brought about by recycling the data and analysis back to research participants for their opinions and advice (Lather 2003). ‘Good research, at the non-alienating end of the spectrum, goes back to the subject with the tentative results, and refines them in the light of the subjects’ reactions’ (Reason & Rowan 1981, p. 248 cited in Lather 2003, p.191). There are limits to the benefits of face validity. These are the encountering of false consciousness. Human stories are not static, meaning and experience shift and consciousness changes (Riessman 1993). As the narratives change, so do the interpretations. Mishler (1990) makes the point that interpretations have to be linked to semantic truth and the social world in which narratives are created.

Transparency carries implications for the structure of an account, the links between analytic coding categories and specific words and phrases and the writing style employed (Mishler 1990, p.434).

In this way it is not the notion of a historical truth that is sought but the point of view constructed by individuals about the same event. Face validity was used in this study in two ways. The first way was by cycling the results of the Plot Analysis, the A4 page of transcript quotes, back to participants for advice and clarification. The second way was through the semi-structured interview format to capture the different perspectives of the
PFP experience without cluing the participant as to what the experiences ‘should’ have been.

Detailed description of the research process

An important method for managing the quality of the research is to provide transparent and traceable research techniques. This makes it possible for others to reconstruct the study and arrive at the same conclusions. This study has applied procedures that exposed the trail of data through the analysis. The steps have been articulated in this Chapter (4.4.3) and quotations, when used, are tagged with the document code or research participant code allowing others to trace the quote back to origin.

Prolonged fieldwork

Lincoln and Guba (1985) argue that trustworthiness of the data and subsequent interpretations can also be traced to the confidence that the researcher has become familiar with the research context through extensive fieldwork. This study required eighteen months of fieldwork to conduct the interviews and document recovery processes. In addition I have had twenty years experience in the region as a farmer and a state agency employee working in the field of behavioural change practice in natural resource management programs.

4.5 Research Ethics

The PFP was a public showcase and for the participating farmers a first hand experience in participation in an agri-innovation. In the 1980s the PFP was an innovation, the expenditure of money on private farms was not common. The provision of advice to farmers was commonplace at the time but even this PFP elevated to another level. The ambitious work plans on some of the farms required close cooperation with the PFP farmers. Uneven participation by the farmers in the project was accepted as an outcome of resource limitations and maximising the extension potential through concentrating on particular farms. This is the starting point of the research. The uneven participation may provide insights to the ways in which meaning is constructed in relation to the adoption of sustainable farm practices. It is the fact of uneven participation and the public exposure of the PFP farmers that increased the sensitivity of this research.
It has now been 20 years since the farmers’ involvement in the PFP. Yet the interest locally in the fate of these farms and judgments about the performance of the farmers has persisted. I am aware of this interest as a member of the farming community in the Hamilton region as well as a practitioner of natural resource management programs with the Department of Primary Industries Hamilton. When people heard that this study was going to proceed there were two general responses. One group seemed to think the PFP had had enough exposure and should be left to history and the second group thought it was important to establish the PFP legacy.

In the 1980s the PFP gained a lot of attention and many claims were made and outcomes attributed to it. While the project enjoyed a good reputation within the area and beyond, and its Project Officers were admired for their prodigious work ethic, local jealousies had been aroused, possibly by the financial benefit those who took part were seen to be enjoying. Some of the demonstration farmers developed a high profile, addressing bus loads of visitors to their farms and attending field days, TV and print media occasions and even appearing in a documentary film. Many locals attended these days on more than one occasion and have been interested in the happenings those farms since.

The PFP farm owners were identified from Campbell’s book on the project. ‘Planning for Sustainable Farming: the Potter Farmland Plan Story’ (Campbell 1991). Each family was sent a letter outlining the research and inviting them to participate. A phone call was made and interviews were agreed on. Most took place in peoples’ homes. The interview process is described in more detail in Chapter 4.7.

The PFP farmers are a small group and well known in the local area. While some people are unconcerned about participating in research some were more circumspect. Part of the agreement they had with the PFP was that they would lend their farms indefinitely to show others what can be achieved (Campbell 1991, p.21). Nonetheless I opted to extend anonymity to all the PFP farmers who participated in this study by assigning a code to each person. For example, 2.60:12/3/2007 identifies by code an individual from a PFP farm family and the date of the interview. This was the only anonymous group; all the other research participants are acknowledged by name.
4.6 Researcher’s Role

I was fortunate to have received a PhD scholarship from Land & Water Australia to undertake this study. As a farmer and a natural resource manager practitioner I have been exposed to numerous agri-intervention events as recipient (or stakeholder) and as an initiator (or sponsor). I had often observed peoples’ fulsome participation drift into seemingly little action and the other way around too. I became interested in the subjective experience of engagement, as opposed to tracing tangible outcomes though the evaluation processes and wondered how this could be done. My family had just begun farming when the PFP began and I attended many of the field days on the PFP farms. This was a time when many in the farming community knew that their farm layouts were not effective for stock or land management and knew that trees had to be re-established on their land. But in many cases people were uncertain which species to plant, where on the landscape they should plant and what the options were for fencing and guarding the trees. I participated in the discovery of these things during the time of the PFP. Hence the emphasis in this study is to understand the signals in narratives and learn to identify the discourses people bring to the experience of participation.

4.7 Conduct of the Study

This section describes the conduct of the study through the four phases of implementation. The process was not sequential, as some phases occurred simultaneously and some were revisited in the light of new information. However there was a general progression to the research process, which is represented in Table 4.15.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Task</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparations</td>
<td>Negotiating Access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Data Collection</td>
<td>Preliminary Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Focused Interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Document Recovery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Data Analysis</td>
<td>Storyboard</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Plot Analysis</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Discourse Analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Conclusion</td>
<td>Theorising results</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Phase 1: Preparations

Negotiating Access

A Human Research Ethics approval process was undertaken and approved by the RMIT School of Social Science and Planning in October 2006. This allowed me to contact people I had identified as possible research participants in order to request interviews and to ask questions pertaining to their experience of the PFP. The formal ethics approval required the preparation of a Plain Letter Statement describing the research and what participation would require in terms of information sought and time likely to be spent. Permission forms were also prepared which summarised the undertaking and required the participant’s signature. Copies of the documents are shown in Appendix 1.

Participants for the research were located from the details supplied in ‘Sustainable Farming’ by Andrew Campbell (1990) and from my own social network. I sent all the PFP farmers a letter describing this research and explaining why I wanted them to get involved and the extent of their involvement. The letters were addressed to husband and wife where that was appropriate. Two weeks after the letters were sent I made phone calls to confirm their receipt of the letter and talk about the research. Other potential research participants were identified during the document recovery process and through my local networks. My initial approach to all other research participants was by phone contact or email.

Phase 2: Data Collection

Document Recovery

The document retrieval process began in early 2006 and continued though 2007. Documents were recovered from six sites and some further finds were made among some of the PFP farmers’ private files. The Ian Potter Foundation made their archive available to me on request and providing a room and a photo copier for the day. The Victorian Public Records Office (VPRO) has both an onsite and online facility. None of the Garden State Committee (GSC) files were digitised so my access to them was at the
VPRO office in North Melbourne. I photographed files for later use. The establishment of the Handbury Archives located at the RMIT office in Hamilton coincided with this study. They were created as the result of a serendipitous discovery of boxes of PFP documents marked for disposal at DPI offices. At the same time the Milne family, who had also stored the PFP office material when the project finished operations, sought a location for the documents. The emergence of these documents generated a small revival of interest in the PFP locally which may have increased peoples reception to this study.

Documents sought from ABC archives, Hamilton Spectator, State Library Newspaper Collection were specific searches following information I had gained from other documents or research participants. The PFP farmers continued to unearth files of documents or film throughout the study.

All documents retained for the study were assigned a code which has been described in section 4.4.1.

**Conducting the Interviews**

The first interview was the preliminary interview, conducted as a conversational or semi-structured interview and focusing on the PFP. Despite the conversational approach the Ethics approval required I keep my investigations to the experience of the PFP. For this reason if a research participant began to talk about someone else or other unrelated subjects I would not ask encouraging questions and would sometimes cease taking notes. In this way I wanted to convey that the conversation was straying outside the research focus without restricting the flow of conversation.

An interview guide was prepared to guide the process. This included a preamble explaining the research and the reasons for the interview. Consent forms were explained and signed before the interviews progressed. Some interviews were audio recorded and at some I took notes. As soon as possible after all interviews I took my own notes highlighting impressions, facts learnt and gaps in narrative. PFP farmer interviews were held in participants’ homes and sometimes while driving over the farm, often both. The
Interview Guide is reproduced in Appendix 1, and Table 4.16 shows a summary of the interviews recorded electronically and by hand notes.

Although audio recording for later transcribing was my early preference, in some instances I felt that producing the recoding device would risk stopping the flow of conversation or shift it to a more formal level. Most of the interviews began very quickly moving from the pleasantries of greeting and finding a place to sit to talk about the PFP. The consent form included consent to have the interview recorded. Despite this consent some people looked uncomfortable when I set the audio recorder up. When this happened I put it aside and took notes. This proved to be a problem when I later chose to conduct an analysis on particular features of speech when the interviews were either full transcripts or fragments of the dialogue.

**TABLE 4.16: RECORD OF THE INTERVIEWS**

<table>
<thead>
<tr>
<th>Research participant</th>
<th>Number of interviews recorded and transcribed</th>
<th>Number of interviews recorded by hand written notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFP farmers</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>PFP agents</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>External to the PFP operations</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

The second interviews were targeted interviews. For the PFP farmer group the purpose of the interview was to check the validity of the plot analysis outcome for each person with respect to the attribution of the PFP and to expand the discussion of the experience of participating designed to clarify information and provide a summary of the preliminary interview. For other research participants this was the first interview. The preamble of the interview guide was followed but the interviews were exercises in fact seeking and confirmation. Transcripts and notes of interviews and notes taken were added to the corpus for this research.

**Phase 2: Data Analysis**

The three data analysis techniques were, as with the data collection process, overlapping activities. This was because new data continued to be uncovered during the study and
changes and clarifications were occasionally made to the transcripts of the interview data or new lines of enquiry emerged.

**Storyboard Technique**

This began with a document coding regime described in this Chapter, 4.4.1.1. The process, also described in that section, was conducted manually with results stored on a spreadsheet. The documents for use in the Storyboard were chosen and analysed according to the process described. I experimented with a number of different ways of representing the outcome pictorially before settling with the semi-circle.

**Plot Analysis**

The Plot Analysis required close reading of the PFP farmers’ interview transcripts to extract passages which best aligned with the plot elements of: orientation, action, evaluation and reflections. The recorded interviews were transcribed at Snap Office Services, 180 Union Road, Surrey Hills, 3127. The files were emailed to me and saved as word documents named with the code assigned to the person for this study. The transcripts were printed out with only the code identifier and date of interview as a heading. The aim of the Plot was to reduce the text to an A4 size page for each person or couple interviewed. Each page was reviewed by the participant at the second interview. Appendix 3 shows the result of this.

**Dryzekian Analysis**

The third analysis was conducted over three steps described in Chapter 4.4.4.3. All the documents and transcribed interviews were read for incidence of metaphors. These were tagged and summed for each document and interview. I repeated this time consuming process at least three times, each time locating additional metaphors. However, despite this care, I expect there are still more metaphors that I failed to identify. The individual metaphors were then organized into broad conceptual groups. Again, this process was repeated numerous times, as the choice of conceptual groups and the placement of individual metaphors was a matter of judgment. It took some time to feel that I had organized this to my satisfaction. In addition to the individual metaphor count I also extracted the sentence or excerpt that contained the metaphor to help provide a
context. It was this context that helped to select the conceptual groups. All of this data was stored in an Excel spread sheet. Step 2 and Step 3 were largely procedural, following the form discussed in 4.4.4.3.
4.8 Conclusion

In this chapter the choice of an interpretivist research methodology has been explained in the context of the study’s aims. This was followed by a description of the two methods of data collection: document retrieval and participant interviews. The processes followed for each data collection method were described and details on the particular issues arising from the data used in this study were discussed. The data collection section concludes with a discussion of the processes used to maximize the quality of the study and an explanation of the ethical considerations extended to the participants. The data analyses involved three separate techniques. They are the Storyboard, Plot Analysis and Dryzekian Analysis. The basis in theory for each technique has been explained and the purpose of each analysis for meeting the research objectives has been detailed. The Chapter concluded with a section on the conduct of this study that explains the phases of the research process from negotiating access to analysis. This information is summarised in Table 4.14.
5 The Narratives

This Chapter presents the results of the public and farmer narratives of the PFP. This is done in two parts. The first part presents the results of the Storyboard Analysis. In this section the elements of the public PFP narrative are identified and expressed through the Storyboard for a number of agents of the project. This is followed by an analysis of the relationships and networks that were significant to the PFP operations and can account for the PFP legacy. This section concludes with an analysis of the media portrayal of the PFP from imagery and supporting text. The second part of this Chapter presents the results of the Plot Analysis. The elements of the farmers’ narratives and the patterns therein are analysed. The two narrative threads derived from the public and farmer perspectives are discussed in the conclusion.

5.1 The PFP Public Narrative

The public narrative of the PFP will be uncovered by the application of the first research analysis technique: the Storyboard. Figure 5.1 locates this step on the data flow diagram. This technique is designed to address the first research objective: To identify the elements of the public narrative of the PFP and explain how it was created. There are three focus questions attached to the first research objective. These are:

1.1. What are the elements of the PFP narrative?

1.2. What relationships and networks helped to establish, authorise and maintain the PFP narrative?

1.3. What role did the media play in influencing the public narrative?

Each focus question is addressed beneath a heading of the same name.
5.1.1 The Elements

This section addresses the first focus question: (1.1) What are the elements of the PFP narrative?

The public PFP story is reconstructed from the documents located for this study and can be located on the data flow diagram Figure 5.1. The PFP was an agri-innovation that achieved a public profile that similar projects today must wonder at. The PFP farmers and their farms were presented in national, rural and urban based media during the 1980s and 1990s. This section will explain the results of the Storyboard, which was designed to capture the public PFP story by locating the domain of the PFP actions.

5.1.1.1 The Storyboard

A selection of seventeen documents was made to build a storyboard\textsuperscript{15}. Based on a method of descriptive discourse analysis (Silverman 2006) to find out what the agents thought took place. The documents are analysed according to a frame. This method has

\textsuperscript{15} The rationale and for this approach and selection of the elements of analysis are explained in Chapter 4.4.4.1
been elaborated on after my own experience in teaching secondary school aged students about river health. For this study, the frame of elements is composed of:

1. The year the document was produced

2. The PFP domain of activity

3. The motivations harnessed by the PFP

The elements combine to build the background of the PFP story. The background is populated by agents (MEDIA, PFP, L-PFP) which are placed on the background to trace the PFP from inception, into the operational phase and finally to the legacy phase. The inclusion of media documents captures the deliberate extension effort of the PFP operation and the project’s enduring interest for readers that built the final legacy phase. The domain of activity and motivations of agents are taken from the text and will be elaborated on here.

Elaborating the Domain of Activity

The story of the PFP is told from the public documents produced by the PFP internal operatives during the project’s operations and also by media reporting on the project. The content of each document was assessed to identify the site or domain at which the PFP impact was targeted. That is ‘where is the action taking place?’ The value of this is that the resulting elements are internally generated from the text of the documents, rather than from a pre-determined order imposed by the researcher. Tracing the site of the PFP impact recognises that an agri-innovation project draws a plethora of issues into its scope and so has a broader social dimension to the approach. This is reflected in the increasing diversity of natural resource management approaches discussed in Chapter 2.3.

The process of identifying the PFP impact site yielded three dimensions: human, social and landscape. These were further ordered into domains of activity. This resulted in the landscape dimension branching into geophysical and ecosystem domains, and the social dimension branching into organisational and informal domains. The human dimension was not divided. Table 5.1 shows the domains of activity.
TABLE 5.1: DIMENSIONS AND DOMAINS OF ACTIVITY

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Domain of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Landscape</td>
<td>1a. Geophysical 1b. Ecosystem</td>
</tr>
<tr>
<td>2. Social</td>
<td>2a. Informal 2b. Organisational</td>
</tr>
<tr>
<td>3. Human</td>
<td>3a. Mental Fames</td>
</tr>
</tbody>
</table>

The following section elaborates these divisions using selected quotations from the seventeen Storyboard documents.

Landscape Dimension

The Landscape dimension is divided into two components: Geophysical and Ecosystem. The Geophysical applies when the physical aspects of the land, such as salinity or soil condition, are named as the site of impact. The ecosystem component applies when the text refers to biota or wider biophysical aspects.

An example of this can be seen in the following quote which was classified as Geophysical due to the emphasis on the PFP impact on the physical processes associated with land degradation.

The long term aim is to budget regularly for soil management so that land degradation is controlled and farm production can be maintained on an ongoing basis at an economically viable level. (85_PFP4)

The Ecosystem component was activated when the prevailing view was that of an impact that rippled outwards, registering as catchment and ecosystems changes. An example of this ripple effect is reflected in the following quote:

He is creating a whole rural ecosystem. (91_MEDIA1)

This quote demonstrates that the PFP domain of impact has initiated benefits beyond the actual physical works undertaken to create an impact on the ecosystem beyond the farm itself.
Social Dimension

The Social dimension applies to two domains, informal and organisational. The PFP sought a wider audience during 1985 and 1987, in an attempt to build a social platform on the premise that the prevailing order had manifestly failed to prevent extensive land degradation. The organisational domain represents this. Included in this are references to governments, administrative structures and local community.

The informal domain in the social dimension refers to general social impacts and captures the extension message. An example of a reference to this domain can be seen in the poignant comment recorded in the minutes of one community meeting that reflects the extent of the divisions in rural communities at the time.

Why are we so unaware of one another and our dependence on one another?’ (85_PFP2:1)

This question is an indication of the ambitions held by the project managers to instigate change beyond farm boundaries. By 1988, 50 groups and over 3500 people had been addressed in a series of field days. Many more had heard of the project through the media – an extension opportunity actively encouraged by project officers and journalists (Campbell Matthews 1988). One of the PFP farmers, Bruce Milne, estimated he had spoken to over 5,000 people (90_L-PFP13).

Human Dimension

The PFP extension message was fundamentally about changing how people thought about the land and their farming practices. The domain is described as mental frames, to depict the change in thinking that the project sought. The PFP interaction with farmers was an example of engendering, or teaching, land literacy techniques to endure the life of the project. Chambers, in his address at the inception of the PFP spoke of learning to ‘read’ the land, (84_PFP9). Milne used this concept again in 1990 in his address to the Wangaratta Landcare Conference when he said ‘it is not easy to read farms closely enough.’ (90_L-PFP13). In 1991 in the Good Weekend Magazine article, the introduction to an article titled ‘The Tree and Man’, talked about farmers ‘hearing’ the landscape, (91_MEDIA1). The farm planning method refined by the PFP was itself a methodology for a new ‘reading’,
...forcing (farmers) to think carefully about the relationship between what they do on their land and the long term quality of that land. (87_PFP2)

The PFP influence was considered by some to have contributed to movements nationally and internationally while other documents reveal the PFP activity as confined to the local area or farmers as a homogenous group. The Human dimension was often scaled, reaching beyond the group of farmers and local people involved to touch all farmers and other professionals involved in agriculture. An example of this can be seen from a quote taken from the Acknowledgment written by Pat Feilman for the *On Borrowed Time* Booklet.

The Project was enormously successful and has attracted the attention of farmers, scientists and policy makers from all over Australia. (90_L-PFP5)

Other agents grew pessimistic beyond the PFP period. A passage taken from Andrew Campbell’s presentation at the ten-year celebration of Potter showed an escalation of scale of the problem of land degradation to a dysfunctional international trading environment.

Australian agriculture is profoundly unsustainable, in ecological, economic and social terms. We are only just beginning to comprehend the size and nature of the challenge ahead…(95_L-PFP1)

Campbell’s presentation proposed another direction vastly expanding the scale of the PFP towards an integration of agriculture with ecology and beyond to an integration of industry and ecosystems.

The Campbell presentation reflects the PFP as a catalyst rather than an event, shifting the scale of the cognitive change beyond local and national borders.

**Elaborating the Motivations Harnessed by the PFP**

The shift in the domain of activity (and scale) was traced by the motivations understood as important to changing behaviours. As an extension project the PFP deliberately set out to induce farmers to change what they were doing and they did so by connecting to the economic relationship farmers had with the land. As the scale of the PFP impacts shifted into wider domains so the driver of change became more complex. The legacy documents reflect this complication as they show a shift from an economic lever to one
of mutual benefits for both nature and the environment and some documents point to an underlying intuitive connection that will instigate change. These later drivers were not retrofitted into the PFP experience but emerged from the journey of the PFP agents and contributed to the legacy phase. The media however did retrofit the new drivers of change. Four of the seventeen storyboard documents did not provide any information on the motives. The motivations identified as a target of the PFP are explained by a summary of the documents and selected quotations. The three types of motives harnessed by the PFP are identified as: economic, mutual benefits, and farmers’ intuitive connection to nature.

(i) Economic

This was the dominant motive targeted during the PFP operations. The deliberate targeting of the economic relationship farmers had with their land as the key to change behaviour is evident in this quote taken from Chambers presentation at the beginning of the PFP.

The aims of the project are to reverse tree decline...in order to get this message accepted, we need to be able to present the benefits in economic terms. (84_PFP9:4)

(ii) Mutual benefits

This more nuanced relationship was apparent in the ‘On Borrowed Time’ brochure (88_PFP4), though the economic lever is still present. In Campbell’s presentation looking at what needs to be done now he calls for an emphasis on a balance that an economic driver alone will not achieve.

We need to focus again on blending considerations of the natural resource base with those of the enterprise it supports. (95_LPFP1:10)

(iii) Intuitive connection with nature

The media representation of the PFP after the 1990s favoured the use of a ‘special’ farmer relationship to the land. It became possible as the PFP agents scaled up the PFP domain of activity. The story ‘The Tree and Man’ (91_MEDIA1) explains the PFP farmers’ interest in frogs and birds as a sign that ‘he is creating a whole rural ecosystem’. The reference in the ABC Landline 2000 program ‘Potter Farms’
(2000_MEDIA1) to the farmers receiving a ‘new set of glasses’ also suggests that a new driver of change has been activated.

Table 5.2 lists the storyboard documents and shows the dominant site of impact and motive according to each document.
<table>
<thead>
<tr>
<th>Doc. No.s</th>
<th>Year</th>
<th>Documents</th>
<th>Landscape Dimension</th>
<th>Structural Dimension</th>
<th>Human Dimension</th>
<th>Motivation Harness</th>
<th>Domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1984</td>
<td>Chambers presentation (84_PFP9)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td>Geo-physical</td>
</tr>
<tr>
<td>2</td>
<td>1985</td>
<td>Project Manager Report (85_PFP5)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td>Eco system</td>
</tr>
<tr>
<td>3</td>
<td>1985</td>
<td>PFP Aide Memoire (85_PFP4)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td>Social</td>
</tr>
<tr>
<td>4</td>
<td>1985</td>
<td>PFP Progress so far (85_PFP18)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td>Administrative</td>
</tr>
<tr>
<td>5</td>
<td>1985</td>
<td>‘Saving Australia’ (85_MEDIA3)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td>Mental models</td>
</tr>
<tr>
<td>6</td>
<td>1986</td>
<td>PFP Aide Memoire (86_PFP5)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1987</td>
<td>FARM Magazine (87_MEDIA1)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1987</td>
<td>Update (87_PFP2)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1988</td>
<td>‘Land Loss by Degradation’ (88_MEDIA2)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1988</td>
<td>Final PFP executive meeting (88_PFP10)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1988</td>
<td>Brochure on Whole Farm Planning (88_PFP4)</td>
<td></td>
<td></td>
<td></td>
<td>Economic</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1990</td>
<td>Acknowledgment by P. Feilman (90_L-PFP5)</td>
<td></td>
<td></td>
<td></td>
<td>Mutual benefits</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1990</td>
<td>Flyer for ‘On Borrowed Time’ (90_L-PFP3)</td>
<td></td>
<td></td>
<td></td>
<td>Mutual benefits</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1990</td>
<td>Presentation to Landcare Conference (90_L-PFP13)</td>
<td></td>
<td></td>
<td></td>
<td>Intuitive connection</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1991</td>
<td>‘The Tree and Man ’ (91_MEDIA1)</td>
<td></td>
<td></td>
<td></td>
<td>Intuitive connection + Economic</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1995</td>
<td>Campbell presentation at 10 year celebration (95_L-PFP1)</td>
<td></td>
<td></td>
<td></td>
<td>Mutual benefits</td>
<td></td>
</tr>
</tbody>
</table>
This completes the elaboration of the elements that composed the Storyboard frame. The seventeen documents composing the Storyboard have provided the PFP’s narrative elements: domain of activity, motivation harnessed by the activities, year of document production and agent group. The elements have been internally generated from the text in the seventeen documents. The justification for this has been provided by the quotations taken from the documents. The elements are arranged as a backdrop to the PFP story. The agents are then placed across the Storyboard, according to the date of the text, to ‘read’ the PFP narrative over time and by agent. These elements can be represented thematically completing the Storyboard of the PFP narratives.

**Thematic Map of Public Narratives**

The analysis of the storyboard documents provides the contours of the PFP public narratives. The contours can be depicted diagrammatically. Figure 5.2 shows the result: a thematic diagram of the PFP public narratives. The diagram has three dimensions: time, domain of activity and motive. These are the elements of the analysis. Each impact domain is drawn in a different colour and populated by an icon representing the agent groups.
FIGURE 5.2: THEMATIC REPRESENTATION OF THE EVOLVING PFP STORY
This builds a rich picture, telling a story of the PFP intervention which evolved over time. Initially the PFP domain of activity was located in the geophysical domain, but within a year the PFP project has taken up a social agenda evident in the appearance of agents in the social and administrative domains. The PFP impact was confined initially to the farm but during the 1990s the narrative expanded making a connection between an individual farm and the wider ecosystems. During this time the concept of sustainability was introduced, changing the consequences of the PFP from an early reliance on economic benefits of the work for individuals (through increased production), to a more subtle relationship generating mutual benefits for both the land and the enterprise. The diagram shows that a project that began as a farm centred, profit orientated solution grew into a project that was represented as an impetus for personal and social change.

5.1.1.2 Summary of the elements of the public narratives

The public narrative evolved from the cooperative activities among agents of the PFP. The ambitions for the project to be the impetus for significant social and administrative change elevated the domains of the PFP impact beyond the perimeters of the farms on which it operated. None-the-less the by the end of the project the domain of activity had contracted back to a farm-centric project, although the understanding of land degradation had, by then, expanded to include landscape integrity and biodiversity. The narrative used by the media persevered for 20 years. This narrative highlighted the farmers’ agency and depicted an intuitive connection between the farmer and his farm. The wives and children were relegated to the background of the PFP story.

5.1.2 Relationships and Networks

This section addresses the second focus question: (1.2) What relationships and networks helped to establish, authorise and maintain the PFP narrative?

The PFP benefited from two organisations prominent in its inception and operations. These are the Ian Potter Foundation (IPF), the source of its funds and the Garden State Committee (GSC), which provided the administrative oversight. Sir Ian Potter, a dominant figure in Australian finance between 1940 and the 1970s, set up the IPF. Through the activities of his stock broking firm he successfully pioneered merchant
banking mobilising capital for post war development projects (Yule 2006). Sir Ian was also socially and politically influential, managing to effect a change in the taxation laws for charitable foundations which has been credited with encouraging philanthropy in Australia (Yule 2006). The IPF began with a $1 million grant that, through profitable investment and further injections of Potter family money, had grown to $27 million in 1980. In 2005 this sum had been further transformed into $300 million. The IPF influence was evident in the preliminary stages of the PFP when Sir Ian sought the advice of the Attorney General that the funds spent on revegetation and other associated works would be regarded as charitable. This required a further change to taxation legislation, which the Attorney General agreed to do. Sir Ian was described by his biographer as a ‘self made man’ with a network of friends in politics, bureaucracy and business and a background in supporting worthwhile causes (Yule 2006).

The GSC operated from the Department of Premier and Cabinet and was chaired by John Jack who was the secretary of the Department. This position at the top of the Victorian Government provided the GSC with an authority to include other Departments in collaborative activities (for example the Farm Tree Group Committees) and flexibility to respond effectively to the queries of the IPF for funding possibilities. The logo of the GSC and PFP are virtually the same representing either a sense of economy or an attempt to extend the influence of the GSC beyond the fragmentary funding allocations of government. Both logos can be seen in Figure 5.3.

![Figure 5.3: GSC and PFP Logos](image)

The GSC role in establishing the PFP has been discussed in Chapter 3.2.2.
The PFP was influenced by these two dominant organisations. The IPF invested the PFP with a successful business focus tempered by a philanthropic or altruistic mien. The GSC, for its part, conferred an authority from its elevated (though frugally funded) position in the Victorian government hierarchy. The influence of the founding organisations can be detected in media articles about the PFP, which indicates that others were responding to the status of the PFP, and also from project documents that, from an early stage, projected authority.

They have been contemplating the farmlands of Australia in the hard headed way you would expect from some of the country’s top business brains. (85_MEDIA3)

The PFP hosted a number of consultations, meetings at which community members and state department officers were urged to consider previous failures in regard to the management of land and consider ways to improve their performance or that of their organisations\textsuperscript{17}. The consultations are an example of the authority the PFP had to command attention of organisations to achieve its own objectives.

The geographical location of the PFP was also significant, contributing more than a useful example of land degradation. The PFP farms’ location was described as ‘Malcolm Fraser Country’ (91_PFP1), referring to Australia’s Prime Minister from 1975-1983 whose family had a property in the district. David Dumaresq, ecology lecturer at the ANU recalls a conference at which PFP project manager Andrew Campbell was evoking the inestimable worth of the western district landscapes and its 400-year-old stands of red gum as motive for action.

He put up slides to illustrate the point and they were all of western district landscapes – they looked like pictures painted by Hans Heysen or Stretton or Rupert Bunny. But they aren’t the only Australian landscapes, some people have different landscapes that they think are worth saving too. (D Dumaresq 2007 pers. comm., 30 October)

This quote reflects the connection of the PFP to the Hamilton region. The region had a reputation as a prosperous and conservative capital of the Western District dominated by the social prestige of a grazier class. While historian Don Garden considered the reputation to be elusive, he traced instead a notion of inherent good fortune that it embodied to the period in the 1880s when Hamilton was ‘quiet, at times drowsy, sober,

\textsuperscript{17} Chapter 3.3 provides details on the social change platform pursued by the PFP.
and affluent and settled’ (Garden 1984, p. 119). A severe drought during the 1890s had somehow left the Hamilton region virtually unscathed. The region’s farmers organised a drought relief fund to support their northern Wimmera neighbours. This seemed to reinforce Hamilton’s privileged place in the world.

5.1.2.1 Summary of the Relationships and Networks

The PFP benefited from the profile of its two sponsor organisations. The IPF, its source of funds, provided business acumen to the projects’ activities while the GSC, its administrative base, provided an authority from an impression of high-level government support. In addition, the farms’ location in western Victoria provided a historical connection to a region regarded to be favoured climatically and socially. The media attached these impressions to the PFP farmers, investing them with the same credibility and fortune.

5.1.3 Media and the Public Story

This section addresses the third focus question: (1.3) What role did the media play in influencing the public narrative?

The media connected and contributed to the PFP story. For example the document recovery process for this thesis uncovered 29 items from 1982 to 2006. This represents a small sample of the media coverage of the PFP. A ‘Public relations and Extension Summary’ report noted that between November 1984 to October 1985, there had been fourteen newspaper articles, four TV segments and two radio interviews about PFP (1984/85, 85_PFP7).

By 1988 some 50 groups and 3,500 people had been addressed by the PFP field staff (Campbell & Mathews 1989, p. 47). Many more had had contact with the PFP farmers, especially in the early stages of the project, before formal visits had been organised. Post project, the farm tours continued either through the PFP farmers’ private arrangements or through the HEAL group which concentrated on the PFP Waldron and Milne farms. The state and national media such as National Geographic, Cross Country and Countrywide, The Weekend Australian, The Financial Review and Earthwatch were
approached by the PFP executive group. Local news and radio media covered the project consistently during the four years of operation.

The documents used in this section are taken from the MEDIA items listed in Appendix 2, references made to any of these documents will be followed with the item identification code used for all documents in this study.

The relationship between the PFP and media was important in the transmission of the extension message. However it started shakily with an article in the *Age*, April 3 1985 announcing the project (85_MEDIA3). This was a ‘hand-out’ story, of dependence and charity. Not a portrayal that was ever going to garner wide support with the target group of farmers! In the April Project Manager’s Report No 2, Campbell describes it as a ‘shoddy article’ in which:

I was badly misquoted and the aims, ideals and budget of the project were misrepresented, despite the reporter having been given detailed and printed information about the development of the project (85_PFP9:6).

He goes on to reason that the likely bad public relations resulting from this article would be offset by a *Countrywide* program which used PFP to highlight the ABC tree care awards. Indeed, a new footing was achieved and the PFP became a favourite of TV and print media as both mediums mined an emotional vein of individual and landscape change – a new Australian agriculture.

News media reporting provides cues which readers use to orientate the reader or viewer and connect to the issue. The cues tell people how important an issue is and what it means to them (McCombs 2002). Newsworthiness plays out beneath the agenda with the reported events ‘populating’ the frame. It is an important process as it decides which events are reported and which are ignored. In a defining article, the twelve common factors affecting the selection of news items was identified (Galtung & Ruge 1965). These have been further organised into categories that influence how memorable events are over time. These are: the impact, size and negativity of the event; the ongoing nature of the event; involvement of elite persons or countries and the proximity to the reader (Engeth 2005).
PFP was of particular interest to the media because it touched on a range of elements that constitute newsworthiness. The impact of current land practices was explained as ‘catastrophic’, with serious future consequences for food security, traditional Australian landscapes and the viability of rural communities. The people involved, though not necessarily the traditional elites of large land holdings and long lineages, were none-the-less portrayed as elites. They were egalitarian elite, coming to the position by combining farming skills with a modern understanding of the landscape. This portrayal provided an emotional human-interest element to the stories of the journey undertaken by the farmers. The depiction of a journey provided the PFP narrative with a vehicle that continued on well after the PFP funding was complete. There were three types of journeys: the journey of atonement, the journey of self-discovery and the journey of ‘up-skilling’. The journeys tell the story of a farmer steering away from a path of ruined and devastated landscapes toward a secure future in repaired and treed landscapes. The diversion is told as a triumphal human story.

Journey of Atonement

This is the story of volte-face; the hereto unseen is now blindingly obvious and has spurred the farmer to redemptive action. An example of this story line is the in the 1985 Financial Review article headed ‘Saving Australia’. The journalist, Rod Usher writes of the ‘sunburnt country fast becoming burnt out’ and the PFP project as a ‘rebirth ‘ for one of the farms. Four years later in 1989 a special report in the Good Weekend Magazine headed ‘The Tree of Life’ written at the time of Prime Minister Bob Hawke’s announcement of the ‘One Billion Trees’ Plan, opened the story with:

Ringbark, chainsaw, dieback, woodchip – these rhythmic words chart the loss of billions of Australian native trees over the past 200 years. …But a new, gentler vision of Australia is taking root. (89_MEDIA2)

Journey of Self Discovery

The journey of self discovery is the ‘gentler vision’, a story about learning through experience. The emphasis is on the practicalities and the farmer mindfully integrating this with their business. In the Good Weekend Magazine December 1991, a feature titled ‘The TREE and MAN’ began with; ‘since the start of white settlement, an estimated one-third of Australia’s tree cover – 20 billion trees- has been wilfully destroyed. Tony
Stephens meets some farmers who are trying to correct the mistakes of their predecessors.’ Fred Fargher, host of the *Good Morning Show* on BVT6 Ballarat, enthused in his introduction to the interview with PFP farmer Peter Waldron, that ‘this is a story about farming with nature not in opposition to it’. David Smith, host of *Earthwatch* on ABC TV, ran a piece on PFP in 1992 describing it as part of ‘Australia’s quiet revolution in farming’. These stories imply that the farmers are reigniting an almost spiritual connection to nature.

**Journey of Up-Skilling**

This is a less enigmatic story most prevalent in rural media, *Stock and Land, Weekly Times* and *Farm Magazine*. The ‘up-skilling’ theme is a journey of improved decision making and awareness, a story of farm practices revised and reorganised. The January 1986 edition of FARM carried a feature on water and trees with 20 articles covering tree selection, planting and care. Examples of the titles are; ‘Direct seeding a success’; ‘Showing farmers the way’; ‘Whole farm plan essential’; ‘Trees to beat salt’; ‘Conservation and farming can mix’; ‘Species selection a vital factor’. These articles provide a description and guide to improve specific farm practices. The emphasis is on the potential of trees to contribute to the farm enterprise as shelter or fixes for salty or eroded sites. This journey promises maximisation of potential.

**5.1.3.1 Summary of the Role of the Media**

Media stories tell the meaning of the PFP. The media tended to report the PFP experience on behalf of the participating farmers as a personal odyssey powered by higher returns to the farm. While different journeys were described they all promoted the male farmer as protagonist – and other people were cast as ‘helpers’ to the important cause.

**5.1.4 Images in the Public Story**

This section addresses the second part of the focus question: 1.3 What role did the media play in presenting the public narrative of the PFP, particularly in its use of images?

Photographs in media stories function as markers or prompts, framing the story to establish an interpretive frame (Griffin 2008). They are deliberate and considered
devices to present the meaning of a story. Therefore, it is important to consider the images that were chosen to frame the media stories of the PFP. A selection of ten newspaper and magazine articles written between 1984 and 1991, covering the PFP operational phase plus the following four years, was taken to judge the type of images used, (refer to Table 5.3).

TABLE 5.3: PUBLICATIONS SELECTED FOR IMAGE COUNT

<table>
<thead>
<tr>
<th>Magazine/Newspaper</th>
<th>Date</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>FARM</td>
<td>1/1/1987</td>
<td>87_MEDIA1</td>
</tr>
<tr>
<td>FARM</td>
<td>1/1/1988</td>
<td>88_MEDIA1</td>
</tr>
<tr>
<td>Good Weekend The Age Magazine</td>
<td>11/11/1989</td>
<td>89_MEDIA2</td>
</tr>
<tr>
<td>Good Weekend The Age Magazine</td>
<td>11/12/1989</td>
<td>89_MEDIA6</td>
</tr>
<tr>
<td>Good Weekend The Age Magazine</td>
<td>12/7/1991</td>
<td>91_MEDIA1</td>
</tr>
<tr>
<td>The Hamilton Spectator</td>
<td>5/23/1984</td>
<td>84_MEDIA1</td>
</tr>
<tr>
<td>The Independent Monthly</td>
<td>6/1/1990</td>
<td>90_MEDIA1</td>
</tr>
<tr>
<td>Weekend Review</td>
<td>7/12/1985</td>
<td>85_MEDIA3</td>
</tr>
</tbody>
</table>

There are seventy-four images accompanying the PFP stories in these publications is. Table 5.4 shows a breakdown of the content.

TABLE 5.4: CONTENT OF IMAGES IN PRINT MEDIA

<table>
<thead>
<tr>
<th>Data Media</th>
<th>Landscape</th>
<th>PFP Farmers</th>
<th>Volunteers and children</th>
<th>Adults working</th>
<th>Tree seedling</th>
<th>other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Devastated</td>
<td>Repair</td>
<td>Men</td>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retrieved docs</td>
<td>15</td>
<td>21</td>
<td>15</td>
<td>8</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

From this selection, the representation of PFP in printed media relied on four stock images. These were (i) devastated and (ii) repaired landscapes, (iii) the PFP farmers working and (iv) children planting trees. Some images were featured most prominently in the media when they conveyed combinations of content. For example, children planting trees in a landscape under repair conveys the message of the works having a value in perpetuity. The presentation of the PFP farmer working at a landscape repair site is also a positive image that can have either a practical or a philosophical aspect.
depending on the readership. The rural papers and magazines were more ‘nuts and bolts’ and the urban media tended to a more philosophical view of the PFP. Images of devastated landscape juxtaposed with a repaired and revegetated landscape also conveys a positive message. These stock images were used to illustrate the stories personalised around the PFP farmer. The stories support the depiction of the PFP experience as an odyssey.

Images in the Storyboard Documents

This section will describe the images from the project and media documents on the Storyboard. Six of the documents contained images, four media and two project documents. A seventh item is the ABC program on the PFP, which went to air in 2000. The footage used in the documentary will be discussed at the end of this section. This section will explore the symbolism of the images by landscape, people and individual tree categories. Table 5.5 shows the content of images found in the six Storyboard documents.

<table>
<thead>
<tr>
<th>Data Storyboard</th>
<th>Landscape</th>
<th>PFP Farmers</th>
<th>Volunteers and children</th>
<th>Adults working</th>
<th>Tree seedling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Devasted</td>
<td>Repaired</td>
<td>Men</td>
<td>Women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media docs n=4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Project docs n=2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The documents of the Storyboard that contain images are described below.

Media

- 85_MEDIA3: ‘Saving Australia’ – A positive image of two people planting a tree superimposed over a devastated landscape. Both black and white images.
- 87_MEDIA1: FARM Magazine – Front cover colour image of men planting trees and a full-page colour image inside. The image is of volunteers planting trees with a background of dead red gums. A rainbow dissects the image. There
are another five images of landscapes, degraded and repaired throughout the story.

- **88_MEDIA2**: ‘Land Lost by Degradation’ - This is a black and white image of a degraded landscape.

- **91_MEDIA1**: ‘The Tree and Man’ – A front cover image in full colour of a PFP farmer standing in a paddock. The article has four landscape images, four of people tree planting and one of a tree seedling.

**Project Documents**

- **88_PFP4**: Brochure on Whole Farm Planning – three colour images of a degraded and two of repaired landscape.

- **90_LPFP3**: Flyer for ‘On Borrowed Time’ – three small images (70mmx70mm), one of a degraded landscape, an actively eroding gully, one of a PFP farmer and PFP officer looking over plans out in the paddock and a treed homestead site.

### 5.1.4.1 Landscape Images

The images are numbered according to the document code. This preserves the link with the text retaining the overall context. This is important because without it the interpretation could be as expansive or limited as my own knowledge of the subject composing the image. In most cases the text is consistent with the images. There is one interesting exception where the journalist’s aspirations for the PFP seem to exceed those of the farmer he interviewed (91_MEDIA1).
Figure 5.4 shows an image of advanced desertification. It sums up the problems of over-grazing and tree decline with the image of a single casuarina. There are no replacements for this old tree in the frame and the trees in the mid-ground appear to be dying. This is a desolate image. The stock camping underneath the casuarina completes the scene, telling a story of over-grazing and soil compaction. This image conveys a message of a landscape in terminal decline.

The back page of the brochure has two images. The top image shows a devastated landscape. There are no signs of life here, although the pastures appear not to be over-grazed. The erosion and salinisation of the shallow gully and trees in various stages of decline, present a picture of devastation.

The back page of the brochure has two images shown in Figures 5.5 and 5.6. The first image shows a devastated landscape. There are no signs of life here, although the
pastures appear not to be over-grazed. The erosion and salinisation of the shallow gully and trees in various stages of decline, present a picture of devastation.

![Figure 5.5: Landscape Image 2 (88_PFP4)](image)

The second image is a repaired landscape. The gully in the image has been fenced from stock, and possibly treed though that is not clear from the photo. Other tree plantations are obvious in the frame. This is a typical image of a PFP repaired landscape with signature PFP style mid paddock shelter. It looks ‘cared for’.

![Figure 5.6: Landscape Image 3 (88_PFP4)](image)

The inside cover story image in *FARM* January 1987 edition (87_MEDIA1) symbolises the PFP message with a combination of elements. The photographer has managed to
capture a full rainbow framing the degraded landscape scene in the background (Figure 5.7). The foreground shows people planting trees.

This is a landscape common to the PFP project. Degraded, as ‘over zealous tree clearing has reduced water use to the extent that ground water was seeping up to the surface and exiting in salt scolds’. The rainbow completes the picture with the ‘pot of gold’ imagery of the story’s title: ‘Pot of Gold with Tree Planting’. The pot of gold was said to be the reward for ‘salinity control, livestock shade and shelter hence improved production, land slip and erosion control, and property beautification and encouragement of native birds and animals’. The presence of the rainbow makes this image a powerful vehicle for the PFP message of repair and prosper.
5.1.4.2 People in Images

People were used in the media images to demonstrate business, and community concern. The volunteers and family of the PFP farmers were pictured as industrious helpers, (Figure 5.8). PFP mobilised an army of volunteers, 328 people from the age of five to seventy from twenty two different community groups (Aitkin 1985). Their presence on site symbolised social concerns for land degradation validating of the seriousness of the issue.

FIGURE 5.8: IMAGE OF CHILDREN (91_MEDIA1)

The PFP farmers’ images were also important. They were usually seen to be actively working, inspecting trees or driving tractors. One interesting exception was an image used in the Good Weekend Magazine, December 7 in 1991 (91_MEDIA1). This is three years after PFP had finished. The image shown in Figure 5.9 renders a more complex understanding of the PFP, not supported by the text of the article.
Indeed the image of the PFP farmer, Bill Speirs, is at odds with the quotes by him in the text. The story is told as a personal journey of atonement for past excesses and the farmer is the central character. Some farmers are portrayed as confronting this reality, and, ‘like a new breed of pioneers’, are administering a more careful form or agriculture. In the article, Bill is quoted as saying, ‘I don’t much like the word “conservation”. What we are trying for is a professional, planned approach to farming’. This is an example of the ‘up-skilling’ journey theme co-existing with the journey of atonement. Much of the story is about the parlous state of the landscape and how this came to be.

Bill is pictured looking very like the ‘new pioneer’. Still readily recognisable as a farmer, with the shirt sleeves rolled up, the hat and work pants, he is staring out of camera as though looking in to the future he is working towards. In the article titled ‘A new direction for farming’ Bill’s quote mentioned in the paragraph above suggests he
has a less ambitious objective and is viewing this through a farm management lens. Bill reflected this focus again 25 years later when I interviewed him as part of the research.

The image can tell us about the writer’s ambition for the PFP. The title ‘The Tree and Man’ may be intended to allude to the highly regarded novel ‘The Tree of Man’ by Patrick White written in 1955. This novel depicts the unarticulated affinity between rural people and the land through a pioneering saga. The main character, Stan Parker, seeks a spiritual meaning in a world of conventions (White 1955). Seeking the other, the reality beyond conventions, may be what the photographer was trying to capture in Bill’s photo. The image feeds into the notion of land stewardship by re-engineering the traditional image of the farmer. It therefore succeeds in conveying a shift in the traditional order of things, providing a hopeful dynamic for the future, a representation of the PFP as a redemptive exercise.

5.1.4.3 Tree Images

Images of tree seedling were used in five of the sixty-five print media images. Although not used frequently it was still a powerful image for PFP. It can symbolise death or near death as seen in Figure 5.10.

FIGURE 5.10: IMAGE OF TREE 1 (91_MEDIA1)
The tree near death also conveys despair, that of a last relic. As one of the PFP farmers commented to me:

The redgum is just the last man standing in a complex system.

(1.60:22/08/07)

There is a sense of loss in the images of surviving trees as in the single casuarina used on the front cover of the ‘Whole Farm Planning’ brochure shown in Figure 5.4.

Conversely the single tree can also be a symbol of hope, a metaphor of ‘rebirth’ representing hopes for the secure future. The seedling trees in Figure 5.11 are a positive symbol. There is pathos with the image as it is a metaphor for life and hope for the future. This is a positive emotional image.

These images have been taken from *FARM Magazine* (87_MEDIA1) and ‘The Tree and Man’ (91_MEDIA1). The use of images of individual trees in the documents has served as a metaphor for death or hope. The PFP logo reinforces this with an image of a single tree.
The images described above were deliberately placed illustrations of the PFP. The portrayal of landscape devastation and repair imply a project with geophysical impact. Placing busy volunteers in the frame is an example of the structural change at the informal social level. It implies community cohesion for the sake of the problems – a ‘pulling together’ portrayal where people chip in selflessly to help in an emergency. The PFP farmers are portrayed as leaders of change for their peers and society’s connection to the land.

5.1.4.4 TV Images

The ABC *Countrywide* program revisited the PFP farms in 2000 (2000_MEDIA4), fifteen years after the project completed. The program ‘The Potter Farms’ provides an insight to the durability of the PFP narrative. Table 5.6 shows a breakdown in minutes of footage from the program. The emphasis is on landscape repair and rejuvenation. The PFP three former farmers are shown reflecting on the success of the PFP.

<table>
<thead>
<tr>
<th>Scene</th>
<th>Minutes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape devastation</td>
<td>2.10</td>
<td>Taken from stills used in the PFP brochure</td>
</tr>
<tr>
<td>Landscape repair</td>
<td>1.50</td>
<td>Taken from stills</td>
</tr>
<tr>
<td>Pastoral</td>
<td>4.25</td>
<td>Stock grazing scenic landscapes</td>
</tr>
<tr>
<td>PFP farmers</td>
<td>7.67</td>
<td>Also in scenic landscapes and rural backdrops</td>
</tr>
<tr>
<td>Other</td>
<td>5.3</td>
<td>Narrator, Sue Marriott (HEAL) and former PFP manager (Andrew Campbell)</td>
</tr>
</tbody>
</table>

As with the still images, this TV program also emphasised the farm and landscape revival, showing over four minutes of pastoral idle scenes. The footage was of a landscape reclaimed. Beginning with the degraded landscape stills used in the brochure for *On Borrowed Time* the film moves to depict the pastoral idle the farms had become. The pastoral idle is evident in footage of ewes and lambs, mature canola crop and stock grazing amongst mature trees. The three PFP farmers featured in the program verified the PFP works from aspects of production, management and habitat improvements. Bill Speirs described the PFP as a ‘pump priming’ exercise to encourage others to do the same works. Bruce Milne described the PFP as providing a lesson that ‘the environment comes first’ and Peter Waldron said it was to influence others. The narrator reinforced the imagery with comments such as:
It could be argued that the PFP was the genesis of the national Landcare movement. Luckily the PFP approach has helped the wool grower participants increase their productive capacity. All the PFP participants ended up with improved farms. (2000_L-PFP1)

The message is unambiguous. The program plays to notions of rurality. The driver for a rural cohesive identity emerged in the 1960s derived from a mix of the nation’s dependence on agriculture and the consequent belief that the farming life is a noble pursuit, preferable to the competitive, untrustworthy life on offer in the cities (Aitkin 1985). This notion gained currency through the 20th century with country people identifying themselves as different and vulnerable (Davidson 2005). While the potency of the ideology has waned the romantic notion of it as an essential Australian characteristic has remained.

The ABC program used the romantic notion of rurality in the PFP encore. Filmed fifteen years after the PFP it repeated the messages of the 1980s: repair and prosper, and connected it to a complex interdependency between farming and nature by using views of a bucolic idyll. When it was filmed the Milne farm had been sold to Jigsaw Farms, though the Milne family were still managing the operation. Within three years the other two properties were also sold. The sale of the properties broke the PFP narrative, most particularly when the farms were sold for the purpose of large blue gum plantations. This was so for one of the Speir’s farms and the Kitchin’s farm also at Wando Vale. The Diprose farm at Melville Forest has been leased for the purpose of bluegum plantation.

5.1.4.5 Summary of Images in the Media

Three types of images were used to depict the PFP story: landscape, people and the single tree. Degraded landscapes were used to depict alarming desertification often juxtaposed with images of a PFP revegetation site. People, in particular the PFP farmers is depicted as the architect of change. The portrayal of the PFP farmer may say more about the journalist than the farmers. Often the quotes of the farmer in the text seemed at odds with the image of him as a new thinking farmer. The re-engineering of a traditional image of a farmer into a pioneer of land stewardship provided the optimistic narrative of the media portrayal. Some of the PFP project staff became frustrated by the media’s fixture on trees as a symbol of the PFP. Trees were used to portray fragility and
optimism for the possibilities of landscape rejuvenation. The image was also used by the PFP as the logo. The portrayal of people and landscapes was emotionally charged and became synonymous with the PFP depicting a journey of change and innovation.

5.1.5 Summary of the PFP Public Narratives

The storyboard documents and images have been used to illustrate a diversity of narratives in the PFP public story. This has been displayed on a thematic diagram that depicts the shifting emphasis recorded by the storyboard documents over time, (Figure 5.2). The early PFP narrative is about a farm and farmer improvement program, which expanded over time to incorporate an altruistic farmer tending to both business and nature in the same measure.

The media made an emotional connection with the farmers and this escalated the meanings and scale of the PFP story into a national and eventually international sphere. The sale of some of the PFP farms broke the triumphal narrative and hinted at a more complex set of circumstances impacting farm management other than the landscape repair and prosper formulae of the PFP narrative. The increasing complexity of the drivers of behavioural change from simple economic reward levers to nuanced connections with the land and nature are reflected in the development of the PFP agents’ journey beyond the PFP experience.

This is the public narrative of the PFP told from the documents created by PFP agents and media. The next section will identify the PFP farmers’ narratives to uncover the complexity of circumstances from the perspective of their engagement with the project.

5.2 The PFP Farmers’ Narratives

Agents in the PFP organisation and media mediated represented the farmers’ experience, during the event and echo period. The public presentations by the farmers at their own field days were not recorded and so unable to be used in this study. This section identifies the PFP farmers’ narratives and addresses research objective 2. To identify the elements of the narratives of the PFP held by participating farmers, and explain how they were created. The location of this stage of the analysis is shown in Figure 5.12.
There are three focus questions attached to this objective that will be discussed in this section. They are:

2.1. What are the elements of the narratives?

2.2. To what extent were the elements in the public narratives shared by PFP farmers and how did this affect their participation in the project?

2.3. What factors explain the different patterns in the narratives of the PFP farmers?

Each focus question is addressed beneath a heading of the same name.

The PFP was more than an agri-innovation for the participating farmers; it was a personal experience, taking place on their farms, in the public gaze of media and other farmers. Their narratives are likely to be diverse. Families interpret experience and react in unique ways. Interpretation of experience takes place at the ‘social interface’, the contested site at which new knowledge is created through the engagement process. The interpretivist paradigm of this study seeks out and values diversity in the experiences of individuals. The following section begins with an explanation of the differential

![Diagram](image-url)
participation in the PFP between 1985 and 1988 before moving into the presentation of the results of the Plot Analysis.

5.2.1 Background to Uneven Participation in the PFP

Differential participation in the PFP among the 15 farms was evident and unremarkable during the PFP operations. The farmers’ involvement was metered by the PFP financial contribution and production of farm plans. The farm plans can be described as either full or partial. That is, they encompassed the whole farm or just a selected site. Eight farms had partial plans. These focused on planning works for a small area of a farm. Seven farms had full plans that took in the whole farm area. A partial plan entailed smaller and fewer works, and so, attracted less funding than a full plan. The PFP budgetary constraints, and the need to showcase works for extension purposes provided effective devices for allocating resources. Comments such as;

> We were second rung really. (3.50:4/8/06)
> We were major players in the whole thing. (1.40:20/12/06)

show that farmers were well aware of the differences. Some knew their potential involvement had been scaled back as the following comment shows.

> It seemed to get less and less every year. (1.38: 23/4/07)

They appeared sanguine, rationalising their access to the project’s resources as a bonus.

> Anything was a positive, I was happy to be involved at any level. (3.40:29/8/06)

The farm plans were a feature of the PFP’s extension methodology. They were seen as an opportunity to enthuse, collaborate and learn, and as communication exercises between family members and the PFP. Campbell (1991) notes that the farmers who had extensive farm plans completed through a number of iterations learnt more than those whose plans were partial. Those who had full farm plans that had been through a number of reviews and redesigns learnt and grew more confident by the experience and were more likely to increase their commitment to the process through extending the works. As Campbell explained;

> How much of a plan was implemented from 1985 to 1987 varied according to the demonstration value of the various farms, and the involvement of the farmers varied accordingly. We found that an
accelerated programme of works also accelerates the farmer’s
dedication to the planning process. (Campbell 1991, pp.74-75).

Once established, the differential patterns of involvement were portrayed as a
consequence of the PFP operational constraints and received no attention by media or
PFP officers. However interviews for this study reveal that the PFP officers were
conscious of using other, unspoken avenues, for allocating resources.

We had a cross section of farms, not just soldier settlers but others too,
trying to be egalitarian. (A Campbell 2007, pers. comm., 19 April)

…and of course the unwritten criteria were that they were people that
we could work with, that’s pretty obvious isn’t it? (B Middleton 2007,
pers.comm., 5 December)

I suppose the difficulty with that was, well one of them that I can
think of that certainly never took the bit, …….. if that farmer had been
suitable to do a full scale farm plan ..well we would never have done it
because we knew from the word go that they weren’t going to have
the same level of inputs to some other people. (J Marriott 2007, pers.
comm., 29 January)

Table 5.7 shows differential involvement by resource allocation on the PFP farms.

<table>
<thead>
<tr>
<th>Farm</th>
<th>% farm in PFP by ha</th>
<th>% of $ contribution to PFP by farmers</th>
<th>Farm Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nareeb Nareeb</td>
<td>5</td>
<td>86</td>
<td>partial</td>
</tr>
<tr>
<td>Fernleigh</td>
<td>11</td>
<td>161</td>
<td>partial</td>
</tr>
<tr>
<td>Benowrie</td>
<td>11</td>
<td>41</td>
<td>partial</td>
</tr>
<tr>
<td>Ballentrae</td>
<td>12</td>
<td>46</td>
<td>partial</td>
</tr>
<tr>
<td>Cherromount</td>
<td>17</td>
<td>48</td>
<td>partial</td>
</tr>
<tr>
<td>Barnaby</td>
<td>18</td>
<td>64</td>
<td>partial</td>
</tr>
<tr>
<td>Pine Grove</td>
<td>20</td>
<td>80</td>
<td>partial</td>
</tr>
<tr>
<td>Reedy Creek</td>
<td>29</td>
<td>63</td>
<td>full</td>
</tr>
<tr>
<td>Warooka</td>
<td>35</td>
<td>97</td>
<td>partial</td>
</tr>
<tr>
<td>Satimer</td>
<td>40</td>
<td>75</td>
<td>full</td>
</tr>
<tr>
<td>Daryn Rise</td>
<td>50</td>
<td>52</td>
<td>full</td>
</tr>
<tr>
<td>Willandra</td>
<td>83</td>
<td>162</td>
<td>full</td>
</tr>
<tr>
<td>Helm View</td>
<td>94</td>
<td>112</td>
<td>full</td>
</tr>
<tr>
<td>Wyola</td>
<td>100</td>
<td>46</td>
<td>full</td>
</tr>
<tr>
<td>Gheringap</td>
<td>100</td>
<td>99</td>
<td>full</td>
</tr>
</tbody>
</table>
Table 5.7 shows, as expected, that a full farm plan resulted in a higher percentage of the farm covered by PFP works than was the case for the partial farm plans. This is an unremarkable measure of involvement as the farm plan itself pre-empts the works that were to unfold. However the farmers’ co-contribution provides some insight to involvement. The co-contribution was expressed as a percentage of total funding dollars, but was, in reality, a measure of the labour contribution, rather than cash. The measure of co-contribution ranges from 40-162%. Of these the seven farms with full plans had a co-contribution of 46-162%. This was similar to the group with partial plans (41-161%). The Fernleigh farm family contribution to PFP works was a highest at 161%, although they had a partial farm plan. At the other extreme was the Wyola farm, which had a full plan and contributed 46% to the activities. The significance of this is that Campbell attributed farmer involvement to the completion of a full farm plan.

It would have been better if all the participating farmers had been through the planning process together…. The fact remains, though, that the farmers who have put the most time into their plans have learnt the most (Campbell 1991, p.139).

However, the full farm plan did not translate into higher co-contributions. It is possible that co-contributions are also an ineffective measure of involvement. For example, they are measures of labour time, not cash, and favour those farms with staff or the means to hire contractors over farms that had owner operator labour. But it may also be likely that the completion of a full farm plan was also an ineffective measure of farmer involvement. For this reason this study has deliberately focused on understanding the farmers’ narratives to provide an insight to their involvement.

The pattern of involvement described by the type of farm plan provided a frame of comparison for the Plot Analysis. The diagram below represents the families and the type of farm plan, taken from Table 5.7. The two additional figures represent families who were active in the farm partnership but for the purposes of the PFP operation were grouped by farm unit. In this study the families were treated as separate entities. Family groups were composed of the immediate family members who participated in this study. The groups were the individual male, husband and wife or father and son. The individual male was the most frequent representative of the family.
These representative figures of the families coloured against the type of farm plan will be used to contrast the results of the Plot Analysis.

### 5.2.2 The Elements

This section addresses the first focus question: (2.1) What are the elements of the narratives?

#### 5.2.2.1 The Plot Analysis

The Plot Analysis was conducted with the transcripts of the first PFP farmer interviews. On the occasion that the interviews with husband, wife and adult sons, occurred separately, the transcripts were pooled into a family unit. Where there was more than one family unit involved on a PFP farm during the 1980s, for example, where the farm had two or more brothers in equal partnership actively involved in the PFP, they were treated as separate family units in this study. That is why although the PFP worked on fifteen farms I have seventeen families in this study. The transcripts were read to highlight the key elements of (i) orientation, (ii) action, (iii) evaluation and (iv) reflections, elements adapted from Labov\(^\text{18}\).

The text relating to each element was cut and pasted into another document under the element heading. This was again reduced until a paragraph remained under each heading for each family. This reduced version filled a single A4 page for each family. The participants had the opportunity to read, and if they wanted to make changes to the quotes at the second, targeted interview session. I asked them to consider whether or not the Plot accurately summed up the interview, and if not what should be changed. This

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\(^{18}\) Scripts are considered as the referential core of personal narratives. Labov and Waletzky (1976) identified narrative structure for analysis, which was based on statements that performed as: abstract orientation, complicating action, evaluation and resolution. See Chapter 4.1.1.2
yielded 17 Plots, each with the headings, Orientation, Action, Evaluation and Reflections. These are shown in Appendix 4.

5.2.2.2 Elaborating the Plot Elements

The following section provides an explanation of the plot elements supported by quotes taken from the interviews. The interviewees, consistent with the ethical considerations of this study, are not referred to by name, but by an identification code followed by the date of the interview.

(i) Orientation

This element was taken from text that addressed the following question:

What was happening with the farm and family before their involvement in the PFP?

This is an important question because the PFP selection process was intended to screen people whose farm management was poor.

...I always wanted to do things properly and learn more. We had put in double gates, not single, drought proofed the dams...we had good capital improvements. Locals could see things were happening.

(3:40:29/8/06)

This was a typical quote. In many ways the PFP farmers seemed to be self-conscious farmers. This may have been an advantage given the exposure of some of the farmers in the project though media and field days. The selection process may have favoured farmers seeking new or challenging situations.

(ii) Action

This element was taken from text that addressed the following question:

What did they actually do during the PFP?

The unstructured interview approach encouraged a wide variation in the activities discussed as their PFP work. For some it was the physical work and meeting the project timelines, while others talked more about the social advocacy role.
It was an idealised - wished for work program. The workload was huge – needed to be young and keen. But in those days everyone worked hard. It was full on really. Put us under pressure – we had to run the farm at the same time...we cut paddocks to size, positioned to soil type and topography. People can’t believe the trees planted. It looked terrific early. I was proud to be involved. (1.20:26/6/08)

This quote describes the PFP as an accelerated farm improvement program. Other representations of the PFP activity were as a social advocacy program or a learning experience.

(iii) Evaluation

This element was taken from text that addressed the following question:

What did the action mean to the PFP farmer (family)?

This refers to the outcome of the PFP. Different activities result in different evaluations. The quotes below, from two members of the one family, show that the PFP represented as a personal development experience as much as a farm development project.

Potter was motivation and momentum. A catalyst, an opportunity to develop. (3.30:1/6/07)

It was resources and we made the most of it. (3.35:20/11/06)

For this family the evaluation was based on the physical changes they made to their farm during the PFP as well as personal development.

(iv) Reflections

This element was taken from text that addressed the following question:

What do they think about it all now?

Reflections are the view taken with the benefit of hindsight. It was intended to separate the evaluation (of their activity) to a wider consideration of what the achievements or advancements had been. In most cases the reflections were ‘close to home’ in that they didn’t have an overview of the PFP beyond their direct experience of it.

The farm plan was there to tell us what to do after Potter left. By then the farm had all the laneways. Half the farm plan was done in that time and the other half we did through Landcare grants. (3.20:4/8/06)
This quote shows that the learning component of the PFP activity was not taken up. Rather it had been more of a private on-farm planning and funding project. This was more typical from people who had not played a role in the PFP advocacy.

The four plot elements provide a means of ordering the farmers’ narratives to understand their experience of the PFP without referring to the public narrative of the PFP. The plots allow for a diversity of the narratives, yet a consistency (through the elements) for comparison between the farmers.

5.2.3 Patterns in the Narratives

This section addresses the second focus question: (2.2) To what extent were the elements in the public narratives shared by PFP farmers and how did this affect their participation in the project?

The transcripts were distilled into the four plot elements and reviewed by participants. This yielded seventeen plots representing the narratives of the PFP farmers aligned to the functional elements of a plot. The elements allow for comparison between the narratives of the farmers and so provide a short hand summary of their PFP experience. It was possible to locate the seventeen plots into groups based on the similarity of the elements. Three groups were settled on: Utilitarian, Affiliate and Transformer. These groups, based on a similarity between plot elements, formed a classification for each family in the PFP. Organising the narratives into these three groups suggest discreet experiences of involvement. In reality this was more like a continuum, which began at a minimum level of involvement with the PFP and moved through to a complete immersion in the PFP. As such, some farmers displayed characteristics across all the groups and some were polarised at the extremes. While the groups did not contain all of the variability in the families’ narratives, they were useful labels to highlight the nature of people’s explanations of their experience of the PFP project. The following description of the groups includes some generalised contextual information on the families, which helps to characterise the groups.

(i) Utilitarian:
Eight families fitted this classification. These people tended to appear as passive participants in that they accepted the farm plans prepared for them as templates for future activity. They were more likely to have had little input or considered that they did not have input to them. The farm plans bounded them and defined and limited their participation. The PFP was, for this group, experienced as an event with a beginning and end. It was an event recalled by all families as an extremely positive experience.

Potter gave us an excuse to fence off gullies and plant trees. Its what people wanted to do but felt they couldn’t cause it wasn’t common practice. Never thought there’d be a financial benefit though. They said there would be extra pasture growth but I never thought there’d be a benefit. The farm needed fencing in three rather than 20 years. This is what Potter offered. (3.20:22/8/06)

This quote explains the PFP as predominantly an accelerated capital improvement program. The farm needs are at the forefront of thinking. The choice of the label Utilitarian is in recognition of the centrality of the farm to their view of the PFP.

The Utilitarians are represented by a pink figure.

Figure representing the Utilitarian Group =

(ii) Affiliates:

Six families fitted this classification. This label was chosen because this group appeared to be conscious of and proud of their role in the extension of the PFP message. They seemed to feel affiliated with the PFP. The association with the project is positive with this group too, but they were less likely to be restricted by the farm plans. They were likely to have had more input to them, though that was not always the case. This group tended to report the PFP as an energising experience. The acceleration of their farm improvements was seen as a beneficial outcome of their participation as with the Utilitarian group. However this group tended to take the social obligations (which they saw as synonymous with the on ground works) seriously and were active in the advocate role.

It made us feel… ah.. more important than just doing something by yourself and having people look over the fence and thinking you’re pretty silly and wasting your money. The people who came with
Potter to have a look at what we’d done, well that gave us a bit of a lift and that gave us the next step. (2.10:25/7/06)

This quote tells us that the advocacy role brought a valuable interaction with other people, which was a boost for further works and self-confidence.

The Affiliates are represented by a green figure.

Figure representing the **Affiliate** Group = 🔴

(iii) Transformers:

There are three families that fitted into this group. The label Transformer was used because they appeared to have undergone a profound change. It is the smallest group made up of three families. For them the PFP was a catalytic project. They could speak of a before and after as fundamentally different times. These people were more likely to have engaged in a critical refection of their farm practices, were unrestrained by the farm plan which altered often. This group was also committed to the advocacy role and was most often used by the media to represent the PFP.

It’s not that I cant do the technical stuff but without a discussion of the thing as a whole I feel pretty unfulfilled about the exercise really ……

It wasn’t just the inherited enterprises(grazing/cropping) that were left there it was the economic and political system that was also left there. We didn’t delve deeply, we didn’t question as hard as we might and we still aren’t. (2.60:3/8/06)

This quote is a reflection on the PFP and its achievements. The tension between farm practises and the wider socio-economic realities have been examined over the years in a way that the individuals from the other groups had not done. The relegation of the PFP to a technical project reflects the fact that for this group, the initial project had been narrowly framed. The Transformer group are represented with a yellow figure.

Figure representing the **Transformer** Group = ⚫

5.2.4 Explaining the Patterns in the Narratives

This section adresses the third focus question: (2.3) What factors explain the different patterns in the narratives of the PFP farmers?
The plot groups of Utilitarian, Affiliate and Transformer, can be used to explain the narrative patterns according to measures of participation available at the time of the PFP. That is, by the extent of the farm plans. In the case of the Utilitarian group, those families for whom the PFP represented a farm improvement opportunity, it would be expected that they would align with those who had partial farm plans and a smaller co-contribution during the PFP. In the case of the Affiliate group, made up of those families who describe the PFP as a social change project, it would be expected that they would align with those who had completed full farm plans. Likewise, the Transformer group, made up of those who predominantly describe the PFP as a life changing experience, would also be expected to be the same people who had completed full farm plans during the PFP. Table 5.8 shows how the farm plan and co-contribution align with the farmers’ narratives of the PFP.

**TABLE 5.8: RESULT OF PLOT ANALYSIS**

<table>
<thead>
<tr>
<th>Group</th>
<th>Nos. families</th>
<th>Ha of PFP works as % of total farm ha</th>
<th>PFP farmers’ contribution % of total PFP $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilitarian</td>
<td></td>
<td>5-50%</td>
<td>40-97%</td>
</tr>
<tr>
<td>Affiliate</td>
<td></td>
<td>11-100%</td>
<td>70-160%</td>
</tr>
<tr>
<td>Transformer</td>
<td></td>
<td>80-94%</td>
<td>112-160%</td>
</tr>
</tbody>
</table>

The second column in Table 5.8, ‘Nos.Families’, shows a symbol for each family. The symbol is large to denote the PFP full farm plan, and small to denote a partial PFP plan. The Table shows that the preparation of a full farm plan in the PFP does align with the Plot descriptions. That is those families whose narratives were grouped as Utilitarian, were more likely to have had partial planning during the PFP and a correspondingly lower level of activity as seen in the % of farm and money contributed. Likewise, those whose narratives were grouped as Affiliate and Transformer, tended to have had a greater involvement with planning, plus greater area of the farm involved and a higher percentage of contribution to the overall works.
This alignment appears to validate the farm plan as a tool of engagement. This is because it suggests that those with full plans which involved a number of iterations, learnt and grew more confident though the experience and were therefore more likely to increase their works (Campbell 1991). This is the basis of the participatory approaches to natural resource management and extension practices generally since the 1990’s.  

The Plot analysis reveals that the farmers experienced the PFP as: a farm improvement (Utilitarian), a social responsibility (Affiliate) and a transformative learning experience (Transformers). These groups provide an insight to the characteristics of the PFP from the farmers’ perspective. This is a more subtle explanation of meaning than that provided by the farm plan. What cannot be known from exposing this diversity however is whether the farm plan created the experience that followed, or whether, pre-existing assumptions tempered an individuals’ involvement with the planning process itself. This is the ‘chicken and the egg’ dilemma, whether or not farm planning methodology does lead to deeper involvement or those more likely to experience deeper involvement commit to the farm planning process. The dilemma is part of the uncertainty surrounding the relationship between action and talk which is discussed in Chapter 7.

While this study does not answer the dilemma it is interesting to note that all the PFP farmers were keen enthusiasts of the PFP, all felt they had embraced the project and most had followed on as members and leaders of their Landcare groups in the 1990s. They were familiar with the issues of land degradation and fluent with the language used today to describe biodiversity and social responsibilities. On the surface they appear to have had similar experiences and represent a united group. Yet, fundamental differences in the attribution and prominence of the PFP in their narratives appeared.

5.2.5 Summary of the Farmers’ Narratives

The differences in the attribution of the PFP impact revealed in the farmers’ narrative by the Plot Analysis show a similar spread as that found in the PFP public narratives. As a result the three groups (Utilitarians, Affiliates, Transformer) can be mapped onto the thematic map using the impact domains described for the public documents and depicted in Figure 5.14.

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19 See Chapter 2 Section 2.3.
Figure 5.14: Thematic Diagram of the PFP Story Overlaid with Farmers’ Plot Narratives
The Utilitarian group align with the attribution of the PFP impact as predominantly a geophysical project. The Affiliate group considered the PFP was an agent for social and farm practice change while the Transformer group were more likely to regard the PFP impact to a profound change in their mental model of farming.

The Storyboard documents are artefacts of the ‘event’ and ‘echo’ moments in time. The authors are unable to revise or update them in the light of new information. The farmers’ narratives, on the other hand, are from the study and belong in the ‘reflections’ period. As reflections they can be revised and updated to suit the times, new understandings and the interview situation. However it is most interesting that the farmers’ narratives, as an insight to their involvement, do appear to retain a dogged hold to their actual involvement, which was characterised by the farm plan. This provides an intriguing line of enquiry that is explored in the final analysis: the Dryzekian Analysis.

5.3 Conclusion

This chapter has explained the results of the first two analysis techniques: the Storyboard and Plot Analysis. The Storyboard shows the emergence and development of the PFP story, the public narrative. The story expands over time as seen from a shift in attribution of the PFP impact. The domains of activity, that is, where the action was depicted to be taking place, changed from a project with an impact at a local geophysical domain evolving to include social impacts and finally to incorporate fundamental changes to peoples’ thinking about the environment in general. This expansion mirrors that of natural resource management and agri-extension over the same period. It was a time of escalating awareness of the scale and extent of environmental issues and a move to more participatory inclusive approaches to involve people in collaborative responses.

However the evolving and expanding public narrative was not uniform across the Storyboard documents. The legacy documents (L-PFP) show that some of the PFP agents’ narratives widened to a critique of Australian agricultural and international development. This was not reflected in the media documents (MEDIA) that tended to repeat the early PFP message of ‘repair and prosper’ reiterating the economic motive. In the 1990s the media made the most of the motive of an intuitive connection to the land.
This was a durable piece of the PFP narrative reinforced by the use of powerful imagery that forged an emotional connection between farmers, the farm and traditional notions of the virtue of farming as a way of life. The most recent example of the repetition of this message was in the ABC Landline program aired in 2000.

The PFP farmers’ narratives were more diverse and reflected a wider attribution of the PFP impact. Three groups were identified from the analysis. The Utilitarian group whose narratives tended to be prosaic, depicting the PFP as a farm improvement opportunity, the Affiliate group who tended to value the exposure and social responsibility they regarded as part of the PFP change message, and the Transformer group, made up of those who tended to tell stories of a profound change as a result of their experiences with the PFP. The Transformer group were the ones most often shown in the media as though they were typical of the PFP experience. These narrative groups provide a glimpse of uneven participation. Their experiences of involvement are part of the flux at the ‘social interface’. The study is an exploration of this conceptual site to make sense of and order the patterns of involvement.

The two sets of narratives, public and farmers’, are not uniform, but reveal a difference between agents’ interpretation of the PFP experiences. The farmers’ patterns of involvement tended to reflect the measure of involvement used during the PFP, that is, the farm plan. Whether the farm plan did indeed set the families up to experience the PFP in a particular way or if a family’s receptiveness to involvement was assessed in other ways is not known. The public narrative, the one assigned to the PFP from its activities and the media representation, is, like the farmers’ narratives, diverse. The PFP seemed to grow in the scale of its impact beyond the confines of the farm boundaries moving into the minds of the farmers challenging traditional practices and ways of ‘seeing’ things. Finally the PFP influence was considered to have taken place at the level of administrative and community responses to the problems of land degradation.

The diversity in these public and private narratives, and the prominence of some narratives over others, contributed to a discourse of the PFP. The diversity among narratives suggests the presence of tensions and provides a fault-line to differentiate between discourses. This is the focus of the next analysis.
6 The Discourses

6.1 Introduction

In the previous Chapter, the PFP narratives were identified from the public documents and PFP farmers’ reflections. The public PFP narrative was found to have evolved and expanded over time beginning as a farm scale and farmer focused geophysical landscape repair project to become a social change agent influencing agents in administrative, government and community domains. The expansion of the PFP was promoted though the media. Imagery and text was used to position the PFP farmer as a new pioneer drawing on traditional rurality to re-engineer a new, land sensitive farmer. The media portrayed the farmers’ experience as a journey providing a compelling human story for the project. The farmers’ narratives also reflected diversity in the experience of the PFP. For some it was a farm improvement opportunity, for others a social responsibility to influence peers, while others reported a transformative experience that changed the way they thought about their farms and the global economic and social systems. This variation in the PFP narratives points to the existence of different meanings among the agents. This goes to the heart of the ‘social interface’, the subjective nature of the participation experience and the source of uneven outcomes.

In this Chapter, the narratives are used as the platform from which the PFP discourse is identified. The discourse analysis is a method of imposing an order on the patterns of meaning created at the ‘social interface’. The order is internally generated using the diversity in the narratives to explore the fault-lines that differentiate the experience and therefore the differentiate discourse. This is done through the application of the third analysis technique, the Dryzekian Analysis. The location of this step of the analysis can be seen from the data flow diagram in Figure 6.1.
The Dryzekian Analysis provides a means of exploring the ‘social interface’ to understand how meaning was created by agents from their experiences in the PFP. This is achieved by differentiating the narratives according to the basic assumptions in each one. This serves to identify the emergent features that characterise each discourse. The analysis is composed of three steps, described in Chapter 4.4.4.3 and corresponds to the study’s focus questions. Each focus question is addressed beneath an individual heading of the same name. The link between the steps of the Dryzekian Analysis and the focus question is shown in Table 4.12.

In this Chapter, each step of the discourse analysis and the link to the research and focus questions will be presented. The Chapter begins with the preliminary work involved in extracting and organising the metaphors for the analysis. This is followed by the presentation of the assumptions that underpin and structure the discourses. The preliminary discourses are labelled according to the prominent features that differentiated them. The final stage of the Dryzekian Analysis is to detail the discourses shifting from a preliminary discourse to a full descriptive discourse. The first set of results presented is based on the public narratives. This is followed by results based on the farmers’ narratives. Finally the Chapter concludes with a section headed ‘Theorising Discourse’, a discussion of the results.
6.2 Step 1: Preliminary Work

Identifying Metaphors in Text

Metaphors are a rhetorical device used to describe something by reference to characteristics of something else that the listener or reader is familiar with. The familiar object is referred to as the ‘source domain’ and the unfamiliar is the ‘target’. The metaphor acts as a map to move from the known (or source domain) to the unknown (target domain) transferring some of the characteristics of the source (Renton 1990). Metaphors are useful for this research because they are widely deployed by writers and speakers. Exceptions to this in are writing for technical purposes, for non-English speakers or for legal or legislative documents (Renton 1990).

The subject of natural resource management is suitable for use of metaphor use because the behaviours or learning considered desirable is new or unknown (otherwise there would be no need for NRM interventions). For example, the words ‘symptom’, ‘illness’ and ‘disease’, are used to illustrate land degradation. This works because we know that health is the optimum condition for a human body. These words transfer the notion of health as the optimum situation for the land too. So land described as ‘sick’ is land we immediately know is not optimum. It has a problem. For example, a recent article in The Age Newspaper on the Murray River used the human body metaphor to convey the extent of the problems in the river.

..to save a river system which is dying from the mouth up. (The Age, 28 August 2008, p.4)

Knowledge of the human body is needed to understand the impact of drought on the landscape. Also common uses of the human body concept are references to parts of the body. An example is the ‘hand’, which is used as in, ‘its in-hand’, to indicate things are under control and ‘it’s out of hand’ for out of control. In the same article on the Murray River the hand metaphor is used to convey a situation in which there is no space to manoeuvre.

In a country gripped by drought and climate change… (The Age, 28 August 2008, p.4)

There are differences in the way researchers identify and describe metaphors (Steen 2002). In this research I have read the documents to identify words or passages, which
made no literal, sense on their own, but can be understood by knowledge of another reality. This yielded a list of over 1,500 items. This excludes colloquialisms such as ‘running around like a chook with its head cut off’ and ‘all over the place’, which were not used in the analysis.

The individual metaphors were then sorted into source domain groups. I chose to keep the source metaphor intact, and ordered them by broad conceptual source domains. These will be referred to simply as conceptual domains. Conceptual domains are an aggregating tool with respect to the source domain but they can be mapped to, or used by many target domains. For example, the concept of ‘building’ can be used to describe a theory or a society. The concept of ‘fire’ can be used to describe both anger and love (Kovecses 2002). ‘Building’ and ‘fire’ are acting as conceptual source metaphors. I have generated ten conceptual metaphors from the set of data and an eleventh group of miscellaneous metaphors.

The individual metaphors have been retained in context as passages, sentences or phrases and copied into an excel spreadsheet. They have been sorted into the conceptual metaphor groups. These are described below. The conceptual metaphor group will always be written in capitals following the example set by Kovecses (2002). The Conceptual metaphors decided on for this study are: HUMAN BODY, JOURNEY, BUILDING, ORIENTATION, NATURE, MUSIC, VISION, CONTAINERS, MILITARY, QUANTITIES and MISCELLANEOUS. The metaphors are printed in bold type. The following section will elaborate on these groups using metaphors extracted from the PFP corpus.

**HUMAN BODY**

This is a rich source of metaphor in the data. Both function and parts of the body are used to explain actions. Faces, hands, putting a foot forward, for example were common uses of body parts. The normal function of a body is also important. A healthy body is the optimum situation so land degradation is mapped from the body metaphor. So commonly we hear about healthy, sick, dying states of land which need to be treated, taken care of or handled.

The extent of *saline scaring* on the land. (90_MEDIA7)
The wider community is still unaware of the cancer of land degradation and what this will mean to our future unless we can restore ecological balance. (88_PFP2)

Forests are the lungs of the earth. (95_L-PFP6)

The HUMAN BODY can read, listen, see and run which are metaphors for learning and doing. These are grouped under HUMAN BODY conceptual metaphors as action focused. Other examples of action are grasp, dig, delve, race and stumble. The HUMAN BODY needs to be taken care of as it has symptoms which need treatment. It can be hamstrung and seduced, both metaphors implying the action will be thwarted or people can jump off treadmills and learn how things do differently. Farms can be healed or returned to better health as a consequence of these actions.

JOURNEY

Journeys are a physical or mental movement, forwards to something new, or backwards to disaster. The text has examples of a path, steps or a road that were long, uncertain, difficult, urgent or destiny. Some examples of the journey concept from the text are shown below.

Trace recent progress on Australia’s path to sustainability. (95_L-PFP1)
I didn’t take steps until I was ready. (2.20:25/7/07)

A journey can be actual movement in a direction or a cognitive journey.

I was learning on the way. (2.30:31/8/06)
We were really glad to get in. We were going to go forward with people who knew what they were doing. (2.10:25/7/07)

Some metaphors were hard to place in a conceptual group as they fell across different domains. When this occurred I made a decision to aggregate rather than separate domains and to bear in mind the underlying meanings evoked. For example the following quote has conceptual metaphors for BUILDING and JOURNEY.

So the people of the town will be able to set about rethinking and reshaping the future opportunities of Hamilton and district. (88_MEDIA2)

In this case the word set could belong to a BUILDING concept but as it is paired with about it referred to the inception of a JOURNEY and so fell into that group.
BUILDING

Building concepts were common in the text across all agents and were used to impose order on human systems. In particular they are used to order human activity and thought. For example building concepts are evident in descriptions of planning to do something such as networks, frameworks and priorities. It can also mean constructing something. For example, putting together or finding the pieces, foundation or base. An example of a BUILDING CONSTRUCTION conceptual metaphor is shown in the following excerpt, where ‘keystone’ is a crucial block, which holds a structure, such as an arch, in place.

The farmers themselves proved to be the keystone of the project’s success. (90_EC5)

Building metaphors are used as a prelude to action as seen in this excerpt which includes a HUMAN BODY metaphor. This is an example of a BUILDING DESIGN concept as the pre-work and organisation are used to describe action.

He put down on paper a plan he had in his head. (90_MEDIA7)

In its undeveloped state Gheringap provided a clean slate for a new, radical Landcare project. (89_MEDIA2)

The BUILDING concept was often used in the PFP material. The metaphor was deployed to denote strength as in this example

..depends on returning to an ecologically sound and sustainable agricultural system. (90_MEDIA13)

Building concepts transfer solidity and reassurance. Other references to stronger planning bases or underpinning and calls for developing solid foundations and having plans set in concrete were also considered as BUILDING concepts. As were reference to levels, such as levels of government or ministerial levels was also common for this concept.

ORIENTATION

Orientation metaphors were also common in the text. Generally they worked because we understand spatial concepts with reference to our own physicality (Lakoff 1992). For example, ‘up or down’, ‘in or out’”, front or back’, ‘on or off” and ‘deep or shallow’ can be understood as either good or bad. A sideways shift can be understood as vacillation.
This is a spatial conceptual metaphor where movement is described as shifts, stimuli or slides which all mean different things but are grouped by the implication that the spatial orientation is altered. ORIENTATION can be both a positive and negative metaphor.

..*to look* at issues *arising* from attempts to *tackle* land degradation at the farm *level*. (85_PFP13)

Farmers are at the *bottom of* the food chain on distorted global commodity markets. (95_MEDIA1)

The first quote also demonstrates the frequency of metaphor use. It has four metaphors from three different concept groups. That is *to look at* which belongs to the HUMAN BODY group, *arising* which belongs to an ORIENTATION group, *tackle* to a MILITARY group and *level* to BUILDING.

**NATURE**

Similar to the human body, nature is often used to convey complex systems. It was often used in the text excerpt to express the development of ideas.

Nature can be a living complex system or an inert one like a machine. Conceptualisations can be cognitive as in the meaning of understanding as *grow, wither or take root* in our minds. The metaphor implies a living system which confers the need for health and stability.

..*it is indicative of growing* community concern about land degradation. (85_PFP9)

Nature concepts are organic and so reference can be made to *growing community* concerns and the *full flowering* of ideas. The metaphors tend to be used optimistically as in flowering, but the ideas can also wither and die.

It was agreed that the *top levels* of management (within the Department) must get *in touch* with the *grass root* problems. (85_PFP13)

Like many excerpts this quote contains a number of other conceptual groups. *Top levels* was grouped with ORIENTATION metaphors (with out ‘top’, ‘level’ would have been classed with the BUILDING group) and *in touch* is a HUMAN BODY metaphor and *grass root* is a NATURE metaphor used to describe origin.
MUSIC
Metaphors for music were used to describe the PFP. While they are not frequent in number they do reveal the positioning of the PFP as a harmonising intervention. The metaphors of balance and in-tune were used as optimal states to be attained by the environment.

..to replan their farms in harmony with the ecology. (88_PFP10)

Many farmers inherited a checker board based on an old title plan, rather than a layout in tune with the natural lie of the land. (88_PFP4)

This quote has a number of concepts to illustrate the point that the current situation, which the PFP wants to change, is not optimal. Metaphors of key and play were also included in this group.

... need to activate urban support for a rural programme will be a key feature. (87_PFP13)

Geography plays a part. (86_PFP5)

The MUSIC concept of unity and balance were important points the PFP was trying to convey, or map onto land management practices.

VISION
This is ‘seeing’ forward to the future or back to the past. I have made this a conceptual metaphor because the documents and research participants often used the idea of seeing things anew.

Opening the curtains. (95_L-PFP6)

Looking back now …. (95_L-PFP1)

This is an example of looking backward in order to look forward - a historical explanation for today’s situation.

Twenty years ago I began to realise things weren’t as good as they could be…. that there wouldn’t be much future for the next generation. (90_L-PFP13)

There are also references to the media’s penetrating insights which are closely aligned to the HUMAN BODY concept but were included in the VISON group because its intention is to convey clarity.
It was felt that giving the media some ownership of the stories would help them to provide most **penetrating insights**. (86_PFP5)

**CONTAINERS**

CONTAINERS are used to describe information or ideas that are held, seen or bound in such a way they can be owned, discussed or transferred to another. People, activities or ways of thinking can be in or out of the container. This is an example of an abstract inference used to develop a spatial image.

It will take many years of effort to **put back** what we have **taken out**. (86_PFP11)

I’ve always **looked outside** the **box**. (2.10: 25/7/07)

The last excerpt is a combination of HUMAN BODY parts (looking = eyes) and CONTAINER (box). The description of ideas or actions can being outside the box is a way of describing isolation which is shown again in the following examples.

Indeed those who tackled the problem seemed to be **out on a limb**. (95_L-PFP1).

I got the feeling that Bruce Milne had sort of **gone overboard a bit**. (95_L-PFP6).

Or there can be mixing of things such as **recipes, ingredients** or **meeting**. These are more strictly speaking metaphors of food and human action but their essence is integration so they have been included in the CONTAINER mixing category.

Aim to incorporate elements of natural systems which convey stability, resilience and ability to recover from disturbance. (95_L-PFP1)

**MILITARY**

Just as the HUMAN BODY is used to describe action as treatment, MILITARY metaphors are used to describe aggressive or proactive action as war or fighting or race. The text held examples of descriptions of **combating** soil erosion, and the disincentives to act as **killing** schemes. Some specific examples are show below.

The Potter Farmland Plan is an initiative to **fight against** land degradation. (85_PFP9)

The use of vegetation **as a weapon**. (85_PFP5)
The military metaphor also is used to explain responses such as **confront, struggle, declare war or marshal forces**. Not all the metaphors are aggressive as suggested by the military label, but they are proactive such as in this example.

It is showing how land degradation can **be tackled** in a manner which complements farm management. (86_PFP11)

**QUANTITIES**

Most things can be counted, accumulated or lost. The tallies or **checklists** are kept as accounts. For example time, ideas, money and people can be accumulated or lost. The more one accumulates the better the outcome. Less equates with losses of time, money, face. Some examples are:

- It **saved** time. (88_PFP4)
- The **returns** were better after. (2.20: 25/7/07)
- … taking the ecological factors **into account**. (88_PFP1)

The tally can also be a measure of equilibrium such as balance as in this example.

- The health of our planet **hangs in the balance**. (90_L-PFP13)

Ideas can have **currency or** money can be **raised** and be positive outcomes. A project could **score** well or badly against a **checklist**. Trees can decline which is a negative so is time which **costs money**.

The concept was also used for pace and speed metaphors. **Fast** was bad if it referred to the environment and could be good if it was in relation to human activity. For example pace is used to describe the PFP in the following excerpt:

- The aim of the project is to **accelerate** acceptance of the need to address land degradation problems. (84_PFP11)

In addition the importance of problems of land degradation is underlined by reference to pace:

- Incredibly we can still see some places where these events are being **accelerated** by further ringbarking and clearing. (84_PFP9)

In both cases the conceptual metaphors is the same. So some knowledge of the target domain is required to understand that one type of acceleration is good and the other bad.
The QUANTITY concept is a collection of the metaphors which are counted or accumulated, such as money, time, and amounts.

MISCELLANEOUS

This category became a location for hard to place metaphors which I felt were not sufficient in numbers to form into separate groups. Examples of this are:

So I decided to share our experiences. (2.60:3/8/06)

All there on our doorstep! (88_PFP9)

How many people realise that in their own backyard is one of the most significant and positive projects in the history of Australian Agriculture. (88MEDIA2)

The tally of conceptual metaphor groups for each data source is provided in Table 6.1. Ordering the metaphors into the conceptual groups did not provide an insight to the frequency of language used between agents. This is because the data sources are not equally represented nor were they produced for the same purposes. This is an important consideration for the research data and worth recapping. The project documents were generated during the implementation and operations of the PFP between 1984 and 1988. The PFP legacy documents represent the early and mid 1990s. The media, looking on at the activity, then set about representing it for others, and to their own production requirements. This spans the years 1984-2000. The PFP farmers, as research participants, are the recent voices, reflecting on their activity, which occurred 20 years ago.

As a result the data consist of fragments produced for different purposes, at different times but unified by this research topic. The diversity would not suit a linguistic interpretation based on total metaphors. However the diversity does work for discourse analysis. The different perspectives, purposes and time scales generate the overall PFP discourse. The analysis exposes how the differences were achieved in the discourse by extracting the metaphors to reveal how the PFP is understood.

This completes the Step 1 of the Dryzekian Analysis – the preliminary work. The metaphors have been identified and extracted from documents as passages or sentences.
of text. Table 6.1 presents a summary of the results of this process. The results are now to be used for steps 2 and 3 of the analysis.
<table>
<thead>
<tr>
<th>CONCEPTUAL METAPHOR</th>
<th>Meaning focus</th>
<th>Example</th>
<th>Numbers of metaphors</th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td></td>
<td>PFP MEDIA Utilitarian Affiliate Transformer TOTALS</td>
</tr>
<tr>
<td><strong>HUMAN BODY</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Condition</td>
<td>The extent of saline scaring on the land (90_L-PFP7), Land degradation is a cancer (86_PFP5)</td>
<td>67 31 11 13 14 136</td>
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<td>Parts</td>
<td>Project aimed at coming to grips with the problem of the death of trees (86_EC4)</td>
<td>66 30 11 12 14 133</td>
<td></td>
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<tr>
<td>Action</td>
<td>Biological management (84_PFP4), carried out (85_PFP5)</td>
<td>56 5 5 10 14 90</td>
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<td><strong>JOURNEY</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Moving</td>
<td>I didn’t take steps until I was ready (2.20:25/7/07)</td>
<td>54 18 15 41 45 173</td>
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<tr>
<td><strong>BUILDING</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Construction</td>
<td>The farmers themselves proved to be the keystone of the projects success (90_EC5)</td>
<td>76 15 19 16 14 140</td>
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<tr>
<td>Design</td>
<td>Looking back I think we could have done more to involve a wider network of farmers (95_EC1)</td>
<td>33 11 15 23 13 95</td>
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<tr>
<td><strong>ORIENTATION</strong></td>
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<td></td>
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<td>Elevation</td>
<td>Ensuring that rehabilitation is done for ecological as well as economical benefits, which includes lifting farm productivity (88_EC2 )</td>
<td>44 15 5 16 8 88</td>
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<td>Descent</td>
<td>Farmers are at the bottom of the food chain on distorted global commodity markets (95_EC1)</td>
<td>33 17 6 3 6 65</td>
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<td>Forward</td>
<td>We were going to go forward with people who knew what they were doing (2.10:25/7/07)</td>
<td>53 15 17 24 17 126</td>
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<td><strong>VISION</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Future</td>
<td>Opening the curtains (95_EC6)</td>
<td>41 13 3 15 18 90</td>
<td></td>
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<td>Past</td>
<td>In the blink of a geological eye we have applied European farming techniques .. (87_IO2)</td>
<td>29 9 2 12 5 57</td>
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<td><strong>CONTAINER</strong></td>
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<td>Inside</td>
<td>.. farmer acceptance of the ideas embodied in this project being most encouraging (88_PFP10)</td>
<td>39 16 15 12 11 93</td>
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<td>Outside</td>
<td>I got the feeling that Bruce Milne had sort of gone overboard a bit (quoted in 95_EC6)</td>
<td>45 13 4 12 2 76</td>
<td></td>
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<tr>
<td>Mixing</td>
<td>Conservation and farming can mix (86_EC1)</td>
<td>42 26</td>
<td></td>
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</table>
### Table 6.1: Conceptual Metaphors Cont.

<table>
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<th>Example</th>
<th>Numbers of metaphors</th>
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<td></td>
<td></td>
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<td>MILITARY</td>
<td>Battle</td>
<td>The Potter Farmland Plan is an initiative to fight against land degradation (85_IC18), Combat soil degradation (86_PFP5), play along with... (85_PFP4)</td>
<td>66 35 0 5 14 120</td>
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<td>MUSIC</td>
<td>Tune</td>
<td>to replan in harmony with the ecology (88_PFP10)</td>
<td>52 11 3 3 2 71</td>
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<td>NATURE</td>
<td>Organic</td>
<td>Maintain the health of the land (93_EC2), The program grew from a suggestion by... (86_EC4)</td>
<td>32 5 0 3 1 41</td>
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<tr>
<td>QUANTITIES</td>
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<td>Spend a large portion of their time (93_EC_2)</td>
<td>84 17 4 11 8 124</td>
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<tr>
<td>TOTALS</td>
<td></td>
<td></td>
<td>912 302 135 231 206 1786</td>
</tr>
</tbody>
</table>

200
6.3 Step 2: Underpinning Assumptions

This step addresses the first focus question: (3.1) What assumptions underpin the different narratives about the PFP?

Differences in the attribution of impact of the PFP and the domains in which the activity took place provided an intriguing glimpse at the complexity involved in ‘reading’ the activity at the ‘social interface’. To do this the analysis must reach beyond ‘what’ the PFP’ was about (the narratives) to find out ‘why’ it was thus communicated. The task then, is to uncover the assumptions implicit in the narratives. This is undertaken through step 2 of the discourse analysis.

This has been conducted separately for the public and farmers’ narratives. The public narrative is represented by the public documents collected as part of this study and the farmers’ narratives are the result of the first and second interviews. A separation between the public PFP narrative (PFP, L-PFP and MEDIA), and the farmers’ narratives (Utilitarian, Affiliate and Transformer), is retained in this analysis. The presentation of results for each step of the discourse analysis will proceed in the following sequence; data source: PFP, L_PFP, MEDIA and a short summary. After which the farmers’ narratives will be presented in the following sequence; Utilitarian then Affiliate and Transformer, followed by a short summary.

The first division in the taxonomic key is concerned with the difference in text regarding the established industrial political economy. That is, the acceptance or rejection of the industrialisation. As this study is not grappling with world environmental debates, as Dryzek was when he devised the method, the question has been refined to a query about the extent to which the established order is regarded as problematic. The question is: Does the PFP narrative represent a reforming or a radical departure from the existing agri-industrial order? A positive response placed the document into a ‘Radical’ division and a negative response place document into a ‘Reforming’ division. A ‘Radical’ label means that excerpts describe the PFP as a radical agenda and a ‘Reforming’ label means that the PFP is regraded as reforming the current situation. The pathway into the key is shown in Figure 6.2
6.3.1 Public Narratives in Step 2 of the Discourse Analysis

There are more documents than were used in this step of the analysis. Of the 101 PFP and L-PFP documents only 42 were considered to be relevant to the questions. Similarly of the 29 media documents 14 were relevant to this split, providing 56 documents for Step 2 of the Analysis. The specific nature of the question has limited the usefulness of some documents, for example documents providing specific instructions rather than reflections on the PFP were not relevant. Appendix 5 shows the documents which contributed to the analysis.

Of the 56 public PFP, L_PFP and MEDIA documents 52 were considered to portray the PFP as a ‘Reforming’ project. The other four documents were classed as ‘Radical’.

Examples of the conceptual metaphors used to indicate that the PFP was a ‘Reforming’ project among the PFP and L_PFP documents are BUILDING, MILITARY, HUMAN BODY and ORIENTATION (elevation). The following excerpts show how the metaphors were used to convey the ‘Reforming’ character of the PFP.
The PFP and L_PFP documents containing metaphors indicating the reformist character of the PFP can be summarised as: optimistic, managerial, production oriented and combative. The use of words for ‘building’, ‘step’ and ‘higher’ denote movement to a better place, and therefore depicts the optimism of the PFP. The PFP organisation was depicted as managerial through words such as ‘processes’, ‘frames’, ‘priorities’ and ‘strategies’. The production maximisation orientation did not extend to questioning the economic efficacy of current land use. The words had a slightly combative tone with ‘war’ or ‘battle’ used to indicate the challenge ahead. This was also used for descriptions of production maximisation as a ‘battle to remain productive’. The ‘Reforming’ conceptual metaphors of MILITARY and BUILDING assumes a pro-active human involvement and pre-emptive rights to engage in the activity.

The media relied on similar language using conceptual metaphors such as MILITARY, BUILDING and VISION. The interesting differences were the tendency to use the managerial or business language to validate the PFP work.

The media documents suggest that the PFP had taken on characteristics of its funding organisation, the Ian Potter Foundation (IPF). This transfer of capability and success to the PFP validated the PFP activities. Generally the ‘Reforming’ group language was upbeat and positive in the call for reform of processes and institutions.
The L_PFP documents indicating a positive response to the first question, that is, the existing order did indeed require a ‘Radical’ overhaul were few in number (4). The four documents are part of the L_PFP, significantly produced after the PFP, in the 1990s. These documents were the same ones that necessitated the addition of a category in the Storyboard Analysis for ‘broader operating environment’. The narratives in the documents extended the PFP story during this time to call for new ideas of management and thinking.

This was a departure from the managerial and productive focused language of the ‘Reforming’ language. In the ‘Radical’ documents the language was urgent; the limits of resource use had been reached and catastrophe or out of control environmental devastation was imminent. The conceptual metaphors are similar to those used in the ‘Reforming’ classification, which demonstrates why the analysis could not proceed at the level of conceptual metaphors. It is the use to which the metaphors are put that is the focus of this analysis. The conceptual metaphors used in the ‘Radical’ division in the L_PFP documents (none of the PFP documents fell into this group) are QUANTITY, JOURNEY, VISION, BUILDING, HUMAN BODY, MILITARY. The metaphors are used to elevate the land or ecosystems to a pre-eminent position over humans. This is a radical shift from the reforming group.

<table>
<thead>
<tr>
<th>Conceptual Metaphors</th>
<th>Excerpts with a Reforming agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILITARY</td>
<td>So the people at the Potter Foundation decided to use a bit of corporate nous to show just how the problem might be tackled (85_MEDIA3)</td>
</tr>
<tr>
<td>BUILDING (design)</td>
<td>trying for … a professional planned approach to farming (91_MEDIA1)</td>
</tr>
<tr>
<td>VISION (future)</td>
<td>When a group of leading businessmen took a long hard look at the problems of soil erosion and farmland deterioration in Australia, they decided they didn’t like what they saw (85_MEDIA3)</td>
</tr>
</tbody>
</table>
The ‘Radical’ documents provide examples of an emotive and passionate language in the criticism of human impact on the environment. The metaphors point to a loss of control, ‘swept along’ and ‘looks to the past’ for inspiration for the future. The way forward is uncertain and described as a series of ‘steps’ or a ‘pathway’. This is a more uncertain discourse.

The second division of the taxonomic key is conducted at the level of ‘Reforming’ and ‘Radical’ units just created to create four further divisions. This required posing the question: is the PFP a solution that required modifications or more significant redesigns to the current practices? If the text indicates modifications the documents are placed into a classification called ‘Modifying’, if the text indicates that the PFP is a new and profound solution the classification is ‘Imaginative’ as the changes required are more imaginative. This question sets a progression in the key, a pathway shown in diagram Figure 6.3.
The use of ‘Modify’ and ‘Imaginative’ to differentiate both the ‘Radical’ and ‘Reforming’ documents needs an explanation. The ‘Radical’ documents, by definition, call for a major overhaul of the existing order. How can they then be sorted into a classification called ‘Modify’? It is possible because, in this data, the ‘Radical’ texts (made up of only 4 documents) were either adventurous or unadventurous in the solutions posed. The unadventurous documents nominated an overhaul of the existing system (so were ‘Radical’) but nominated similar solutions such as ‘frameworks’ and ‘priorities’ to organise change, hence the label ‘Modify’. The adventurous text was more alarmist and likely to nominate pre-industrial solutions and so the label ‘Imaginative’ was used.

Of the ‘Reforming’ PFP and L-PFP, MEDIA documents (56), 31 documents were classified as ‘Modify’: that is the PFP is presented as an adjustment to current practices. The remaining 20 were classified as ‘Imaginative’ in that the text depicts the PFP as an
imaginative and profoundly different solution. The differences within the PFP and L_PFP documents are apparent at this level. The PFP is depicted as a superior process of reform (‘Modifying’) or a learning exercise for humans (‘Imaginative’). Examples of conceptual metaphors used to portray this division are: QUANTITY, BUILDING for ‘Modifying’ and MILITARY, JOURNEY and NATURE for ‘Imaginative’. The metaphors were deployed to indicate certainty and mastery for the ‘Modifying’ group and experimentation for the ‘Imaginative’ unit.

<table>
<thead>
<tr>
<th>Conceptual Metaphors</th>
<th>Excerpts with Reforming agenda + Modifying solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUANTITY elevation</td>
<td>persuade land owners as to the practicality of revegetation to improve farm productivity in a variety of deteriorating environments (84_PFP3)</td>
</tr>
<tr>
<td>BUILDING design</td>
<td>Participating land owners are actively involved in formulating their own plans (85_PFP23)</td>
</tr>
<tr>
<td>(MISCELLANEOUS) QUANTITY</td>
<td>essentially a commonsense approach which aims to manage the land in a manner which will maintain its quality for future generations (84_PFP1)</td>
</tr>
</tbody>
</table>

These excerpts show that the solutions aim to refine current techniques, such as ‘processes’, ‘common sense approach’, ‘maintaining quality’ and ‘improving productivity’, which depicts a focus on modifying current practices. This is not an adventurous depiction of change.

The ‘Imaginative’ classification however does use adventurous language. The language of change is applied to learning (rather than better systems), with the metaphor ‘growing’ and ‘the way forward’ indicating the cognitive change this will entail.
The MEDIA documents that contributed to the ‘Reforming’ + ‘Imaginative’ unit were most notable for the metaphors used to depict the nature of the PFP intervention (MILITARY), the landscape (HUMAN BODY) and the PFP farmers (VISION).

<table>
<thead>
<tr>
<th>Conceptual Metaphor</th>
<th>Excerpts with Reforming agenda + Imaginative solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILITARY + QUANTITY</td>
<td>… provided that they operate in harmony with the powerful forces of nature which have in the process of evolution over millions of years produced a relatively stable environment on which mankind is completely dependent (85_PFP12)</td>
</tr>
<tr>
<td>JOURNEY</td>
<td>Potter Project is seen as a pilot demonstration which could help find the way forward (85_PFP5)</td>
</tr>
<tr>
<td>NATURE</td>
<td>There is a growing awareness of the interaction between many different factors (87_PFP9)</td>
</tr>
</tbody>
</table>

The use of HUMAN BODY conceptual metaphors to describe the nature of the PFP intervention extended also to a description of the land in human terms. For example landscapes are commonly depicted through metaphors of illness, health and cancer as shown below.
The MEDIA documents’ language for the PFP farmers’ agency interestingly alternated between the ‘Modify’ and ‘Imaginative’ groups. The conceptual metaphors of BUILDING and QUANTITY were used in the ‘Modify’ unit while JOURNEY AND VISION made up the ‘Imaginative’ unit.

The notion of change was part of the ‘Imaginative’ rhetoric with metaphors such as ‘new set of glasses’ (2000_EC4) or a ‘fresh look’ and the farmers as ‘pace setters’ (93_EC2). The underlying premise of this language is that there is a new understanding dawning. This notion carried into the Landcare ethos of raising awareness which, it was believed, would trigger change in individuals’ behaviour (Landcare Australia 2008). However the new understanding was contained to the prevailing situation. For example, by linking ‘pioneer’, a metaphor for heroic change, to the phrase ‘to go on producing’
turns the farmers into avatars in the economic world, rather than people forging new frontiers.

It was not until the ‘Radical’ discourses of the 1990s that the notion of ‘new pioneer’ farmer was explored, and it was not done by the MEDIA. These ‘Radical’ narratives were not present during the PFP. The language of fixing land degradation to increase farm productivity became a global struggle to match land use with land resources (‘Modify’). The ‘Imaginative’ group took the language further injecting an ethical social agenda that extended to all life (humans no longer pre-eminent). At this scale the narrative connects to global issues of poverty, unequal development, access to resources and pollution. These connections supersede the PFP narrative in both geographic scale and issue.

<table>
<thead>
<tr>
<th>Conceptual Metaphors</th>
<th>L_PFP Excerpts with Radical agenda + Modifying solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTAINER</td>
<td>Natural Country … its about jumping off the treadmill …by developing new industries for new and emerging markets (95-L-PFP1)</td>
</tr>
<tr>
<td>JOURNEY</td>
<td>I hope the road (for agriculture) leads to one marked 'bio dynamic' farming and then finally to a village named 'permaculture' (90_L-PFP13)</td>
</tr>
</tbody>
</table>

6.3.1.1 Summary

Thus far progress through the taxonomic key has moved through the basic structure of discourses by addressing the following questions:

(i) Does the PFP narrative represent a reforming or a radical departure from the existing political economic order?

(ii) Is the PFP a solution that required modifications or more significant imaginative changes to the current practices?

The first question, (i), drew out language which indicated an over-haul of the existing system was required to address land degradation. These were grouped as ‘Radical’. Language that indicated the system merely required reform was grouped as ‘Reforming’. The second question, (ii), was posed. If the PFP was an intervention drawing on modifications of existing systems it was grouped into ‘Modify’. When the
PFP was depicted as an innovative change agent drawing on new and creative ideas the excerpts were considered to be ‘Imaginative’. The result of this process, summarised by the number of documents involved, is shown in Table 6.2.

**TABLE 6.2: PATHWAY OF PUBLIC DOCUMENTS IN THE TAXONOMIC KEY**

<table>
<thead>
<tr>
<th>Source</th>
<th>Total number of documents</th>
<th>Number of documents used in Step 2 of Discourse Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFP, L-PFP, MEDIA</td>
<td>140</td>
<td>56</td>
</tr>
</tbody>
</table>

Division 1: Does the PFP narrative represent a reforming or a radical departure from the existing political economic order?

<table>
<thead>
<tr>
<th>Reforming</th>
<th>Radical</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Division 2: Is the PFP a solution that required modifications or significant redesigns to the current practices?

<table>
<thead>
<tr>
<th>Modifying</th>
<th>Imaginative</th>
<th>Modifying</th>
<th>Imaginative</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>20</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

The number of documents that accumulated at each division is not the focus of this analysis. Rather, it is the excerpts and the metaphors drawn from the documents and the progression they establish into the key. This direction has been presented and described in this section. Figure 6.4 presents this information diagrammatically.

**FIGURE 6.4: DIAGRAM OF THE FORMATION OF THE PFP PUBLIC DISCOURSES**
Each of the four possible discourses resulting from the taxonomic key have been populated with documents containing metaphors that reveal the common elements of a discourse. The ‘Reforming + Modify’ discourse tended to describe the PFP as an intervention to refine farm practices to control land degradation and as a result increase production. Metaphors such as ‘frameworks’, ‘priorities’ and ‘building’ were used. The ‘Reforming + Imaginative’ discourse depicted the PFP as an intervention agent, awakening people to the land (through the use of Human illness and health metaphors) and to increase production and landscape integrity at the same time. The ‘Radical + Modify discourse depicts the PFP as part of a shift to recognise an agriculture operating in a world of limited resources. The ‘Radical + Imaginative’ took this further into ethical concerns for species. The four discourses transmit the PFP narrative.

The emergent discourses represent the first sense of order among the narratives described in Chapter 5. The narratives touched on a number of dimensions, changing emphasis and expanding across domains over time. This provided a clue to the existence of tensions at the ‘social interface’ of the PFP: tension, which could be used use as fault-lines to differentiate the discourses. Thus far the four emergent discourses have been differentiated from the public documents. The farmers’ narratives are not part of this yet. Their narratives have been taken from a different point in time, the ‘reflection’ (refer back to the thematic diagram Chapter 5 Figure 5.2). The public documents represented the farmers, but although prominent in them, their representation was mediated or interpreted by other agents. This makes their narratives important. Unlike the material from the ‘event’ and ‘echo’ periods, the reflections represent their recall of the experience today. There is no sense in contrasting these narratives with the public one. Too much time has transpired between the event and the reflections, the PFP signal across time would be weak. What the narratives might reveal now is what the uneven experience at the ‘social interface’ of this agri-innovation meant to them. This search for meanings is a search for the patterns that make sense of participation, not from overt actions (such as a farm plan) but from a deeper perspective, from a worldview. This attempts to integrate the plethora of influential factors involved in changing practices with conceptual thinking systems. The next section investigates

20 This is explained in Chapter 1.2 The Research Problem.
this by linking the assumptions about the PFP in the narratives of the farmers to the four public discourses.

6.3.2 Farmers’ Narratives in Step 2 of the Discourse Analysis

This section repeats the same process undertaken with the public documents (PFP, L_PFP and MEDIA) for the farmers’ interview transcript’s using both the first and second interviews. The Plot classifications are used to form the transcripts into groups for the process. Over 900 metaphors were identified in the transcripts. From these 226 extracts were considered relevant to the first two questions posed by the taxonomic key. This can be viewed in Appendix 6. I altered the questions for this part of the analysis, to refocus them on the PFP experience:

(i) Did the experience of the PFP fundamentally alter the way they understood their farm practices?

(ii) Were these changes portrayed as consistent with their current practices or were they in some way new to them?

The following section will present a summary of the outcome of this process against the taxonomic key. Each Plot group will be represented in the examples shown unless there is no material for that unit, in which case I will say so. In total there were 226 excerpts: Utilitarian, 106, Affiliate, 44, Transformer 76.

As with the public documents, the metaphors have been sorted according to conceptual metaphor group. Likewise with the public documents, these conceptual groups are too broadly defined to be useful to differentiate discourses so the individual metaphors within the phrase or sentence are used as a unit of analysis. Again, total numbers of metaphors are not useful to this analysis. This is because the farmers’ interviews varied from 1 to 4 hours duration generating different volumes of text per person. The number of metaphors would be weighted toward people whose interviews were longer, without necessarily providing an insight into how the words were used to express the PFP experience.

The first question deals with the extent of the shift deemed necessary to address the problems of land degradation. A positive response to the first question, calling for a
completely new system, would be grouped as ‘Radical’. A negative response to the first question, one that suggests the need is to refine the current systems is grouped as ‘Reforming’ (see Table 6.3).

The ‘Reforming’ classification was overwhelmingly dominant. A ‘Reforming’ excerpt does not seek to challenge the existing order; difference was evident in the horizons rather than content. The Utilitarian group were confined to farm based boundaries. The Affiliates expanded beyond their farms responding to the PFP extension message. This was regarded by many of them as a social learning exercise in which they played a significant role.

The ‘Radical’ group was made of excerpts from the Transformer group exclusively. The Transformers tended to blur their farm boundaries into the social world. This may have been a consequence of these farmers taking the most visitor traffic during the PFP and in the years after. Or it may be evidence of the journey they embarked on as a result of the PFP experience. One individual describes it as the latter.

<table>
<thead>
<tr>
<th>Conceptual Metaphor</th>
<th>Excerpts with Reforming agenda</th>
<th>Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN BODY (action)</td>
<td>It wasn’t just the inherited enterprises that were left there it was the economic and political system that was also left there. We didn’t delve deeply, we didn’t question as hard as we might and still aren’t (2.60 3/8/2006)</td>
<td>Transformer</td>
</tr>
</tbody>
</table>

The words hard and delve deeply are metaphors for uncovering, in this case truths. The Transformer group discourses were radicalised through their reference to boundaries or scales beyond the farm and beyond agriculture. The Utilitarians and Affiliates tended to portray their activity as consistent with their previous works. The Affiliate group made references also to learning and change that accorded with a pre-held ideal. By comparison the Transformers were venturing into the unknown.

Three themes emerged in the portrayal of the PFP after the first division. They are (i) control, (ii) the PFP journey (iii) the land. The following presentation of results are organised around the themes. The themes lead into the second question: Were the PFP
changes portrayed as consistent with their current practices or were they in some way new to them? If references to ‘control’, ‘journey’ and ‘the land’ are depicted as a continuation of previous practices or beliefs, the excerpt is grouped into ‘Modify’. When these themes are treated more adventurously, they are located in the ‘Imaginative’ group.

(i) Control

The public narrative elevated the PFP farmers into ‘pioneers’ of a new style of land management sensitive to the environmental consequences of their activities. The farmers’ experience of this seems, from the text, to be prosaic: they described a tight internal control on change (Utilitarians). The Affiliates and Transformers placed the impetus outside themselves. That is, they seemed to nominate external stimuli or acknowledge influences, which led to changes to their management.

<table>
<thead>
<tr>
<th>Conceptual Metaphor</th>
<th>Excerpts with Reforming agenda + Modifying solution</th>
<th>Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN BODY</td>
<td>They struck a nerve with us on what we’d been trying to do anyway (1.38:16/8/2006)</td>
<td>Utilitarian</td>
</tr>
<tr>
<td>JOURNEY</td>
<td>it was the next step - to fence to land types which I think when we sold it we had one fence left to do (3.10:26/7/2006)</td>
<td>Affiliate</td>
</tr>
<tr>
<td>ORIENTATION</td>
<td>The results were there, shelter and birds, were driving me on. It was a better place to live and work. But it wasn’t about economics (2.20:3/07/2006)</td>
<td>Transformer</td>
</tr>
</tbody>
</table>

Another way to explore control of the participation experience is through the adoption of the public narrative by the farmers. The public narrative of the PFP told of prosperous farmers increasing productivity and repairing the environment in a new way of land management. This was challenged by the experience of participation. The MEDIA failed to make this shift in the use of narrative over time, representing the original narrative twenty years after the project (Chapter 5.1.3). The Utilitarian and Transformer groups were able to reject the public narrative, although for different reasons. The Affiliates sought to find a way to retain the original narrative in their evaluations.
Utilitarian

All the improvements on my place were from off farm work. They said you could get a new woolshed and renovate your house from Potter, but it was working 7 days and off the farm that did that. (1.40:12/7/06)

Affiliate

Well it was easier to manage, all the paddocks were subdivided and laneways, so you didn’t need staff…. (3.10:26/7/06)

Transformer

The old message is still rehashed through the telling of Potter and also theories by the formal extension services. These are extravagant claims made by researchers. A blind person can see that it’s not the case. (2.60:27/6/08)

These three quotes show the easy way that an individual in the Utilitarian group could discard the PFP narrative as his initial investment in it was not great. The individual from the Affiliate group seems to seek a path through his experience, which still pays homage or respect to the PFP (which he genuinely feels) while according with his own reality. The individual in the Transformer group has discarded the narrative, just as the Utilitarian did, but due the ‘high’ investment in the narrative, he was more emotive.

(ii) The PFP Journey

The PFP journey was different between the individuals of each group and was a useful theme to address the second question. The division into the ‘Modifying’ classification was made for the journeys, which were described as part of their ongoing individual farming narrative. The ‘Imaginative classification was made for learning journeys. The Affiliates had socialised the PFP experience and appeared to be self conscious of their obligation and role in the PFP story. The Transformers tended to show evidence of a more profound cognitive shift.

The Utilitarian group tended to minimise the PFP influence by describing the journey as a farm development experience. They did not add any elements of the public narrative nor attribute any influence outside their own volition.
Utilitarian - depiction of the PFP journey

There was a missionary gospel tone about the whole farm plan (1.60 22/8/2006)
We were smouldering along and Potter was an injection of enthusiasm (1.60:22/8/06)
We know what we had to do but the Potter rate was higher (1.40:12/7/06)
We thought they would lead us along the track of productivity more. But that particular wagon got hitched to the environmental wagon more than it did the productivity wagon I guess (1.38:23/4/07)
No one wanted to tie up the farm. But we had a lot of other farm to run as well and it all had to take its place in the priority (2.30:31/8/06)
Whist we did quite a bit of the additional work it took a priority in whole running of the farm for the next owner (2.40:10/8/2006)

The Affiliates were slightly more complicated. They did see beyond the farm but were conscious of their social position. This group was most likely to use their expertise as farm managers to demonstrate the benefits of the PFP.

Affiliates - depiction of the PFP journey
wasn’t the sort of farmer who is focused 100% on the bit of dirt in front of me (3.10:26/7/07)
It made us feel ah more important than just doing something by yourself and have people looking over the fence and thinking you’re pretty silly and wasting your money (2.10:25/7/07)
After Potter it was a case of getting back the balance (3.30:1/6/07)

For the people in the Transformer group the PFP was acknowledged as a learning experience. The journey was consistent with the land sensitive and profit maximising public narrative of the PFP.

Transformers - depiction of the PFP journey
A rare and precious opportunity so, yeah, make the most of it, really hop in because, not because of just that it was assistance, that we were assisted to do it but because we know, by then we knew the country really needed it, it absolutely needed it, it was really a biological desert (2.50:2/11/2006)
But we did prove that you could not only maintain the current production of the land but continue to increase it with taking out 15%, 20% from active grazing (2.60:3/8/2006)
(iii) The Land

The public narrative contained compelling imagery of land and this representation was absent from most farmers’ narratives. Interestingly of the seventeen families interviewed, only six spoke directly about the condition of the land. The excerpts were ordered into ‘Modify’ and ‘Imaginative’ according to the land descriptions. The absence of direct reference to land or where the comments were confined to productive descriptions the excerpt was grouped as ‘Modify’. Descriptions that focused on the land or its condition were grouped as ‘Imaginative’. The individuals in the Transformer group were more likely to use the HUMAN BODY and MILITARY conceptual metaphors to describe their land or their PFP activity directly. As a result the language was more emotive. The Affiliate group rarely used emotive language for land and the Utilitarians never did. The examples below show the oblique way in which some of the Utilitarians would refer to the condition of the land.

Utilitarian

I got the farm in the 1960’s it was all in big paddocks. By the time Potter came I had fenced it all. All Potter did was fence the creek off and put in a few trees. (2.30:31/8/07)

The individuals in the Affiliate group tended to present their farm developmental progress by way of talking about their development of the farm.

Affiliate

I was amazed to be getting 10-20 years work done in 3 years …. I am still involved with my farm, I have created it, I love it, I see it as part of my life, I have been super creative. (1.50:17/12/06)

The individuals in the Transformer group were more likely to use metaphors for their land and their work. This was similar to the media representation.

Transformer

Oh that it was necessary and that it was necessary. The land was suffering. (2.50:2/11/06)

The ‘Radical’ side of the taxonomic key was made up by the Transformer group’s reflective musings on the PFP. This reflection was not present in the text of the
individuals from the other two groups. It may be that, as none of the individuals in the Transformer group are actively farming, they were in a more reflective mood. Perhaps those still actively farming have more immediate concerns, so do not have the opportunity be reflective.

6.3.2.1 Summary

Thus far the metaphors taken from the farmers’ narratives have been progressed through Step 2 of the Discourse Analysis using the response to two questions.

(1) Did the experience of the PFP fundamentally alter the way they understood their practices?

(2) Were these changes portrayed as consistent with their current practices or were they in some way new to them?

The questions were addressed through three themes, which I considered best differentiated the narratives between the Plot groups. The themes concern the nature of participation in the PFP: control, the PFP journey, and the land.
Table 6.3 shows the results of the taxonomic key divisions using the excerpts taken from the PFP farmers’ interviews. Judged by volume, the ‘Reforming +Modify’ classification is the most prevalent. The Utilitarians were almost exclusively located in the dominant classification, (78 excerpts were ‘Modify’ and 5 ‘Imaginative’). The Affiliates were similar but had more excerpts classified as ‘Imaginative’ (26 of the 81). The Transformer excerpts spread across the key into ‘Radical’ (14) and ‘Reforming’ (62) as well as the sub categories. Even this group however, had most excerpts classified as ‘Modify’ (46).

As with the public documents (PFP, L_PFP, MEDIA) the conceptual metaphors are less revealing of the context in which metaphors were deployed. The Utilitarians talked about the PFP as a farm based remedial landscape program. The Affiliate group tended to talk about the learning outcomes and be conscious of the social consequences of their involvement. The Transformer group portrayed the PFP as a catalytic experience, stretching the public PFP narrative from a repair and prosper story into a global environmental narrative.

The outcome of the progression through the taxonomic key has identified three preliminary discourses: Reforming+Modifying, Reforming+Imaginative, Radical+Imaginative (refer to Figure 6.5 which shows a diagram of this progression). The ‘Reforming + Modifying’ is typified by language of control and farm confined
horizons. The ‘Reforming + Imaginative’ discourse is made by language of learning and inclusion of social consequences. The horizons have moved beyond the farm. The ‘Radical’ discourses are relatively ill defined. They are populated with the Transformer group excerpts describing the experience of a shift beyond the original PFP public narrative. The ‘Radical’ group divisions are aggregated to form one.

FIGURE 6.5: DIAGRAM OF THE FORMATION OF THE PFP FARMERS’ DISCOURSES

This completes Step 2 of the Discourse Analysis. It has been applied to both the public documents, (PFP, MEDIA and L-PFP), and the farmers’ narratives by the Plot group of Utilitarian, Affiliate and Transformer. The Dryzekian Analysis, using the metaphors taken from texts, has led to the identification of seven preliminary discourses. Four of the discourses emerged from the public document analysis and three discourses emerged from the farmers’ narratives. The seven groups are defined by the underpinning assumptions and will be further refined by Step 3 of the analysis.

The preliminary discourses have been differentiated by predominant metaphors. Step 3 uses this differentiating character to achieve two outcomes; an appropriate label for the preliminary discourse and a link into the wider discourses beyond the PFP.
6.3.3 Linking Assumptions to Discourses

Section 6.2.2.6 has presented the results of the Step 2 of the Dryzekian Analysis for both the public and farmers’ narratives. Seven preliminary discourses of the PFP have been identified, uncovering the assumptions implicit in each.

This section addresses the focus question (3.1): To what extent do the assumptions extend the narratives into wider discourses?

This question is answered by assigning a label to each of the seven preliminary discourses. The labels are chosen to highlight the prominent assumptions in the preliminary discourses. Thus the label will represent both the preliminary discourse and the signal of that PFP discourse into wider discourses.

The Dryzekian Analysis uses tension in text to determine the structure to differentiate discourses. This is the basis for separating texts into different groups or preliminary discourses. However the discourses of the PFP do not exist in a vacuum. Indeed farming as an activity intersects a number of domains: family, domestic, land, business, community and others. Working among farmers in Scotland, Gray coined the term ‘consubstantiality’ to represent the seemingly coherent presentation of:

\[
\text{a spatial relation between family farm, between things and place such that the distinct existence and form of both partake of or become united in a common substance (Gray 1998, p. 345).}
\]

Indeed, so effectively united, that a reliance on a discourse of economic efficiency, as a guide to the rural restructuring experience, has been said to miss the point (Johnsen 2003). In an ethnographic study of the effect of rural restructuring among New Zealand farmers, Johnsen found that a number of ideologies and discourses were used to describe a period of financial hardship.

Likewise, the research into the adoption of conservation practices has settled on a range of influential factors that make adoption more rather than less likely. This has been discussed in Chapter 2. The understanding of farming as a culturally situated activity, and the focus of this research at the conceptual ‘social interface’, exposes the study to multiple discourses. The PFP discourse is just one of them. The discourse analysis approach taken in this study illuminates this. Thus, one of the aspects of the method is
to identify the links into broader discourses that were brought to the explanations of the PFP by its agents. This is achieved by highlighting the links from the assumptions that underpin the structural configuration of the preliminary discourses. These links are used as labels for the seven discourses. Table 6.5 and Table 6.6 provide summaries of the underlying assumptions of each discourse, the label applied, and the link into prevailing discourses.

The first public PFP discourse assumes that the processes introduced by the PFP will usher in the necessary changes. Metaphors such as ‘development’ and ‘putting it together’ were frequently used with BUILDING design concepts such as plans and priorities. The assumptions which place faith in business principles provide a link to a wider discourse of economic management. The label assigned to this discourse is Managerialism.

The second public PFP discourse assumes that by recalibrating the between the environment and human activity land degradation will be reversed. The assumption retains elements of the first set of assumptions in that the outcome of the correct is profitability for the farmer. It is however, tempered by an overt regard for nature, the environment and the notion of the farmer administering a sensitive form of management. The label assigned to this discourse is Sustainability.

The third public PFP discourse assumes that there are limits to resources and so therefore the practice of agriculture has implications for national environmental and economic realities. This discourse is a combination of the previous two but scaled into a national discourse of competitive advantage. The label assigned to this discourse is Constraints.

The fourth public PFP discourse is a global discourse of ethics, nature and environment which links into concerns for poverty in the emerging nations. The discourse regards industrialisation and consumerism as destructive global forces. The label assigned to this discourse is Eco-citizenship.

The farmers’ narratives have yielded three discourses. The first of these characterised the farmers’ description of the PFP as a change agent but controlled within the farm
boundaries (Utilitarian). The discourse portrayal of learning, as an extension of preset ideas, and limiting the PFP to a farm based experience, appears to make these farmers formidable gatekeepers to their farms. The expression of this role in the interviews may link to a wider discourse on the pre-emptive rights to farm. That is, the concept of land ownership conferring unrestricted access to practice farming. The label assigned to this discourse is Farming Praxis.

The second farmer PFP discourse is a self-conscious description of farm management expertise which assumes that leadership and awareness of community concerns is an effective way to model change. The farm improvement aspect was described with awareness metaphors such as ‘rethink’, ‘looking back’ and ‘changing things’, evidence of learning, change or openness to change. This links into the families’ own discourse on their farming praxis and the role of the farm in the family narrative. The label assigned to this group is Social Leadership.

The third farmer PFP discourse is a ‘Radial’ one, populated by Transformers material in which agriculture, as currently practiced, is ill suited as a vehicle for beneficial environmental outcomes. The language was pessimistic and problematised agriculture. This discourse had outgrown the farm and took an industry wide view of agriculture linking it to global environmental discourses. The label assigned to this discourse is Eco-human Dysfunction, reflecting the pessimistic nature of the material. Tables 6.4 and 6.5 provide a summary of the seven discourses.
The seven discourses of the PFP provide seven different ways of understanding the intervention. They locate aspects of the narratives uncovered in Chapter 5 and the use of the taxonomic key has revealed that actors participated in more than one of the discourse. The discourses will be elaborated on in the following section to describe the characteristics of each and explore how the meaning of the PFP was differentially experienced though the use of discourses.
6.4 Step 3: Characteristics of Discourses

This is Step 3 of the Dryzekian Analysis identifying the realities, motives, agents and relationships peculiar to each of the seven discourses. This step addresses the third focus question (3.3): What are the characteristics of the discourses and how are they activated and transmitted?

The public discourses will be characterised through the Storyboard documents described at the beginning of this chapter and the transcripts of the first and second PFP farmer interviews.

6.4.1 Characteristics of Public Discourses

The Storyboard documents have been assigned to the discourses judged by the metaphors they contained that matched the label assigned to each discourse discussed above. The following labels have been applied to the four discourses: Managerialism, Sustainability, Constraints, and Eco-citizenship. Some documents straddled discourses which indicated that the discourses coexisted, that is, attachment to one type of discourse did not negate attachment to another. This was most common between Managerialism and Sustainability.

Characteristics of Managerialism

Five documents were matched to the Managerialism discourse. The documents and their key metaphors are shown in Table 6.6.

This is a management-based discourse, which recognised planning, priorities and schedules. The emphasis was with the conceptual metaphors for BUILDING with planning and schedules and frameworks used alongside metaphors for seeing clearly, such as in the light of (VISION). The dominant motivation is accumulation through economic activity seen in the use of metaphors for QUANTITY such as pot of gold, save work and save time. This motivation was deliberately deployed by the PFP to persuade farmers to change and necessitated the premise that the land repair works would lead to increasing profitability. The PFP focus was on improving land ‘quality’ for this purpose. The discourse appeared deferent to superior processes to be activated.
Land is valued as a resource. Language of illness and treatment from the HUMAN BODY metaphor group is used to explain the activities with metaphors such as back of mind, seek and carried out. This discourse does not confer the notion of a living complex entity to the land, which is implied by metaphors for ill health.

The relationships are between people and the means of accumulation. This single focus defined the farmers’ purpose, and other agents peripheral to this purpose as supporters. This is evident in the QUANTITIES conceptual group, which all promise more and improved outcomes.

Characteristics of Sustainability

This was the most common discourse of the PFP. Nine storyboard documents matched this discourse. The documents and their key metaphors are shown in Table 6.7. The label of this discourse is ‘balance’ – between land use and nature, construed as a balance of activities or new types of thinking. The difference between Sustainability and Managerialism is evident in the use of HUMAN BODY metaphors to describe the land, infectious, treatment, cancerous, healing, suffering and rebirth. The Sustainability discourse was the awareness raising discourse which saw promise in the social possibilities of change which would flow from knowledge of land depredation processes. This was an enthusiastic discourse as seen from the use of VISION metaphors such as reaching for the sky, wider view, light switch and new set of glasses. It recognises humans as powerful influences and is optimistic in believing that people will act for the common good.

Many farmers in western Victoria are known for putting something back into their land. (88_MEDIA2)

It was also about inspiring social change. The ambition was not quite reached as the comment from Pat Feilman at the final PFP executive meeting reveals.

The greatest disappointment is the attitude of government at all levels. The Potter Foundation can fund future works but it is government responsibility to carry on the work which PPF has commenced. (88_PFP10)

The motivation is still accumulation, seen in the QUANTITY metaphors of maintaining and increasing capacity. But there is also a belief in an intrinsic human
desire to cause no harm. The following quote shows how these two motivations were seamlessly combined.

He is recreating a whole rural ecosystem. He is making his farm sustainable again. He is making it profitable. (91_MEDIA1)

The JOURNEY metaphor was used in this discourse to describe what people were actually doing: **bring people along, train of events, set in motion** and **new direction** which depicts a more profound change for the people involved.

This discourse recognises ecosystems and values the integrity of nature. Agents are those humans whose activities need modification and adjustment. The adjustment is mediated by BUILDING metaphors similar to those used in the **Managerialism** discourse. The **Sustainability** discourse is activated by human ingenuity and ability of people to make changes. Table 6.7 shows a summary of the storyboard documents and key metaphors for this discourse.

**Characteristics of Constraints**

Only one document could be used to explain this discourse. It was the presentation by Campbell at the 10-year celebration (95_L-PFP1). The document and key metaphors are shown in Table 6.8. This is a national discourse that draws all Australians into the narrative. The discourse recognises the natural world as an entity with finite limits. The **HUMAN BODY** metaphors for illness were used extensively: **healing, care, damaged** and hurting **farms** along side **listening, read and speak up** to describe the action necessary. The discourse retains an optimistic outlook seen in the JOURNEY metaphors of **move on, caring way, strive to go on, step forward, stepping stones, safe road** and **strive together**. MILITARY metaphors are also used to underlie the serious nature of land degradation: **declare war, man placed time bomb, barricades thrown up and shooting itself**. The **QUANTITY** metaphors have a similar function with **send us broke, cut back, scores badly** warning of the seriousness of the problems. None-the-less negativism is countered by the optimism of the JOURNEY metaphors as well as the familiarity of BUILDING metaphors such as, **network sound decisions, fits together, checklist** and **key**. This discourse is activated by human ingenuity and belief in human good.
While the discourse wrestles with the dominance of the industrial economy the motivation remains pragmatic. Human needs are to be met through the products of industrialisation. The motives of accumulation and consumerism however are subject to limits and restraint.

Characteristics of Eco-citizenship

There is one document among the seventeen-storyboard documents that fits this discourse; the presentation by PFP farmer Bruce Milne to the Landcare Conference held in Wangaratta in 1990. (90_L-PFP13). The document and key metaphors are shown in Table 6.9. This is a global discourse. It recognises nature, species and humanity. Nature is a fundamental base that is overlaid with an ethical map by which the people in the developing world are connected to Australian farmers and their practices of production. The reality is stark, pessimistic and alarming.

The motivations are polarised between destructive and gentle. This is evident from the MILITARY metaphors such as hard won, targeted, tackling, explosion, many forces and wrestling, and VISION metaphors such as far sighted, lie ahead, rose coloured glasses, big picture, left behind and looking back. The destructive motivations are associated with consuming and accumulation and are seen in the QUANTITY metaphors of: great deal, mining, lowest common denominator and lifting our management game. The gentle motivations are intrinsic and activated by learning and awareness. This is also evident in the JOURNEY metaphors such as path towards, shift, common thread, step back and trajectory, which describe an experiential learning journey. Just as the scope of the discourse is vast, so too are the number of agents. This discourse includes humanity and all species as equals, directing particular responsibility for achieving this to developed nations. The failure of this discourse to resonate in MEDIA or the narratives of other farmers leaves it isolated and inactive.
<table>
<thead>
<tr>
<th>Storyboard</th>
<th>Doc:2 85_PFP5</th>
<th>Doc:4 85_PFP18</th>
<th>Doc:7 87_MEDIA1</th>
<th>Doc:11 88_PFP4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HUMAN BODY</strong></td>
<td>seek, carried out, signed in, pace, back of mind, bearing in mind,</td>
<td>long term illness, cured, faced with…, looking at,</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JOURNEY</strong></td>
<td>schedules, composition, format</td>
<td>setting up, key feature, set a level, a level of implementation, level of production, outlined</td>
<td>outlines, planting strategies</td>
<td>planned into, checkerboard layout, schedule, sound farm planning,</td>
</tr>
<tr>
<td><strong>BUILDING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ORIENTATION</strong></td>
<td>arising, streamlining, accelerating</td>
<td>above all, higher priority</td>
<td>clear appreciation, on-going program illustrates,</td>
<td></td>
</tr>
<tr>
<td><strong>VISION</strong></td>
<td>clear idea, point, exposure, viewpoint</td>
<td>fresh look, in the light of…</td>
<td>realisation</td>
<td>short term, rethink</td>
</tr>
<tr>
<td><strong>CONTAINER</strong></td>
<td>circulate</td>
<td>brings together, blend, simple recipe</td>
<td>to complement rather than frustrate,</td>
<td>control measures, work put into long term,</td>
</tr>
<tr>
<td><strong>MILITARY</strong></td>
<td>aim</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QUANTITIES</strong></td>
<td>valuable, measuring, little margin for error, fully costed, keeping records, fully spent</td>
<td>quality of the land,</td>
<td>pot of gold, optimum timing, improved production</td>
<td>save work, save time, cannot afford, maintain quality</td>
</tr>
<tr>
<td>Storyboard Documents</td>
<td>Doc:1 84_PFP9</td>
<td>Doc: 3 85_PFP4</td>
<td>Doc:5 85_MEDIA3</td>
<td>Doc:6 86_PFP5</td>
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</tr>
<tr>
<td><strong>HUMAN BODY</strong></td>
<td>infectious, suffering, deal, pioneers, biological management</td>
<td>handling</td>
<td>treatment, rebirth, falling apart, face of country, hard headed, land suffering, another arm (a PFP volunteer), if farmers grasp this, seen to tinker</td>
<td>holding, sit back, hands on, treated</td>
</tr>
<tr>
<td><strong>JOURNEY</strong></td>
<td>train of events,</td>
<td>flow, passed, set in motion</td>
<td>expose people, bringing people, lead, catalytic person</td>
<td>expose people, bringing people, lead, catalytic person</td>
</tr>
<tr>
<td><strong>BUILDING</strong></td>
<td>state of,</td>
<td>layout, level, structure along these lines, set-up</td>
<td>a business like schedule</td>
<td>both sides, setting up, drawn from,..</td>
</tr>
<tr>
<td><strong>ORIENTATION</strong></td>
<td>reverse, decline, moved to,</td>
<td>arising, falls under, high priority,</td>
<td>low awareness, come up, reversing, high level,</td>
<td>low awareness, come up, reversing, high level,</td>
</tr>
<tr>
<td><strong>VISION</strong></td>
<td>focus, wide spectrum, early days, doomed to extinction, habitat disappearing</td>
<td>looked at, looks to</td>
<td>reaching for the sky, fresh look, overview</td>
<td>given an orientation, wider view, penetrating insights, identify gaps, perception</td>
</tr>
<tr>
<td><strong>CONTAINER</strong></td>
<td>in each case, groups within, formed into,, embarking</td>
<td>opened,</td>
<td>combines</td>
<td>mix</td>
</tr>
<tr>
<td><strong>MILITARY</strong></td>
<td>tackle, powerful groups, destruction, destroy, aim</td>
<td>tackling, combat, kill schemes</td>
<td>halt, tackled, aim</td>
<td>halt, tackled, aim</td>
</tr>
<tr>
<td><strong>NATURE</strong></td>
<td>grown</td>
<td>groundswell, refresher</td>
<td>bleak facts, bald term, guineapig farmers</td>
<td>bleak facts, bald term, guineapig farmers</td>
</tr>
<tr>
<td><strong>QUANTITIES</strong></td>
<td>chain of events, paying dearly, time consuming, cash terms, accelerating, measured</td>
<td>bearing, dealing</td>
<td>measured and calculated and translated into cold hard dollars, if productivity is to be maintained</td>
<td>less of a factor, alarming rate,</td>
</tr>
<tr>
<td>Storyboard Documents</td>
<td>Doc:8 87_PFP2</td>
<td>Doc:9 88_MEDIA2</td>
<td>Doc:10 88_PFP10</td>
<td>Doc:12 90_LPFP5</td>
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<td>----------------------</td>
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</tr>
<tr>
<td><strong>HUMAN BODY</strong></td>
<td>cancerous erosion, illness, long term illness, fragile, treatment, hands dirty, bottom up approach, facing Australia, grab the headlines, blink</td>
<td>cancer, facing, curing</td>
<td>suffered, intensive treatment, catch, handling</td>
<td></td>
</tr>
<tr>
<td><strong>JOURNEY</strong></td>
<td>pass on</td>
<td></td>
<td>sociological approach</td>
<td></td>
</tr>
<tr>
<td><strong>BUILDING</strong></td>
<td>ecologically sound, farm layout, planning, well organised farm, management</td>
<td>components, set-up, reshaping, set about new method, gap, point, social structures, impinge on government, concept, logical processes</td>
<td>was built, keystone, shaping their destiny, supporting</td>
<td></td>
</tr>
<tr>
<td><strong>ORIENTATION</strong></td>
<td>raise community awareness</td>
<td>stimulate others, flowing on, fast becoming</td>
<td>reversing land degradation, redress land degradation</td>
<td></td>
</tr>
<tr>
<td><strong>VISION</strong></td>
<td>evoke images, forcing them to think, visual landscape quality, rethinking, focus activity</td>
<td>rethink, suffered a misconception</td>
<td>perspective</td>
<td></td>
</tr>
<tr>
<td><strong>CONTAINER</strong></td>
<td>put back, foster</td>
<td>putting something back, interactions between farmers</td>
<td>input, links</td>
<td></td>
</tr>
<tr>
<td><strong>MILITARY</strong></td>
<td>tackled</td>
<td>aim, tackle</td>
<td>aim</td>
<td></td>
</tr>
<tr>
<td><strong>MUSIC</strong></td>
<td>harmony</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QUANTITIES</strong></td>
<td>less productive, optimum in dollar terms, raise money, lifting productivity, land loss, knowledge gained, restore the balance, improve production, maintain quality, sustain productivity, invaluable, to have advice,</td>
<td></td>
<td>improve farm productivity, vast store of knowledge, gave of their time,</td>
<td></td>
</tr>
<tr>
<td>Storyboard Documents</td>
<td>Doc:13 90_LPFP3</td>
<td>Doc:15_91_MEDIA1</td>
<td>Doc:17 2000_MEDIA1</td>
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<tr>
<td>----------------------</td>
<td>--------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>HUMAN BODY</td>
<td>landscape is dying, treatment, didn’t hear, cut their throats, scream, pointing accusing finger, death, bear grim witness, read landscapes, silent dialogue, gutless soils, watches, pioneers, set foot</td>
<td>signs of strain, held, sick and dying, treat, treatment, held ideas,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOURNEY</td>
<td>new direction</td>
<td>step up, run along,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUILDING</td>
<td>concept, practical series, based on, physical layout, plan design, framework</td>
<td>recreating, sound, industrious hands</td>
<td>build it up, put up with it, insulated farmers, the farm was a package</td>
<td></td>
</tr>
<tr>
<td>ORIENTATION</td>
<td>turn it around, ripple effect, diving their success, fast track</td>
<td>environment is the bottom line, get things started,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VISION</td>
<td>demonstrated vividly, long term, background, overview</td>
<td>a light switch!, a good sign, confronting</td>
<td>cast a big net, new set of glasses, experience was liberating, a way to look after the land, life changing, spot light</td>
<td></td>
</tr>
<tr>
<td>CONTAINER</td>
<td>encompasses</td>
<td>into the future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MILITARY</td>
<td>win the war</td>
<td>saw trees and aborigines as enemies, battling, wilfully destroyed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC</td>
<td>harmony</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUANTITIES</td>
<td>maintain productivity, productive capacity maintained</td>
<td>making it profitable, good land, gap on producing, living beyond its means</td>
<td>increase the productive capacity</td>
<td></td>
</tr>
<tr>
<td>Storyboard document</td>
<td>Doc:14 90_LPFP13</td>
<td></td>
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<td>---------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>HUMAN BODY</strong></td>
<td>struggle, heal, healing, read the farm, intensive care, health, healthier, farm healing, listening, repair, life suffers, unhealthy farm soils, hangs over, over heads, face the fact, damaged and struggling to cope, hurting farms, intensive care, rapacious appetites, greedy delicate ecology, speak up.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JOURNEY</strong></td>
<td>martyr, go on and on, move on, caring way, strive to go on, step forward stepping stones, safe road, strive together</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BUILDING</strong></td>
<td>ecologically sound, network sound decisions, fits together, checklist, key</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ORIENTATION</strong></td>
<td>met, raising awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VISION</strong></td>
<td>sorry saga, economic blinkers, take a closer look, a dream world,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONTAINER</strong></td>
<td>recipe for .., inside our farms,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MILITARY</strong></td>
<td>destruct, declare war, man placed time bomb, hearing the tick, barricades thrown up, not at war, shooting itself,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MUSIC</strong></td>
<td>ecologically illiterate, tune</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NATURE</strong></td>
<td>today's economic climate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QUANTITIES</strong></td>
<td>waste energy, send us broke, cut back, scores badly, hog resources,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 6.9: KEY METAPHORS FOR THE ECO-CITIZENSHIP DISCOURSE

<table>
<thead>
<tr>
<th>Storyboard Document</th>
<th>Doc:16 95_LPFP1</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN BODY</td>
<td>spring to mind, symptoms, blinkered, carried away, face, looking, jumping off, inside farmers heads, hamstrung, seduced, pioneered, attention</td>
</tr>
<tr>
<td>JOURNEY</td>
<td>path towards, shift, common thread, step back, trajectory, pathway, along the path</td>
</tr>
<tr>
<td>BUILDING</td>
<td>underpin, back to basics, project conception, colonial structure, solid foundations, wider network, framework, based on, planning base, attention to process, strategic investment, blue print,</td>
</tr>
<tr>
<td>ORIENTATION</td>
<td>stimulation, move towards, driven by, drift away, transition ongoing,</td>
</tr>
<tr>
<td>VISION</td>
<td>far sighted, lie ahead, rose coloured glasses, big picture, left behind, looking back, ecological perspective, spotlight</td>
</tr>
<tr>
<td>CONTAINER</td>
<td>input, synthesis of ingredients, interrogating</td>
</tr>
<tr>
<td>MILITARY</td>
<td>hard won, targeted, tackling, explosion, many forces, wrestling</td>
</tr>
<tr>
<td>QUANTITIES</td>
<td>great deal, mining, record rates, lowest common denominator, ideas are currency, lifting our management game</td>
</tr>
</tbody>
</table>
A summary of Step 3: the characteristics of the four public discourses, is shown in Table 6.10. The characteristics are the discourse ontology identified through: realities, motives, relationships and agents help to differentiate the discourses. The first differentiation was achieved by use of the divisions nominated by progress through the taxonomic key after which four preliminary discourses were described. The differences between the preliminary discourses were based on underling assumptions and formed the structural basis of discourses. The structural differentiation has been elaborated on in Step 2 of the Dryzekian Analysis. Step 3 has increased the differentiation of these discourses by using the storyboard documents that were matched to the preliminary discourses.

**TABLE 6.10: CHARACTERISTICS OF THE PUBLIC DISCOURSES**

<table>
<thead>
<tr>
<th>Discourse Ontology</th>
<th>Managerialism</th>
<th>Sustainability</th>
<th>Constraints</th>
<th>Eco-citizenship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realities</td>
<td>Policies</td>
<td>Nature</td>
<td>Land Resource</td>
<td>Nature</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>Land resource</td>
<td>Nature</td>
<td>Policies</td>
</tr>
<tr>
<td></td>
<td>Land ownership</td>
<td>Community</td>
<td>Communities and Society</td>
<td>Industry</td>
</tr>
<tr>
<td></td>
<td>Land resources</td>
<td>Policies</td>
<td>International relationships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schedules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frameworks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motives</td>
<td>Accumulation</td>
<td>Accumulation</td>
<td>Accumulation</td>
<td>Accumulation</td>
</tr>
<tr>
<td></td>
<td>Accumulation</td>
<td></td>
<td>Consumerism</td>
<td></td>
</tr>
<tr>
<td>Relationships</td>
<td>Functional/ profitable</td>
<td>Optimal benign balanced beneficial</td>
<td>Excessive</td>
<td>Intrinsic human connection to nature</td>
</tr>
<tr>
<td></td>
<td>Excessive</td>
<td></td>
<td>Hierarchical</td>
<td></td>
</tr>
<tr>
<td>Agents</td>
<td>Farmers</td>
<td>Farmers</td>
<td>Farmers</td>
<td>Farmers</td>
</tr>
<tr>
<td></td>
<td>Supporters of farmers</td>
<td>Community</td>
<td>Society</td>
<td>Society</td>
</tr>
<tr>
<td></td>
<td>Government agencies</td>
<td>Government Agencies</td>
<td>Government Agencies</td>
<td>Government Agencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Industry</td>
<td>Industry</td>
</tr>
</tbody>
</table>

The discourses reflect different positions with respect to the agents, relationships, realities and motives by which they are activated. The activity, which occasioned the activation, is the agri-innovation project the PFP. Evaluation of projects, such as this one, that seeks to change farm practices, often concentrates on changes in practice as a measurable outcome. As discussed in Chapter 1.1, many projects are facing uneven outcomes from extensive participatory projects. The PFP action between 1984 and
1988, such as the number of trees planted and streams fenced, is represented by the type of farm plan. These are either extensive or a partial. The plans were used to direct the works and funding to each farm and therefore are a surrogate measure of a family’s involvement. This is why the detail of a family’s PFP on-ground works is not part of the ontological specification. They provide instead the occasion for an exploration of uneven participation.

The underlying assumptions represent a way of understanding the emergent pattern in the discourses. It is a way of locating the differences between these discourses. This has been done using an ontological specification: that is what is ‘real’ in these emergent discourses?

Reality differs. For example, the primary motive for agents is accumulation. Accumulation can be increasing production or profits or land ownership, and is perceived negatively within the ‘Radical’ discourses and positively within the ‘Reforming’ discourses. The recognition of land, nature and humans differs across the discourses. References to nature would not be ‘heard’ by proponents of the Managerialism discourse, but they would likely respond to references to ‘ownership’ resources’ and ‘frameworks’ the artificial constructs which represent reality inside this discourse. The centrality of farmers as key agents is different across the discourses. Farmers’ agency is seen as important within the Managerialism discourse and less so within the Eco-citizenship discourse which values cooperation and community agency.

### 6.4.2 Characteristics of Farmers’ Discourses

Three farmers’ discourses were identified. They have been labelled as: Farming Praxis, Social Leadership, and Eco-human Dysfunction. These preliminary discourses can be matched to the Plot Groups (Utilitarian, Affiliate and Transformer) identified in Chapter 5.2.3. While there is considerable overlap between these groups I have been able to align them to the discourses. I did experiment by fragmenting the groups to use the individual transcript but this only increased the complexity with out increasing the value of the data.
The matches between the Plot Groups and Farmers’ discourses are: Utilitarian and Farming Praxis: Affiliate and Social Leadership: Transformer and Eco-human Dysfunction. Key excerpts for each Plot Group are shown in Appendix 4.

Characteristics of Farming Praxis

This is an active farming discourse. It recognises the productive function of farming as the paramount motive. The land is often a mute presence in the discourse, inferred from a discussion of repair or fixing a problem site. The discourse is largely confined to the farm boundaries.

There was a lot of emphasis on water, surplus and runoff and trees were going be the answer. I had the view and still have the view that good productive pastures were going to ……………….yes I suppose that was a view I had even then. (2.40:10/8/06)

The important realities for this discourse are capital, increasing value through capital improvements and productivity increases. These represent legitimate frames for discussion of the PFP.

We saw it as a ‘windfall event’. (1.60:22/08/06)
And it was basically financially neutral anyway. (1.30:23/04/07)

The agents are the immediate family. The relationships are ‘arms length’ with outside agents.

In Hamilton and they kept running ideas past us. And I started to feel like a mouse in a box. (1.38:16/08/06)

The discourse is a formidable ‘gate keeper’, vetting information and people who enter the farm. We always had our way. (2.30:24/04/07)

I regard Farming Praxis as the ‘home site’ of the farm families: a platform upon which the family farming story can be mounted.

Characteristics of Social Leadership

This discourse has a social catchment extending from the farm. It recognises the productive motive of farming as a paramount drive but tempers it with a social conscience.

We were always interested in doing conservation. (2.15: 25/7/060)
It was a logical extension of what we were already doing.
(3.10:26/7/06)

The social conscience introduces a non economic and self conscious motive - to provide social leadership for change.
I’ve always looked outside the box. (2.10: 25/7/06)
Potter was a chance to do something and have some influence.
(3.30:1/6/07)
We felt like we belonged to something big. It united the whole area.
(3.20:22/8/06)

This discourse allows for uncertainty and adaptation as part of the journey of change. For example, use of the words ‘shift’ and ‘changed my thinking’. The agents involved are the families and the local community. As with the Farming Praxis discourse, the Social Leadership discourse treats land as mute presence implied through the story of the farm enterprise.

Characteristics of Eco-human Dysfunction

The Eco-human Dysfunction discourse tended to advance the language of constraints with discussions of flawed systems at local, national and international scales.

Even with all the inputs that, because nutrients should really cycle around on the local area and agriculture is not doing that. It’s still really mining. It’s depleting the soil. It’s extracting nutrients out of the soil and shipping it away. (2.50:2/11/07)
The move into discussion of malfunctioning systems was a move away from agriculture.
We had well and truly woken up to the fact that it’s unhealthy to have a virtual biological desert there. (2.50:2/11/07)

This discourse identifies excessive human motives of consumption and competition as drivers which should be replaced with equity guided by an ethical frame.

It’s meant to be home for lizards and centipedes and spiders, echidnas and where are they meant to live if you haven’t got plantations? (2.60:3/8/06)
The agents recognised in this discourse are all humanity with particular responsibility for governments and individuals of the developed world.

I couldn’t have gone on and been like a parrot left in a cage and kept on being restricted to the technical aspects of Potter and Potter as it was. (2.60:3/8/06)

…the dominance of the economy still over the subservient ecology at our own peril and the peril of every other living species on this earth. (2.60:3/8/06)
Table 6.11 provides a summary of the ontological differences between the three PFP farmer discourses.

**TABLE 6.11: CHARACTERISTICS OF THE FARMERS’ DISCOURSES**

<table>
<thead>
<tr>
<th>Discourse Ontology</th>
<th>Farming Praxis</th>
<th>Social Leadership</th>
<th>Eco-human Dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Realities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Ownership</td>
<td></td>
<td>Land Ownership</td>
<td>Nature</td>
</tr>
<tr>
<td>Land Resources</td>
<td></td>
<td>Community</td>
<td>Species</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Society</td>
<td>Humanity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Governments</td>
<td></td>
</tr>
<tr>
<td><strong>Motives</strong></td>
<td>Accumulation</td>
<td>Accumulation</td>
<td>Uncontrolled accumulation and production</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td>Productive</td>
<td>Productive</td>
<td>Ethical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Balanced</td>
<td>Malfunctioning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agents</strong></td>
<td>Family Members</td>
<td>Family Members</td>
<td>Farmers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community</td>
<td>Society</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Government Agencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Family Members</td>
</tr>
</tbody>
</table>

Table 6.11 summarises Step 3 of the Dryzekian Analysis. This has detailed the characteristics of the three farmers’ discourses and identified the ontology. The ontological specification was composed of realities, motives, relationships and acknowledged agents. This provided a means to further differentiate the discourses. The first differentiation was achieved by use of the divisions nominated by progress through the taxonomic key. These differences were based on underling assumptions and formed the structural basis of seven preliminary discourses. Four of these were derived from the public narratives and three from the farmers’ narratives. The structural differentiation has been elaborated on in Step 3 of the Dryzekian Analysis. This has described the characteristics that activate the discourses.

The farmers’ discourses are activated by the elements of the discourse described above. There has been no attempt to draw a line between the family’s actual farm works to their narratives, to a measure of success or failure of the farm enterprise, or with any change to landscape processes. The main reason for not making such connections is that the link after all these years is weak and overlaid with multiple other influences. The
PFP signal would be at best faint. The farmers’ involvement was instead linked to the type of farm plan. This has provided the occasion to explore uneven participation.

As with the public discourses the farmers’ discourses also reveal that the motive of accumulation is regarded as basic to persuade people to change. This is, however, not the case with the Eco-human Dysfunction discourse, which regards it as a negative and destructive motive. Farm families are the primary agents in all these discourses with a relationship to the PFP intervention being ‘productive’. This reflects the PFP’s own publicity which nominated profit maximisation as an important relationship to be enhanced during practice change programs. The self-focus of the discourses is to be expected as they are drawn from the reflective narratives.

The realities recognised within these farmer discourses reflect the nature of the PFP intervention as a farm based project. The centrality of the farm is a feature of the Farming Praxis discourse. Therefore, appeals to issues of human poverty would not resonate in the way that it would for proponents of the Eco-human Dysfunction discourse. This discourse recognises global entities such as species and humanity.

### 6.4.3 Summary

The Discourse Analysis yielded four public discourses and three PFP farmer discourses. The four discourses formed from public documents reflect the mobilisation of the PFP. That is, the authors of the documents were either delivering the project or broadcasting it to others and so had chosen their language. For the PFP farmers, in contrast, it was a personal portrayal of the PFP; they were the recipients of the project and have now had over 20 years to consider its implications. The different perspectives provided a shift in the narratives. For example, as expected, family issues are absent in the public documents but often prominent in the interviews. Other personal material used to explain the PFP experience was: land ownership, farm expansion, leaving the farm, and succession. These are private lenses through which people make sense of their motives and decisions. This is the reality of the ‘social interface’ a site of myriad influences, some apparent, and announced some unannounced and hidden. The ‘Reforming’ discourses were predominant for both groups and have retained currency across time. The ‘Radical’ discourses were marginal and failed to be reflected by other agents in the
public domain. Synergies between discourses are conceptualised as occurring selectively to affect cooperation and participation while remaining congruent with pre-existing realities. Figure 6.6 summarises the outcome of the Dryzekian Analysis for the data sources.

**FIGURE 6.6: THE PUBLIC AND FARMERS’ DISCOURSES**

This diagram shows that three of the farmers’ discourses; Farming Praxis, Social Leader and Eco-human Dysfunction, were similar to three of the public discourses. That is structurally similar to Managerialism, Sustainability and Eco-citizenship. The nearly permanent pattern of engagement among the farmers over time as Utilitarians, Affiliates or Transformers suggests an entrenched pattern of engagement, not with the PFP project, but with discourses external to their farming praxis. This durable pattern would suggest limits to the receptiveness to change when the changes are outside their prevailing farm or nature discourse.

So far the differences between discourses have been discussed and used to shape the outcomes. But there are similarities too. These are shown in Figure 6.7 which depicts the discourse pattern over the three time phases (‘event’ ‘echo’ and ‘reflections’). This aligns the farmers’ (‘reflections’) and public discourses (‘event’ and ‘echo’) according to the common features of each. So far the differences in communications have been used to separate and articulate discourses. But similarities also exist. Dryzek noted
similarities between parts of the nine global environmental discourses he had identified. For example, idea of global limits was accepted both by the green radicalism discourse and the survivalism discourse. However green radicalism did not accept the same political analysis or solutions (Dryzek 2005 p. 229). There were similarities between discourses in this study. The farmers’ discourses, just as in their narratives, rejuvenated some of the elements of the public PFP narratives by appropriating and reflecting aspects of the public communication in their own explanations of the PFP experience. As a result the persistence of discourses differs with the four historic discourses showing different rates of survival. The radical discourses were short-lived and the two public discourses - Managerialism and Sustainability, persisted. This was achieved by the media returning to the PFP story during the ‘echo’ period reiterating the story and so providing data for analysis.

![Diagram of relationships between discourses]

**FIGURE 6.7: RELATIONSHIPS BETWEEN DISCOURSE**

I can justify separating the public and farmers’ discourses. The individuals of each group are orientation toward different kinds of problems. The public discourses were built by media and PFP materials and were part of the extension PFP message. The
farmers’ discourses were built from first-hand experience – integrating the PFP to daily practice.

This section completes the results of the Dryzekian analysis technique. The progress of data through the analysis steps has been set out describing seven discourses. Each one displays a ‘comprehensive account of an orientation to’ the PFP among the agents who took part in different ways. The technique has provided a way of interpreting the communications of these agents and so offers a method of ‘listening’ to talk that reflects their vision of the world and their role in it.

6.5 Conclusion

This Chapter has described the steps involved in the Dryzekian Analysis. The presentation of the data has been detailed in order to present as much material to support the discourses as possible. This differs from the generalist approach taken by Dryzek (2006). The finer resolution I have used is necessary given the scale of this study. A generalist approach may not have detected the subtle variations between discourses nor would it have allowed others to examine the logic underpinning the outcomes.

The Dryzekian Analysis has involved an examination of documents recovered from the PFP project and interviews with agents involved. Metaphors were extracted from these texts and used as a basic unit to sort the text into those that emphasised a reformist agenda from those that emphasised a radical agenda of change. The second division was decided by the degree of change called for. Change was either to improve current processes or more adventurously to alter the existing methods. This step yielded seven different discourses. Four were public discourse and three farmer discourses. The public discourses are: Managerialism, Sustainability, Constraints and Eco-citizenship. Of these four the Managerialism and Sustainability discourses were supported by the bulk of the data. The farmers’ discourses are: Farming Praxis, Social Leadership and Eco-human Dysfunction. Theses three discourses aligned with the description of farmers’ narratives as: Utilitarian, Affiliate and Transformer.

21 ‘Their vision of the world and their role in it is a reference to Doppelt’s “iceberg” model of thinking shown in Figure 1.1.'
A synergy was found to exist between the PFP public discourse, Managerialism and the dominant farmers’ discourse, Farming Praxis. Both discourses made use of the language of planning, frameworks and priorities as arbiters of behavioural change. Further connections between the media favoured Sustainability and the farmers’ discourse of Social Leadership were found as the media and some PFP documents emphasised the notion of balance in human activities resulting in mutual benefits for society, the individual and environment which formed part of the PFP farmers discourse of social leadership. The radical discourses that emerged post PFP failed to gain traction in the public domain.

The media, to re-engineer the farmer as a land sensitive agent, used the discourse of Managerialism and Sustainability. Paradoxically this elevated the farmers and concealed their wives’ narratives, which were confined to the level of a private family discourse. Interestingly though the elevation of the farmer in the public narrative did not necessarily elevate his narrative, just his agency. The narrative most likely to be represented in the public discourse came from the Transformer group. That is, the group with the fewest individuals was used to project the archetype PFP farmer.

This study has found that the struggle at the ‘social interface’, the ground of cooperation between farmers and sponsors of the PFP can be conceptualised as discourses. Agents were subject to both encouragement and exclusion depending on the alignment of the perspectives they articulated with the symbolic character of the PFP. The PFP outcome can be typified as a union: experienced variously as partial, spasmodic or complete. The union can remain over time or be outgrown if agents’ understanding evolves beyond the projects limits, (as occurred for the individuals in the Transformer group). The persistence of the PFP symbolic meaning can be explained in terms of its utility for all agents as it was appropriated into their other discursive practises. However the failure of the PFP to evolve with its own agents’ experiences and learning may reflect the early focus of the project. This was to set up visual demonstration farms and account for the funds spent. The urgency of this function and the restricted time frame may have overwhelmed the potential for development through experience. This tension between delivering and accounting, with learning and developing ideas, may be common to other participatory programs.
The study has also found the existence of durable patterns of engagement overtime. The entrenched pattern of engagement described linked the PFP involvement (measured by the farm plan) to the narratives used to tell the PFP story. It found that this early involvement seemed to be reproduced at the level of narrative two decades later. Given the journey metaphor used in the adoption of changed farming practice this would be evidence of a stalled journey: no new directions no evolution. However it cannot be said, from this study, that this is a consequence of the involvement or a logical outcome of these individuals’ sensemaking of this experience. In the context of this study this does not matter, the objective was to understand the many meanings and the utility of these meanings as the agents were found to incorporate elements of the PFP discourse for their own farming praxis.

The PFP benefited from the media portrayal of the project, drawing on traditional notions of Australian rural life and amplified the extension message for a large audience. The downside of this was that the narrative remained unchanged over time, failing to incorporate new understandings of the PFP message. The archetype farmer of the PFP time became fixed in the archetype participation program that promised profits from land sensitive management.

Models that guide the design of agi-innovation projects today have their roots in earlier theoretical modes of extension practice. The development of today’s models has followed a path of increasing diversity of agents and issues and encouraged cooperation through participatory processes\(^\text{22}\). These changes were not part of the PFP experience which was an early example of the ‘farmer first’ method of the 1980s. The diversity accepted today was unimagined at the time of the PFP. As a result research into adoption of changed farming practices now attempts to integrate more sustainable farming outcomes to capture a range of factors from human, economic and landscape dimensions (Pannell et al 2008).

The 1980s witnessed the emergence of a fundamentally new approach to farm extension and research overturing the expert model that had been in use for many decades. This new period restored agency to farmers, validating their practices through a new

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\(^{22}\) This is discussed in the Literature Review Chapter 2.
partnership approach. The PFP became a symbol of this period, a symbol of innovation and change. In Hajer’s terms it was the storyline, the narrative which reduced complexity, referred to by many agents and used as a reference to individual agent’s discursive identities- that is their own farming praxis. The effectiveness of the PFP as symbol for these times is also reflected in the diversity of attributions traced to the PFP. As described in Chapter 3.4 the PFP has been noted as the genesis of number subsequent activities undertaken locally and nationally, further underscoring its symbolic use as a story of innovative change. Unlike storylines that forge new coalitions among actors that lead to new meanings, the utility of the PFP appeared to reside in its symbolism, as agents traced their involvement as a continuation of their prior intentions. It may be that the failure of the PFP symbol to evolve is because it was a relatively short-term event, perhaps not long enough for new discourse coalitions to form. Thus it lacked the diversity within to reshape and reform the story elements ensuring that repetition of the PFP story in the ‘echo’ period would be a repetition of the initial symbolism. Indeed the utility of the discourse approach has been to show that agents were active in defending the symbol. The strength of this symbolic character was balanced by a corresponding loss of diversity in the involvement of participants.

23 This has been discussed in Chapter 2.4
7 An Explanation of Uneven Participation

This chapter explores the utility of the discourses. It looks to incidents described by research participants that can explain how the discourses were built and reproduced through the action of PFP agents and others. This addresses the fourth Research Objective: To use the patterns of discourses to explain uneven patterns of participation and outcomes in the PFP. There are two focus questions guiding this Research Objective. The first is:

4.1 What is the relationship between discourse and participation and outcome?

4.2 To what extent is discourse able to explain uneven participation and outcomes?

The questions will be addressed in separate sections in this chapter.

7.1 Background

This research objective seeks to explain how the PFP discourses functioned to organise and direct action by demonstrating the utility of the discourses to participating agents.

In this study, ‘participation’ was taken to be involvement in the PFP and ‘outcome’ is the communications material generated during explanations of the PFP. The focus on communication represents one way of discussing the PFP. It does not suggest that the project only existed through its communication. Indeed both the extensive landscape works that took place during the project and the many other projects which took their inspiration from the PFP are both significant to the PFP story and its legacy, (refer to Chapter 3.4). The reasons this study focused on the communications and language rather than peoples’ performance in relation to the PFP objectives was:

1. To maintain a non-judgmental approach in the study in accord with the interpretivist methodology (Chapter 4.2). This was further validated with the diversity of topics covered by some participants at the research interviews

2. To involve all agents – not just the farmers as the outcomes are understood through the heuristic of the ‘social interface’; to be multi authored (Chapter 1.2).
3. To meet the study’s aim which was to understand the meaning or sense people made of the PFP. This integrates action to discourse as the interplay of action and interpretation is a primary organising principle. This is understood to capture the realities of agency which is unfolding, emergent; imperatives which command an individual to construct an explanatory and plausible story of an experience (Weick et al 2005).

A surrogate measure of involvement has been used in this study. This is the extent of the farm plan which is a measure of on farm works and financial contribution to each farm. It was either a full farm plan or a partial plan. At the time it was considered that the type of farm plan, which included the whole farm area and involved the family in discussion as they collaborated on modifications, resulted in a more committed family and therefore a better learning experience. On the other hand, for those who had a partial farm plan, covering a small section of their farm land, involvement was limited. The different funding allocations were portrayed as a function of meeting the priorities for PFP extension. However alternative currents were detected in interviews for this study. These suggest that the limited funding was more deliberately allocated to select people the PFP officers thought would be better collaborators (refer to Chapter 5.2.1). In addition, the diversity in the women’s contributions to the research interviews indicated that the family response was not uniform. As this analysis operated at the scale of the family farm unit rather with its individuals, this signal has not been unpacked. However the diversity across the group suggests that uneven participation in the PFP may have been more complex that the explanation provided by full plan versus partial plan response.

7.2 Relationship between Discourse and Outcome

7.2.1 Introduction

The reference to ‘outcome’ in this study is the communication from all the agents of the PFP; that is, the staff who were engaged in implementing the project, the media who told readers what the project meant, and the families who told of their experiences. This communication is contained by a ‘social interface’. That is the social space formed for
the PFP by its agents, which is multi-authored and multi-layered and the site of struggles over meaning or a ‘battleground’. The layering emerges from cooperation.

This section steps outside the excerpts containing metaphors used to differentiate the taxonomy of PFP discourses. It instead refers to reflections of particular incidents made by the research participants that illuminate deliberate attempts to control or shape the PFP. This has been done to anchor the discussion to the realities recalled by agents – not interpreted from the metaphor analysis. I consider that these examples of deliberate PFP shaping reflect the process that Hajer used to understand the power of storylines on the basis of; ‘how they sounded to others’. That is, the trust people have in the author of the story, the practice in which the story is produced and its acceptability to their own discursive identity (Hajer 1995, p. 63). The first: the trust people have in the author, is covered in Chapter 5.1.2 which deals with the relationships and networks of the PFP. This will not be repeated here except to reaffirm the overall finding that the important social and administrative standing of the founding organisations invested the PFP with authority to operate. The second two elements will be discussed here: the performance of the PFP event and the acceptability of discourse to its agents.

7.2.2 Performance of the PFP Event

This is an ongoing process, an example of the retrospective nature of sense making. This was evident at a meeting, unrelated to this research, which was held on April 3 2008 at RMIT Hamilton. The purpose of the meeting was to canvas a group of farmers, researchers and natural resource management practitioners to develop ideas for future projects. While some of the people present had had direct involvement in the PFP others had not. The reflections by three former PFP agents demonstrate how they re-established the symbolic character of the PFP for the benefit of those without direct experience. Comments such as:

- Potter was a good way of getting peoples’ attention (Peter Waldron)
- Potter was about pulling it all together (Andrew Campbell)
- We worked on what we did know would work so we used the adoption processes we knew (Bill Sharp)
- Potter outcomes have been spectacular – was a pity it didn’t get taken on by the Department as a major extension outcome (Bill Sharp)
- The whole project was the antithesis of reductionist science (Andrew Campbell)
(Peter Waldron was a former PFP farmer, Bill Sharp was a member of the PFP Local Advisory Group and Andrew Campbell was the former project manager).

Foucault provides a conception of discourse that regards ‘normal’ as socially constructed, and historically changeable. Discourse, according to Foucault is a system of exclusion and constraints, dictating what can and cannot be said and who is authorised to speak and who is not (Wallace & Wolf 2005, p.266). Discourses, according to this understanding, are the rules that decide which connections are built and strengthened and which are weak and marginalised. This process results in discourse routines.

One exchange at the same meeting in April shows a discourse routine in action. It is between Professor Iain Gordon, CSIRO Leader for Healthy Terrestrial Ecosystems and Andrew Campbell then the Chief Executive of Land & Water Australia.

For Potter though, I see trees. (Ian Gordon)

That was a mistake. There was perception at the time that putting money into making a farm more productive would get a negative reaction form people. So it wanted it to be seen as a public good expenditure – spent on water, and some pasture – never heard about that. And trees – that’s all they talked about! (Andrew Campbell)

Campbell shows his frustration at the failure of the PFP to move past its initial symbolic representation. The prominent Managerialism and Sustainability discourses had become routines which repelled other versions of the event.

Hajer’s ‘argumentative approach’ to discourse analysis sought a middle level conceptual explanation for the role of the individual. He did this through storylines - the narratives that cluster knowledge, positioned actors and forge coalitions between actors. An approximation of a storyline would be the public PFP discourse; a triumphant story of man healing the environment in the process of innovative farming. This study has shown that this was a prominent symbolic story, appropriated by agents to advance their involvement or align with their beliefs. That is, it had something for everyone. It held the story of the Transformers journey of discovery, it reinforced the social standing of farmers through its expression of mastery of modern farming practice and for the project officers, it was an exhibition of the PFP extension message taking flight. For
Hajer these coalitions are the ‘discursive cement’ that holds the coalition of disparate agents together around discursive ‘affinities’. That is, while agents might not understand the detail of the narrative it may none-the-less ‘sound right’.

The incidents recalled by my research participants’ show the lived experience of the PFP. For example Barr, a senior social researcher with DPI Victoria, provides an explanation of the PFP in which a discourse, which he describes as an ‘appeal to the archetype story’ about farmers, was used because it was what people wanted to hear.

At the time they put a lot of effort into getting the right farmers, the ones which would appeal to people, present well, look and sound good. (N Barr 2007, pers. comm., 17 December)

The PFP’s compelling narrative, according to Barr, was not about increasing productivity on farms despite that been part of the discourse but about creating an authentic image of farmers as agents of change. Indeed the productivity narrative was largely left unexamined. As Barr explains:

Potter was in a wool growing area and they, the wool growers have increased productivity by about 0.1%pa. (N Barr 2007, pers. comm., 17 December)

The public discourse of Managerialism and Sustainability gave agency to the farmer. The elevation of the farmer to a new and modern status was achieved in both discourses. In the Managerialism discourse it was achieved by recognising an astute farm operator. This aligned, through language, realities and agents deployed with the farmers’ discourse of Farming Praxis. For the Sustainability discourse it was achieved by activating the farmer as an altruistic manager of nature. This aligned with the farmers’ discourse of Social Leadership through similar recognition of agents, realities and language.

The emerging radial discourses in the 1990s were ignored because they fell outside the established PFP narratives. The problematisation of agriculture and the humanitarian aspect were pessimistic in contrast to the reforming discourses of able management and good social will. The existence of the radial discourses formed in the 1990s did not dent the established discourses, nor did the media give them any consideration. Indeed the radial discourses were marginalised by the dominance of the reforming discourses. Thus, other agents located outside these discourses were also on the margin.
An example of an agent on the margin can be seen in the third discourse. At the ten-year celebration of the PFP Campbell’s presentation was reflective connecting to a global discourse (Constraints). In trying to draw the link from the PFP operational period in the 1980s to the present he said:

> Current land uses are mining Australia’s natural wealth, aided and even driven by, the imperatives of the dominant economic worldview……………….Let’s not get carried away by what we see over these two days, in the flush of a good season in a favoured region… (95_L-PFP1)

The audience did get carried away. They dismissed Campbell’s opening remarks about the unsustainable nature of Australian agriculture altogether. One farmer interviewed for this study remembered the presentation, but felt that linking the practice of agriculture in Australia to mining was just:

> Andrew being Andrew! (99.5:17/8/06)

The farmer’s comment shows how the opportunity for reflection and learning was lost and the PFP story failed to develop. Barr spoke at the same event. He recalls his presentation was more of a critique on practice change extension and by implication a critique on PFP.

> The audience was full of the Potter luminaries, including Lady Potter, who was there to hear that her late husband’s bequest had been a success. … My talk went over like a lead balloon; the audience were completely unresponsive so I knew something was wrong… In the foyer afterwards I got a withering, cold response from Lady Potter. I never do memorial events; they are not a place for critique. (N Barr 2007, pers. comm., 17 December)

This is another example of ignoring diversity by limiting the opportunity for the PFP story to evolve which thwarted learning opportunities. The marginalisation of outsiders also took place within the PFP farming cohort. One of the PFP farmers commented on his experience.

> At field days sometimes the body language would tell us we were considered ‘sticks in the mud’ a bit. We didn’t agree with everything. (2.30:24/4/07)

Another professional working in the field at the time also recalls an exclusion of alternative ideas during the PFP. Now a convenor of the Human Ecology Program at ANU, David Dumasresq was at the time involved with organic agriculture. At the time
of PFP, Dumaresq was an unpaid liaison officer for NASSA (Australian and International Organic Certifier).

We were like an ant next to the elephant. (D Dumaresq 2007, pers.comm., 30 October)

Dumaresq believed PFP benefited from a pre-existing attachment to western district landscapes. He believed the landscapes attained an iconic status through the work of artists such as Hans Heysen, Rupert Bunny and Eugene von Guerard. The western district was an area associated with early agricultural settlement patterns based on large squatter runs, which met a general notion of a rural idyll. This bucolic image linked with the Ian Potter Foundation, whose founder was a member of a business elite, a connection that the media used with the Sustainability discourse; a promise of ongoing prosperity.

In another incident of exclusion Bruce Milne recalled a negative audience response to a presentation he gave to the Landcare Conference held in Wangaratta in 1990. The presentation was based on his PFP experiences and takes a social and industry wide view of land degradation. Milne recalls polite applause after his presentation, but during a closing session two days later, a speaker reflected critically of Milne’s presentation as it ‘offered me nothing as a farmer’. Bruce recalls others seemed to agree and remembers feeling isolated by the experience (Bruce Milne pers. comm. 29/7/08).

Exclusion can also be self-imposed. For example, towards the end of this study, John Jack provided documents to the RMIT Potter Archives I had not previously seen. Among them was correspondence relating to his involvement with the Melbourne Chapter of the Club of Rome during the 1980s. The Club of Rome is a non-government organisation made up of influential scientists, industrialists and politicians. The group considered global issues such as limits of food production, climate change and atmospheric pollution (ozone depletion) well before such topics were widely understood. One of the papers even couched the possibilities of a policy on the reduction of carbon emissions by 20% by the year 2000! It is interesting that these global concerns were not expressed in the context of the PFP, and when global connections to Australian farming were made in the 1990s, they were marginalised.
That Jack kept these activities separate to his PFP conversations is an example of self-imposed censorship.

The PFP was shaped by deliberate encouragement of the connections regarded as favourable. Indeed the PFP used its own outsider status to claim legitimacy for its activities. Participatory planning was a keystone activity, considered at the time to be an indication that the PFP principles had been adopted. This extension approach was new for its time.

We had ideas, we were going to lead the farmers, they were going to do the work and they were going to do the thinking as well and we were there to prompt or help really because that was the crux of the whole matter. (B Middleton 2007, pers. comm., 5 December)

Middleton illustrated the difference between this participatory approach and the ‘expert advice’ model of extension, which it replaced.

We were down there in the back room one day and you know they got used to us, and the phone went one day and there wasn’t a soul there, so Andrew answered the phone. It was a fellow from Koonong Wootong or somewhere up there who said ‘would you just give the Soil Conservation fellows a message? Tell them the cows have got into their plantation and would they come up and do something about it’. Now whether we made that up I’m not sure, but I’m sure that’s what happened. And that is really what we were on about – a different approach altogether. (B Middleton 2007, pers. comm., 5 December)

This story sums up the consequences of ownership- or rather the lack of ownership, which was regarded as a problem for advancing conservation practices on farms. The story reflects a belief that the PFP was a better model of extension. This superiority was an important part of the PFP public discourse. Managerialism and Sustainability provided a bridging narrative from one land management approach to another. This is an example of plausible reframing in which a new story is told that reflects significant changes in belief have taken takes place (Howden 2008).

In so doing the PFP rewrote some of the rules of engagement. The Project operated outside the traditional state agencies thus challenging the dominant discourse on how an agri-innovation should appear. The former rules had been groomed by the state government agencies for many years. The PFP narrative was not available to

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24 The development of extension practice and theory is discussed in Chapter 2.4
25 The rationale behind the PFP farm plan method is discussed in Chapter 3.3.
government departments responsible for administering agri-innovation programs. They were unable to match the PFP’s image of innovation and success, and in the process of an amalgamation, they were a fragmented and at times demoralised unit. In such a state, the bureaucratic dominance in the delivery of agri-innovations was lost. Despite the outsider status, the PFP managed to fashion a new model of intervention and to legitimate it. It is tension such as this that can crack the ‘discursive formation’ to fragment or create a new discourse on, in this case, an agri-innovation. Agents are active in the process of building discourse connections. The public discourse of Managerialism, with its language of financial prudence, accountability, budgets and timetables, likely satisfied the Ian Potter Foundation’s notion of responsibility. The PFP Executive and officers had an ambitious schedule to simultaneously establish the demonstration farms and the extension program, to leverage it. The speed with which these works unfolded, (they were visible after the first year), seemed to be efficient, and so, validated the business approach.

7.2.3 Acceptability

Hajer saw that the formation of discourse coalitions opened the possibility for the formation of new discursive forms and regarded that the acceptance or rejection of the story was evident of an actors’ orientation to the meanings it held. From the analysis in this study this process has not been found to have occurred, rather the symbolism of the PFP was transportable and was appropriated by agents for their own discursive activities. For example at a recent meeting to discuss possible funding opportunities one of the former PFP farmers commented:

Potter was one of the most important things I have ever done.
(3.40:27/03/2009)

This was a person who left his farm nearly 18 years ago and whose involvement during the PFP was limited. His genuine expression of attachment can be understood, perhaps as nostalgia, but also as an example of the utility of the symbolism of the project. He was able to trace its influence into non farming and non agricultural arenas.

This highlights the importance of the family Farming Praxis discourse and the utility of the PFP symbolism to it. All participant farmers, whether grouped as Utilitarian, Affiliate or Transformer, used a language of control of process and mastery of their
farming praxis to explain the PFP experience. This suggests a strong family farming identity at play mediating the engagement experience.

Despite the existence of conflicting discourses the agents of the PFP combined effectively to implement the project. However the unity may only have been achieved through the reproduction of the PFP symbolism by media. There were real differences in the PFP agents’ attribution for the PFP uncovered in the Storyboard analysis. The Plot Analysis reproduced this diversity among the PFP farmers identifying three distinct types of experience labelled Utilitarian, Affiliate and Transformer. The Dryzekian Analysis described different discourses formed by sets of assumptions and characteristics, which were prevalent in the language used by different agents. This resulted in comprehensive differences among the PFP cohort which could be traced to the extent of the farm plan (the surrogate measure of involvement).

Discourses have been described as ways of navigating complex worlds. They embody assumptions, judgments, contentions and capabilities allowing the mind to make coherent accounts of reality (Dryzek & Niemeyer 2006). The authors quote Harré and Gillett.

However the fact that each individual engages multiple discourses provides some freedom for manoeuvre, such that ‘fluid positionings instead of fixed roles’ are possible. (Harré & Gillet 1994 cited in Dryzek & Niemeyer 2006, p. 2)

The PFP story was made compelling through the experiences of the farmers. They provided the picture of a model participative approach to extension. The media took over and told triumphant stories. This all relied on a few farmers to carry the story. While they regarded it as a privilege and a responsibility, it came at personal cost.

At the end we were just so burnt out we weren’t going to go on. We’d done so much work, we’d thrown ourselves into Potter and done everything we could, we’d had enough, so we weren’t going to go on. (2.20: 25/7/07)

We were, I know you forget this, but I don’t, we were nearly at breaking point… (2.65:3/8/06)

Most of the farmers were not visible in the media; their connection to the PFP story was vicarious, reflected from those few who carried the story. But their invisibility did not equate to powerlessness as this comment demonstrates.
I recall an argument with John Jack (Chair of PFP executive and Department Secretary of the Premiers Department) about sustainability. We told him ‘you define it and we will tell you how we will fit it in’. (2.40: 10/8/06)

This comment is typical of many of the farmers who retained their own agency in amongst PFP’s dominating discourse. This would seem contradictory to the concept of discourses which vie for dominance and so acceptance by actors (Dryzek 2005). However it can be explained by reference to the Farming Praxis discourse which links to the families farming narrative - the stories of themselves as farmers.

I was mindful during the interviews that I was being told less about the PFP and more about the how the individual adopted PFP and made it fit into their own narrative. Research into the adoption of sustainable farming practices, and evidence from models of changed behaviour, have shown that the range of influence on choice of behaviour is more extensive than a narrow definition of the behaviour alone. This has been discussed in the Literature Review Chapter 2. The research has shown that it is not possible to draw a line between an activity and subsequent shift to sustainable farm management. If such a line were drawn it would be tentative, as changes in behaviour have so many antecedents, from diverse dimensions, illuminating just one of them for anything other than a specific action would be problematic. For this reason the aim of the study was to discern the patterns in the meanings people took from their involvement. The narratives they provided presented as consistent to their prior farming intentions. That is, the Utilitarian farmers didn’t bemoan the lost opportunity to be transformed by the project and the Transformers didn’t regret the opportunity to reduce their commitment and involvement. The stories were offered as part of their life continuum, and made as much sense to them today as they did at the time.

Our family have cleared this country, planted it made it productive. (1.20:26/6/08)

This is an example of one of the family stories. It is a story of betterment and improvement, and is integral to the presentation of themselves as farmers. PFP made sense to this farmer as part of his family’s story of improvement.

This is ongoing work here, I didn’t do it for profit. I can’t explain why I did it really. Except to say I’ve always done it. (1.20:26/6/08)
Another example of a farming narrative is the illustration in the Dryzekian Analysis of different types of control over the project. None of the farmers surrendered themselves to the PFP’s participatory influence. Rather they saw their involvement as a deliberate and managed engagement.

The outsider is not privy to the family farming story, but is merely given a view. The ‘arms reach’ at which others are kept is reflected in these quotes from agricultural professionals.

In my experience farmers present themselves to me as food and fibre producers. It’s like a badge of honour. I don’t know of any who describe themselves as land stewards or land managers. They are producers. (A Patterson 2007, pers. comm., 6 February)

I always want to see the whole farm analysis before I believe in one system production gains story. Usually I don’t get it. You get given the aspect that people wish to show to the public. (N Bar 2008, pers. comm., 17 December)

The Farming Praxis discourse is alluded to by the agents’ descriptions of the PFP or by the farmers’ own explanations of their involvement. The use of their metaphor material in the Dryzekain Analysis has provided a description of it as a controlling and masterful site of the family farming story. It is as though this is the ‘home space’ from which all external interventions are mediated. The existence of this discourse may be explained by the role identity plays in farmer decision-making. In a study undertaken to explain the role of farmer identity to the adoption of post productivist landscape values, researchers found that the business roles associated with an ‘agribusiness’ identity permeated across the spectrum of farming self concepts. They concluded that a ‘conservationalist’ identity was applied around the farm, that the farmers’ claims of post productivist attitudes were still an integral part of their dominant productivist identities (Burton & Wilson 2006). This means that an expression of conversationalist identity is suitable only for land deemed appropriate for conservation. This explains why schemes designed to move farmers away from productivism have had limited success. The researchers used an interpretation of identity theory that posits that;

as the self reflects society, and society compromises multiple social groups and is structured and hierarchical, it follows that the self, arising from social experience, will be constructed of multiple
identities, which are similarly structured and hierarchical (Burton & Wilson 2006 p. 98).

This organises identity into a hierarchy from which a particular one will be invoked in any given situation or across a range of situations. This is consistent with the notion that farmers are not a single group but there are multiple agricultures and within a single farm enterprise multiple agents influencing decisions (Pannell et al 2006). Others have dealt with these multiple selves through the application of farming typologies which have differentiated between distinctive farmer groups based on role based criteria (Vanclay et al 2006; Vanclay et al 2007). The number of farming identities has been expansive posing problems in verifying their validity in the field. Instead, research has focused on aggregating them according to ‘reoccurring typological groups’ (Burton & Wilson 2006) or in another approach, by ‘scripts and parables (Vanclay et al 2007). Others have addressed this issue in terms of multiple, but hierarchically arranged decision systems that may be applied by a farming family depending on whether the decision is perceived as farm business, social leadership roles or concerned with the dynamics of family cohesion (Farmar-Bowers & Lane 2009).

The expression of the Farming Praxis may be the culturally acceptable public discourse with which to discuss farming experiences. It may be that the discourse mirrors elements of the dominant neo-liberal economic policy. This policy initiated macro economic reforms to integrate the Australian economy into international flows of capital (Vanclay & Lawrence 1995). For agriculture, this ushered in a period of restructuring in which productivity increases were necessary through increasing inputs or increasing debt to expand the farm enterprise. The period was said to have legitimised a narrative in which management skills in farming would automatically lead to economic reward. The narrative has it that only the incompetent would suffer (Johnsen 2003). Vanclay and Lawrence suggest that the prevailing economic emphasis had resulted in a ‘certain denial’ of the personal and family stresses which occur as a result of the restructuring (1995, p. 15). It is possible that the discourse used to describe farming reflects this culturally accepted portrayal of farming, rather than fragments of a family’s farming identity.

However I conclude that the Farming Praxis discourse does contain data similar to that used in the exploration of farmer identity. The discourse was a platform from which
participation is deliberately managed thus retaining a coherent farming story while appropriating elements of the other discourses to make sense of the experience.

7.2.4 Summary

This section has described how the PFP agents were promoted or marginalised by the discourses that shape the PFP. It shows how its agents advanced the PFP objectives and how that advancement resulted in the marginalisation of others. While this is not ‘authentic communication’, it has shown that there is a behavioural consequence to perception. This is manifest in incidents in which people are included, silenced or promoted in relation to the PFP story. This underscores the difficulties in sharing knowledge which is also a familiar refrain in participatory projects. For example extension staff in the Department of Primary Industries in Victoria reported that stakeholder agreements and understandings preceded project planning but frequently only to often evaporate during implementation. Disagreements around words, concepts and meanings occurred as a result of the group view not matching the individual’s perspective (Howden 2008). This section has shown that this challenge is met at the smallest of social incidents in which a person is marginalised. Encouraging inclusion through diversity seems to be the answer although exactly how to achieve this is not clear.

One suggestion for improving this situation is by ‘imagining’. This encourages participants to project themselves into an unpredictable future environment and build a narrative to make sense of the new world. This has the potential to help people assimilate divergent and conflicting messages into a coherent, and for them, plausible form (Howden 2008). Some researchers have noted that imagining the future cannot proceed for a group unless there is a common understanding about the past (Weick 1995). A recently promoted practice within the Department of Primary Industries is story telling to improve a group’s collective understanding of the past and the present context. Such stories would be effective to collect and articulate the diversity but a discourse approach can trace assumptions to origin – a deconstruction of the assumptions as well as evidence of their presence.
7.3 Discourse and Uneven Participation

This section addresses the second question of the fourth Research Objective: 4.2. To what extent is discourse able to explain uneven participation?

This study has been an exploration of meaning making at the ‘social interface’. As such it has explanatory rather than predictive value. The final focus question exposes this, as the link between ‘action’ and ‘talk’ has not been established. Perusing this link would require an assessment of agents’ performance. How would this be conducted? Would the PFP farmers’ performance be assessed against the expectations placed on them? Would it include the journalists and project officers in a multi agent performance critique against project outcomes? The study’s methodology implied an acceptance of multiple interpretations from the same event as adoption is understood to be a unique journey of change. Chapter 2.4 introduced some change models which incorporated the factors considered important in the process. However they are known to be only part of the adopter’s story and the ‘whole’ drives action. Other components such as habit or impulse are also likely to be important. The possibility of influential factors outside the story also exists (Weick et al 2005) and could be a focus for further research.

This uncertainty about what constitutes the ‘whole’ picture is relevant to the adoption of changed farming practices because the desired behaviours are complex and set in complexity about the natural systems they are intending to influence. Indeed the ‘desired behaviour’ is certainly unspecified as it is contingent upon a range of individual, climatic, enterprise and policy realities. The PFP is an example of this complexity26. It sought to introduce ecological principles to the decisions make in farm enterprise management27. This embodies complexity in a way that a project with a more specific target, such as re-establishing streamside vegetation, does not. The latter is not complex. One either participates and revegetates a stream frontage or does not. The outcomes are observable. Of course the reasons for choosing to act in one way or another are not observable even for this simple environmental practice.

26 Discussed in Chapter 1.2
27 Discussed in Chapter 3.3
What does *talk* mean if the action that precedes it is not measured? The interplay of action and interpretation is understood to give meaning to an experience which is *talked* into being (Weick *et al* 2005). When action is the central focus, interpretation rather than choice is the phenomenon leading to an evaluation of performance. In a study of organisational situations in which highly complex practices are routinised, Weick has described a ‘collective mind’. This is a live social network that is located in the patterns formed by the individuals’ relating and performing. Actors in the system construct their actions in the understanding that the system consists of connected actions by themselves and others, and interrelate their actions within the system. A ‘collective mind’ requires effective connections rather than a single herculean performance of any one individual to function. The ‘social interface’ has similar qualities but it does not anticipate a particular outcome. In the field of agri-innovations it explains the conflict among the multiple actors whereas Weick’s ‘collective mind’ functions as a performing organism—the mind is action rather than entity. Later Weick developed the concept of ‘sensemaking’ to account for how people make meaning out of an event. Sensemaking relies on plausibility (that an understanding is justifiable) rather than accuracy (that a given understanding better aligns with the facts of a situation). Preference plays a role in the sensemaker’s process of choosing from the known justifiable understandings. Sense making therefore takes a relative approach to truth as people incorporate what is …interesting, attractive, emotionally appealing, and goal relevant (Fiske 1992 cited in Weick 1995, p. 114).

Preferential plausibility therefore affects adoption-related attitudes and perceptions which in turn affect the link between action and talk. As Weick *et al* conclude, ‘talk’ becomes a springboard into subsequent action (2005, p. 409). Hence the use of ‘action’, understood to be socially constructed, to ground truth or validate meaning is problematic. For example Bourdieu regarded action as an outcome of power which was orientated toward accumulating social capital. For him language was the instrument of power (Bourdieu 1977). In his description of interpretivism, Crotty (1998) claimed that the aim was to ‘identify culturally derived and historically situated interpretations of the world’ (p. 67). The actor oriented approach of the Longs and the ‘social interface’ heuristic on which it is built considers the intersection of different lifeworlds as action which results in the creation of a new multi authored outcome. For the Longs the event
is a precursor to the ‘real’ action which takes place between agents. This accords with Weick’s concept of sensemaking described above.

This study has identified a ‘deliberative engagement’ with the discourses of the PFP. This indicates that the farmers were active in selecting their level of involvement according to their own discursive practices. The relationship between discourse and involvement is not one of causation. The PFP was not, from this study, considered to cause greater participation by mediating access to its resources (a measure of the farm plan and subsequent farm works). Rather it has been found that narratives and discourse mediated the involvement with the PFP.

(i) Agents deliberately aligning themselves with the PFP public discourses when it matched their own underlying assumptions. This is evidenced through the appropriation of elements of other discourses.

(ii) The Transformer group transiting into a radical discourse without it having public endorsement

(iii) The collection those with full resource allocation plus those with limited allocations falling into the Affiliate group.

(iv) The resource allocations were established prior to an assessment on the families’ performance within the PFP. Therefore allocations were made according to subjective assessments on the match between the family and the PFP extension message and opportunities they and their farm would offer to maximise the extension message.

The relationship between discourse and uneven participation is one that mediated the PFP experience but the exact mechanisms are obscure. This is relevant to this study but cannot be extrapolated to other participatory projects. The relationships are summarised in Table 7.1. The outcomes are consistent with the workings of the ‘social interface’, as the farmers are seen to retain agency by selecting how much of the PFP discourse they appropriate. The PFP is an opportunity which offers different benefits to the families depending on their own discursive practices. Relying on shifting meanings may be an unsatisfactory explanation for ‘action’ and ‘talk’ but the confluence of hierarchies of complexity in which adoption of changed practices takes place, and the problem of
aligning beliefs with behavioural outcomes suggests there is much more to be understood about this link before its presence and efficacy can be judged.

However differences at the level of discourse can be more confidently considered. Others have found differences among environmental discourses similar to this though not premised on the acceptance or rejection of an industrial economy. Work by O’Riordan found that beliefs about the relationship of humans to nature were fundamental to locating differences. He named these ‘ecocentrism’ and ‘technocentrism’ (O’Riordan 1990). ‘Ecocentism’ is further divided into ‘gaianism’, a faith in the rights of nature and co-evolution of species, and ‘communalism’, which is a faith in the capabilities of society. ‘Technocentrism’ is divided into ‘accommodation’, a faith in the adaptability of institutes to ‘intervention’, which is a faith in the application of science, market forces and managerial ingenuity. However a critique of O’Riordan’s ideas found that the definitions were too rigid and did not account for pluralism or contradictory behaviours. People took different positions in relation to environmental matters.

…at any one time in different aspects of their lives; for example, in their employment, in their lives in a local community, in their personal relationships, and in their inner thoughts. (Gough, Scott & Stables 2000, p. 46)

The point that Gough et al make is that discourses are evidently permeable and context specific. This aspect of the discourses identified in this study has also been found as the two prominent discourses Sustainability and Managerialism were populated by different agents at different times. Indeed the Transformer group were also, from time to time, located in the Managerialism discourse despite their relative radical position in relation to the PFP meaning. While it is interesting that those who used the radical discourses have all left the industry the significance of this cannot be concluded from this study. The overall numbers of farmers are small and the interviews did not take quantitative farm performance data, or explore the satisfaction people felt towards their farming activities. This study has not made an attempt to show causation. Rather it has explored

28 Others have approached environmental discourses differently. For example, Martin Lewis (1992) used an ideological distinction between moderate and extremist’s environmentalism, while Robyn Eckersley (1992) divided discourses according to anthropocentric and eco-centric perspectives.
the contested meanings taken from the experiences in the PFP. As a result of this approach the relationship between ‘action’ and ‘talk’ was not pursued and so the discourse of this study has provided a picture of uneven participation but not found the cause. The PFP discourses are understood to reflect the plurality of experiences, individual and family situations, although the contribution of particular factors and their measure are unknown.

The Dryzek method of discourse analysis has been radically modified for this research. It is a taxonomy designed for world environmental discourses applied at the level of a micro-scale application. Translating this taxonomy down to the scale of a single natural resource management intervention risked the narratives aggregating into a nebulous discourse about concerns over land use. The PFP was not a broad environmental debate; it was an agri-innovation that aimed to integrate the ecological principles with those of the farm enterprise. Its ambitious works program was leveraged to reach an audience beyond the farm. A discussion of the PFP is a discussion of the meaning of the works program. The discourse analysis used in this study was re-scaled to the level of the PFP and, despite the lack of a systematic data analysis provided by the Dryzek approach, (and therefore reliance on the researchers own in-depth understanding of the data and context); the method offered a transparent means of differentiating discourses.

While the scale shift appeared to be effective it occurred with the loss of some data. The family’s retelling of their PFP experience in the context of their situation makes up part of the Farming Praxis discourse and has not been examined in further detail. In reality there are many discourses intersecting with the experience of the PFP, not all of which have been described by this data.

Critics of the taxonomic discourse analysis technique have been concerned about the lack of systematic data analysis and the “meta-view” of environmental discourse (Tuler 1998). Tuler considers that the discourses Dryzek identifies are simply a function of one person’s unique experiences and may be no more compelling than that of others. In addition, he argues that this has resulted in generalist techniques, which do not guide other researchers to empirically demonstrate that the discourses identified are used. Dryzek acknowledges the shortcomings and claims he sought ‘vindication only in the plausibility of the stories I tell. These stories are backed by my own twenty years of
working and teaching in the environmental field’ (Dryzek 2005, p11). This study avoids such a criticism as it is situated in a tangible intervention with specific context, agents and time periods.

The usefulness of a discourse analysis for an explanation of uneven participation may reside with the clarity and focus it can bring to the participatory process. The experience of the adoption of changed practices and its location in increasingly complex and uncertain contexts suggests that uneven outcomes, rather than a reflection of an underlying problems to be ‘fixed’ is an opportunity to strive for genuine involvement.

Dryzek posed that a ‘deliberative communication’, fundamental to democratic process, could be facilitated by discourse. He considers that public reason is plural and that agents can agree with one another for different but politically accessible reasons. So rather than have the differences disappearing behind a consensus, a deliberative communication could embrace them.

Deliberative communication is about good ‘authentic communication’ and all the mechanisms that deliberation possesses to restrict domain operate in argument, in rhetoric and storytelling alike (Dryzek 2002, p. 74)

However it is the way that the differences are used that matters. This does not mean that any point of view is relevant to a given situation, but that a deliberative communication can foster an ‘authentic communication’ as it delivers the mechanisms of ‘deliberative scrutiny’. This would see reflections on preferences taking place in a non-coercive fashion. The challenge is to conduct this in an arena crowded with differences ranging from repressive to emancipatory - a reality of political life. When discussing differences that arise within the environmental debate, Dryzek considered that discourse could inform dispute resolution processes to promote this ‘authentic communication’ (2005 p. 235). For him this ultimately is an interspecies communication which, at this time, he considers is hindered by political power and the influence of money. This also hinders communication between humans. An ‘authentic communication’ is akin to the removal of the ‘emperors clothes’: shedding the social artifice associated with being human.
Again, as this study has scaled down the application of discourse to the project level there is a less ambitious objective: to validate multiple meanings as a step toward making communications between human actors authentic. This ambition also sits at the heart of participative natural resource management although its achievement has been problematic. Discourse analysis in this study has structured narratives. The PFP stories enacted the assumptions or worldviews that underpinned them. The discourse analysis has located and revealed these assumptions. This additional layer of information will be useful in participatory projects which must encourage diversity rather than eliminate it for a less than sincere consensus. The discourse approach provides transparent scrutiny. By articulating the basis of difference the merits of an argument or position to be undertaken can be reflected upon in an open non-judgmental manner.

7.4 Conclusion

This Chapter has described the utility of the discourses identified in the analysis providing a picture of uneven outcomes. It has done this by relaying incidents described by PFP agents during interviews or from my field observations. The Chapter begins with a discussion on the relationship between ‘action’ and ‘talk’ which has been difficult to define. The two are understood in this study to be integrated, such that an experience is talked into being. The applicability of this understanding to the adoption of changed practices is not completely satisfactory as the aim of adoption is change, which implies action. However the reality of the farmers’ operating environment is characterised by uncertainty and complexity and the focus may be more usefully focused on how to be effective in this climate rather than ‘right’.

The utility of discourse to the agents has been discussed in two sections. In the first, the ‘Performance of the PFP’, the examples given show how its agents were engaged in deliberately positioning and communicating a particular meaning of the PFP. This can explain why despite over two decades of rapid social change the PFP meanings have not yet evolved to encompass realities of farming and natural resource management imperatives today. In the second section the ‘Acceptability’ of the PFP was explored though incidents which reveal how agents felt in relation to the project. This describes a

29 Refer to Section 2.4.4
number of incidents in which people were included or excluded from contributing to the PFP depending on the alignment of their understandings with the prominent PFP discourses.

Finally this section grapples with the applicability of this discourse approach for understanding uneven participation. Again the unsatisfactory relationship between ‘action’ and ‘talk’ leads to a discussion on alternative outcomes. Are they landscape change, a change in people’s ability or is it captured by the multiple meanings people develop? This study has taken the latter and mapped it to a surrogate measure of involvement during the PFP. The measure provides a link into the two prominent PFP discourses: Managerialism and Sustainability. As the group of farmers known as Transformers also contributed to theses discourses (as well as the radical ones) it supports the notion of plurality rather than a predicative type of participation.

The next section identifies the problems involved in the particular analysis undertaken in this study and how these were addressed. Finally the use of discourse to explaining uneven participation is addressed. The explanatory nature of this study has resulted in a picture of diversity among participants in the PFP which showed a discourse structure with blurred boundaries with actors contributed to more than one discourse. The study has not shown causation. That is the uneven participation cannot be said to be a consequence of a particular personal or farm enterprise factor or that a particular stimuli of the PFP was more or less influential than other PFP stimuli. Rather it has provided an explanatory picture of diversity. Uneven participation, instead of being considered as evidence of a problem in a project’s methods resulting in the conduct or shortfall of those involved, can, through the journey metaphor for change, be regarded as evidence of uncaptured diversity. Now, in the climate of increasing uncertainty in which farmers undertake this journey, it can be understood as unpredictable and ongoing. In a climate of genuine participation, one in which the different perspectives are heard and considered, solutions can emerge from a rich mix of options. This would have learning benefits for all involved. The discourse approach articulates the assumptions which shape the meanings people develop about their experiences. When these can be clearly articulated the basis for a more inclusive exploration of options can proceed.
TABLE 7.1: THE RELATIONSHIP BETWEEN ‘ACTION’ AND ‘TALK’ IN THE PFP

<table>
<thead>
<tr>
<th>Relationship between ‘action’ and ‘talk’</th>
<th>What the data would show</th>
<th>The dependant variable</th>
<th>Evidence in the data</th>
</tr>
</thead>
</table>
| Action mediates talk                    | 1. Farmers with limited participation were limited in their access to resources which would have resulted in a reduced PFP experience. They would all be located in the Utilitarian group.  
2. Farmers with a larger share of the PFP resources would have had a richer learning experience. They would all be located in the Transformer group. | Exposure to the PFP | The farmers did not exclusively fit the pattern which showed maximum involvement resulted in maximum learning. Although the numbers of farmers in this sample is small, the data cannot be used to demonstrate that the PFP alone caused the particular responses from the farmers |
| Talk mediates action                    | 1. Farmers with a limited share of the resources chose to remain with a limited involvement because they did not fully subscribe to the PFP narrative.  
2. Farmers with large share of the PFP resources would be favoured because they could appropriate the elements of the public discourses that met with their own discursive practices (for example the Social Leadership discourse). | The individual farmers’ intentions | The data does show evidence of a ‘deliberative engagement’.  
1. Patterns of narratives persisting over time suggest that the farmers’ narrative did not evolve in line with the public narrative. (Utilitarians tended to be drawn from families with limited involvement). This group used the Managerialism discourses as the publicly endorsed expression of their PFP experience.  
2. The Affiliate group was made up of families with both limited and extensive involvement. As a group they all relected the importance of their role as peer leaders (not just those with extensive involvement). This also accounts for the Social Leadership discourse.  
3. All three groups (Utilitarian, Affiliate and Transformer) shared in the reforming discourses (appropriating elements). The Transformers were the only ones with a radical discourse which was not part of the main public PFP discourse. As the radical discourses failed to be endorsed publicly the commitment to these was personal, rather than a result of the PFP expectations of them.  
4. The allocation of resources was made early in the PFP - before the project could determine how effective each farmer would be from their actual performance. Therefore the allocations were made on subjective judgments about how they might expect them to perform and further judged against the opportunities for maximising the PFP extension opportunities. |

Conclusion: From the perspective of involvement, the narratives and discourses mediated the PFP experience. This finding is not predictive for involvement with similar projects. The data in this study cannot be used to establish a casual link between the PFP and participation or outcomes.
8 Conclusion

This chapter presents the findings and recommendations of this study. This is undertaken in three sections. The first provides a summary of this report. The second section summarises the study findings according to the research objectives. The third section reflects on the research journey before beginning a discussion of the implications of the study’s findings and the recommendations it raises for future research.

8.1 Overview of Thesis

The adoption of changed farming practices and farm management to minimise and mitigate environmental degradation is understood to be a journey of change, not a series of isolated ‘one off’ events. This study has taken this journey to interpret the patterns of participation from the communications of agents of the PFP. In Chapter one the background to the significance of the adoption of changed practices has been discussed and the research problem identified. The concept of a ‘social interface’ was introduced to locate the disputed boundary, the conceptual space where agents clash over meanings as they bring to their cooperative venture different values, interests and experiences. This space, coloured by social and individual characteristics is mediated through mental frames – a relatively unexplored frontier for practice change practitioners. Four research aims were described each with a set of guiding focus questions. The Chapter concludes with an explanation of the approach taken in this study to examine uneven participation. This is the discourse approach, which uses the language produced in social action to interpret the multiple meanings of participation.

Chapter two outlines a history of natural resource management in Australia. This provides a context to understand the logic of participatory approaches to natural resource management common today. Today’s models use an inclusive participation, emphasised by information flows, adult learning principles and participation (Marsh & Pannell 2000). However despite the advances in encouraging participation in change programs, the subjective nature of the adoption process ensures that objective ‘realities’ do not always prevail in decision-making (Webb et al 2004). Furthermore, measures of beliefs and attitudes towards innovation are not reliable indicators for future behavioural
change (Lawrence et al, 2004, Vanclay, 2004). The result of this is that participatory projects that seek to influence changes to farming practices or management can result in uneven outcomes. The Chapter presents some of the research methods used to explain and predict behavioural outcomes. The application of such models to real life experience tends to result in a reduction of behavioural complexity or limited to describing flows of possible influential factors. As such the methods struggle to accommodate the complexity of the adoption journey, which necessarily includes the wide social and individual influences that mediate the outcome. This is especially so in the adoption of change which is understood as an ongoing journey of change, whereas the interventions are short-term although the intention is to influence thinking in the long-term. The Chapter concludes with a section of explaining uneven participation and looks at alternative ways of doing this before describing the benefits of a discourse approach used in the study.

Chapter three presents the history of the PFP. It explains how this philanthropically funded project was implemented on fifteen farms in southwest Victoria, Australia. The PFP is significant as a project that used the ‘farmer first’ methodology that was emerging in the early 1980s. This meant that the participating farmers were active in the project, a fact demonstrated in the farm planning methods and extension opportunities in which they were seen to participate. The PFP’s extension resulted in many thousands of farmers from across Australia travelling to view the ‘Potter’ farms. The result was a highly visible project through media coverage and it was seen to be influential to government. The outcome was a showcase of ‘Potter farms’ and ‘Potter farmers’ and a project which provided inspiration to other activities.

Chapter four presents the research design. The interpretivist research design used in this study takes the subjective nature of decision-making in natural resource management as a starting point to conceptualise the interaction between people and an agri-innovation as a contest at the ’social interface’. The case study design is described which includes a detailed explanation of the data and data collection methods. Three discourse analyses techniques have been utilised for this study: (i) Storyboard, (ii) Plot and (iii)Dryzekian analysis. The genesis and logic of the development of these research techniques is explained in detail. The final sections describe the processes used to observe good
research practices. This includes an explanation of the ethics of working with the research participants, my own role in the study and the steps that guided the conduct of the research.

Chapter five presents the results of the first two analyses techniques that analysed the communications of the agents to construct both the public and farmers’ narratives. The public narrative is one of an evolving PFP story. This evolution was mapped across three dimensions - Human, Social and Landscape - as the awareness that tree decline, soil erosion and biodiversity loss were increasingly seen as part of the same problem bundle. This was part of a wider national narrative, which came to understand natural resource management as a societal problem impacting all ecosystems. However, in the concluding days of the project, the narrative retreated to again focus on farm successes at the geophysical domain. The project impact in the social dimension was less obvious than the landscape dimension. The PFP works were visually impressive in terms of farm plans, tree plantings and re-fencing. During the ‘echo’ period, in the 1990s, the media returned to the PFP story as a positive example of agriculture’s response to growing community alarm about land and water degradation. The urban media found an emotional connection to the PFP farmers and personalised the projects’ ambitions onto two or three families. The analysis of the public narrative also included a consideration of the external relationships important to the establishment of the narrative and an analysis of imagery used by media and agents of the PFP.

The farmers’ narratives were more diverse than the narrow media portrayal in the public narrative of the PFP. The Plot analysis enabled the farmers’ narratives to be organised into groups: Utilitarian, Affiliate and Transformer groups. Only one of these, the Transformer, with the least number of people, aligned with the dominant PFP narrative. The Affiliate group aligned to one of the elements of the public narrative, that is, the promotion of farmers as agents of change. The Utilitarian group offered a prosaic depiction of their involvement that did not connect to the public narrative.

Chapter six presents the results of the Dryzekian Analysis. The variability among narratives was shaped by tensions or conflicts among agents that reflected different fundamental truths or assumptions about ‘how things should be’. The objective of this technique was to identify and differentiate the fundamental assumptions that could
explain the diversity and tensions in the narratives. These were pinpointed by using signals emitted by metaphorical concepts in the texts. Seven separate discourses, each one built on different sets of assumptions that recognised different agents with different realities. The discourses emerging from the ‘event’ and ‘echo’ periods are labelled: Managerialism, Sustainability, Constraints, and Eco-citizenship. The farmers’ discourses taken from the ‘reflection’ period are labelled: Farming Praxis, Social Leadership and Eco-human Dysfunction. In summary this analysis has found that the:

- PFP generated multiple and co-existing discourses.
- Participation in the PFP did not result in agents’ reflecting the public discourses.
- Agents appropriated elements of the public narrative to explain their participation.
- Radical discourses were marginalised though not extinguished.

Chapter seven explores the functionality of the discourses. This describes social incidents noted in my own observations in the field and by the research participants. These social incidents are used to explain how agents performed within the framework structured by the discourses. Their actions demonstrate processes by which actors and information were either included or excluded so as to develop and then reproduce the PFP discourses.

The second part of this Chapter discussed the use of discourse to explain uneven participation. The study has not tried to show causation. That is, it has not attempted to demonstrate that an agent’s involvement in the PFP has resulted in particular outcomes for the farm, the landscape or the family. Instead the PFP is represented by its ‘talk’ because the multiple meanings resided in the language used to explain the project. The project itself was complex in that it promoted the consideration of ecological principles to everyday farm management. This was non-prescriptive, farm specific and individually interpreted. The study found that narrative and discourse were useful in illuminating uneven participation which indicated a deliberative engagement with the PFP. This suggests that the PFP was an opportunity each family perceived differently. Rhetoric is a substitute for action and the relationship between ‘action’ and ‘talk’ is not clarified. While discourse provides a picture of involvement it cannot account for it. This study is concerned with the adoption of changed practices in the context of farm
management and the literature on this subject highlights the role of subjective decision making in this process. This places the focus on mental frames as the unexplored frontier in natural resource management. The discourse analysis approach can articulate the assumptions that underpin multiple meanings and therefore provide a picture of diversity.

In summary this study has found that the PFP held symbolic meanings that had been reproduced in the media. The symbolism drew on emotional links connecting rural tradition and nature to images of trees and men. In this way the PFP became symbolic of rural innovative change. The symbolism held utility for a wide range of actors who incorporated it in their own discursive practices. The paradox of this is that the prominence of the symbol did not correspond to a united understanding of the meaning of the practices advocated by the PFP works. Rather the symbolism was functional, as actors appropriated it in their own interpretations of the PFP. The pattern of discourse was found to map back to the surrogate measure of involvement in the PFP on farm activities. However this was not a rigid pattern. The reforming discourses were used by all the PFP participants showing that the discourses were not hegemonic structures, but blurred across boundaries as actors found a utility in elements of different discourses.

8.2 Summary of Findings

The summary of findings is presented according to the four research objectives and accompanying focus questions that guided this study.

1. To identify the elements of the public narrative of the PFP and explain how it was created.

2. To identify the elements of the narratives of the PFP held by participating farmers, and explain how they were created

3. To explain the structure and characteristic of the discourses that linked the narratives

4. To what extent is discourse analysis able to explain uneven participation?
The findings for each of the objectives are reported in the following sections. A summary of the findings is shown in Table 8.1.
8.2.1 The Public Narrative

The study has described an evolving public narrative of the PFP. It was influenced by the authority of the PFP, an association with traditional rural values and an expanding...
community concern with environmental issues that allowed for a more ambitious interpretation of the PFP. The public narrative captures the elements of the journey of change as a journey influenced by the emergence of changing social norms that functioned to erase some patterns of behaviour and normalise new ones. Others have also explored the transmission of change through farmers’ narratives that were found to reinforce established patterns (Vanclay, Silvasti & Howden 2007). In so doing these researchers utilised a narrative approach to understand how people undertake change – by changing the ‘story’. This study has found that the public narrative created the background shift by a narrative of change that began with a farm and profit-focused farmer and concluded with an environmentally sensitive land manager. Therefore PFP can be regarded as the symbol of innovation rather than a vehicle for the farming practices it promoted. However the public narrative was not the only narrative and the fate of alternative narratives under the weight of this prominent narrative has provided a picture of uneven participation.

8.2.1.1 Relationships and networks

There are many ways of explaining the differences between worldviews that result in some assumptions becoming prominent. These have been described in Chapter 2.5. This study has described the leverage PFP made from its influential sponsors allowing it to command an authoritative space in the fledging natural resource management industry. Indeed the PFP legacy message became entrenched, overshadowing other versions of the experience. The two organisations that provided the source of this authority were the Ian Potter Foundation (IPF) and the Garden State Committee (GSC). The IPF was the philanthropic sponsor and initiator of the project. The organisation invested the PFP with a successful business focus, tempered by a philanthropic or altruistic mien. The GSC, for its part, conferred an authority from its elevated (though frugally funded) position it the Victorian government hierarchy. The influence of the founding organisations can be detected in media articles about the PFP, which indicates that others were responding to the status of the PFP, and from project documents, which from an early stage, projected an authoritative stance.

Contributing to this was the opportune location of the PFP in the south west of Victoria. This region had a prior reputation of status and good fortune, made prominent through
the iconic squatter period of agricultural expansion in Australia. This tradition was used by the media as a backdrop to stories of the farmers’ new modern pioneering experience. In this way the changes they were implementing could be pinned to traditional notions that rendered the changes as a natural extension of a prior superiority. The result of this was to limit the evolution of the narrative, which was not prominent in the farmers’ narratives. The legitimacy invested in the PFP by its sponsors and symbolism draw from the geographic location are examples of the combination of elements that draw agents to the story because it ‘seems to make sense’.

8.2.1.2 The Role of Media in the Public Narrative

In addition to the networks, which vested the PFP with authority, the media also played a role in entrenching the archetype PFP farmer story. This was an important outcome because the project did not find an ongoing sponsor in a government department, alternative philanthropic sources or from farmer contributions. Continual updates by the media of selected PFP farms provided the legacy in a narrative of growing prosperity from the works. This seemed to reinforce the theory that changes to more sustainable practices would be an ongoing process typified by a continuous learning environment (Pannell et al. 2006).

However the media may have created boundaries around the PFP experience that constrained the interpretation. By portraying the farmers as leaders of change for their peers and society other agents, considered to be on the peripheral, were effectively erased. The prominent masculine narrative used by the media largely ignored women and children who were portrayed as helpers. Other researchers have noted this exclusion in a review of the role of the ‘Australian Women in Agriculture’ organisation (Pini, Brown & Simpson 2003). A similar exclusion has been found in this study. The pre-existing demarcation lines operated in the presence of the PFP which had made early attempts to invite and include women in events. The women considered that they were not part of the PFP because they did not implement its works, a reflection that the PFP could only be physically experienced. This exclusion came to light as a result of the interview techniques that allowed the participants to select how they understood the PFP. By removing the traditional ‘production’ or ‘profit’ frame of the masculine
narrative, the women’s stories provided an insight to the role of family relationships to the families’ farming story.

The adoption journey itself may be a part of the male narrative of farming and that this journey may represent only a fragment of the family’s farming experience and that the masculine narrative obscures the role of women in the farm business. The women involved in my study are over 50 years of age and cannot be said to be typical of the 30-year-old women entering farming now. The generational change taking place, plus a de-traditionalisation of the role of women in society generally, may bring a change in the farming narrative. A recent report, *Raising the Profile: Celebrating Darling Downs Women in NRM* (McCartney, Ross, King & Kelly 2005), may capture some of this change in the mixed profile it offers of women making diverse contributions to farming. Their case study participants trace threads of interest that find expression in various experiences with natural resource management. This non-prescriptive and non-role descriptive approach to the experiences of women may better capture their involvement and find, as this study has, that while they fall outside the public farming narrative, their experiences are influential at the level of the private family farming narrative.

### 8.2.2 The Farmers Narratives

The Elements of the Farmers’ Narratives

The farmers’ narratives reflected a more prosaic understanding of the PFP than the public narrative (most particularly the media narrative). The important aspect of the different farmers’ narratives is that only one, the Transformer group, was represented in the media. The others, just as the women experienced, were on the peripheral and largely ignored. Indeed, they created the bulk, mutely supporting the story by validating the PFP experience as a Transformer experience. The alternative experiences were not useful from a project extension perspective as they raised conflicting messages. The erasure of diversity stunted the development of the narrative, as agents reflected elements of the prominent narrative. The farmers were pragmatic about the diversity among the group and accepted the need to communicate change to others as the most important aspect of the PFP. In this way the uneven inputs (money) of the PFP was rationalised as important to the goal of maximising the message. This effectively limited
self-reflection as a consequence of the PFP to inform the journey of adoption. It acted to limit the PFP to the status of an event, which remained meaningful for the attention it brought, rather than the change in thinking it initiated.

8.2.2.1 Patterns in Narratives and PFP Involvement

The reflections of the farmers were mapped to their involvement during the ‘event’. This suggests that the original involvement was a one off activity, rather than the beginning of a journey of changed thinking about farming practices. Continuous change, ‘seeded’ by money, participation, or a farm plan, was not found. There was not a sequential ladder of advancement with the partial plan experience evolving over twenty years to the full plan or Transformer experience of the journey of change. Rather there was an entrenched pattern, in which the reflections mapped back to the ‘event’, suggesting a circumspect journey of change.

An Explanation of the Patterns in the Farmers’ Narratives

There is an expectation that involvement in participatory programs will encourage ongoing learning and knowledge acquisition (Coutts et al 2005). It may be that the whole farm plan is not an effective surrogate to judge people’s sustainable farming intentions. It may also be that the sense people made of the PFP did not shift their fundamental worldviews. The latter is more likely as uneven outcomes from a growing number of agri-innovations suggests. The contested nature of the vision or goals for sustainable farming combines with diversity among people with different basic assumptions of ‘how things should be’. The analogy for this is the iceberg model of thinking in which the fundamental frameworks, which pattern our responses, are submerged: subjective. Only the activity at the event is observable and therefore potentially objective (Figure 1.1).

Patterns in the farmers’ narratives reflect what is understood about adoption of change. The model of change describes the mix of social, individual, and locality specific influences, which are mediated by a subjective and invisible process -the ‘black box’ depicted in Figure 2.1. The model predicts uneven outcomes as a consequence of this diversity. Extension practitioners are now advised to target their interventions to

30 Refer to Chapter 1
specific practices, as each practice will play out with its own adoption story (Pannell 2008). Plurality is considered to be a feature of environmental problems and grappling with the inherent diversity is part of the challenge of working in this field. Indeed Dryzek seeks an even more challenging expansion of diversity in his call for the inclusion of non-human signals into the environmental discourses (Dryzek 2005). This study has used diversity to illuminate the diverse stories of the PFP and then to use the differences and tensions to describe the structure of agents’ participation. The elucidation of narratives provided the first layer of order the second was conducted though a Dryzekian Discourse.

8.2.3 The PFP Discourses

Assumptions in the Narratives

The public discourses consisted of reforming and radical discourses. The reforming discourses held assumptions that the current, productivist system of agriculture, needed to be modified. The radical discourses questioned the appropriateness of the productivist system. Both discourses were further divided according to the sort of solutions posed. The modifying solutions were of a business nature, suggesting modifications to current business practices to better ‘manage’ the farm and land system. The imaginative solutions were more creative, assuming human ingenuity and learning to accommodate nature would lead to positive change.

The same analyses were carried out for the ‘reflection’ period on the farmers’ narratives. This yielded three discourses. Two were reforming and one radical. The reforming discourses were, as with the public discourse described above, grounded in the assumption that the relationship between the farmer and the land was one of accumulation and production. The imaginative solutions of one of these discourses assumed that the farmers’ social responsibility was important to the adoption of changes. The modifying discourse, a farm-centric and controlled discourse, reflected little of the PFP narrative. The single radical discourse was a pessimistic discourse reflecting the limitations of an agricultural response to what was recognised, by this discourse, as a global problem. The agents’ connection to the discourses was found to be fluid such that at times some individuals of the Transformer group were represented
in the Managerialism discourse. This is an important outcome as it reinforces that meaning making is constantly under construction – a feature of the change process.

This study has provided some useful diagnostic tools to interpret narratives. Narratives, as in the Storylines of Hajer, are expressions of unspoken assumptions. This analysis takes the next step and identifies and names the assumptions that command how we view the world and understand what seems right. The outcomes validate the use of a discourse approach to understanding uneven outcomes. While not be appropriate to read the descriptive model of change provided in Figure 2.1 as a predictive one, it does allow insight to the mediating process within the ‘black box’ allowing an interpretation of the communications. This approach offers a more nuanced understanding of agents’ participation and can be used to explain uneven participation.

8.2.3.1 Links to Wider Discourses

The ‘social interface’ is inclusive of agents’ life worlds and perceives the experience of an intervention as a social phenomena rather than a discrete event. Hence the value of a discourse approach is that it is expansive, embracing life beyond the farm boundaries. As discussed in Chapter 2, interpreting farm activities from a narrow farm profit or land stewardship basis has failed to explain the outcome of change processes. In this study the links were established by nominating the predominate characteristic of each discourse for the label. This resulted in: Managerialism, with a language of business and systems, Sustainability with language of balance, harmony, Constraints with a language of global limits and Eco-citizenship with a language of ethical connections and global responsibilities. The three farmers’ discourses were labelled: Farming Praxis with a language of control confined to a self-centric and farm-centric boundary, Social Leadership with community and societal perspectives of the problems, Eco-human Dysfunction with a language of reordering the relationship between humans and nature. These labels recognise the PFP as highly specific and artificial collaboration among agents. They describe how, in the presence of multiple perspectives agents to find a way to collaborate and cooperate.
8.2.3.2 Characteristics of the PFP Discourses

As part of identifying wider discourses that provided meaning to the experience of participating in the PFP, the discourses were refined by uncovering their particular characteristics. The ontological differences between discourses were most pronounced in the entities recognised as part of the PFP story. The farm-centric and self-centric discourse segued into the pace of the family farming story. The broader the entities, such as national or global, the more radical and marginalised the discourse became. Thus different agents managed to elevate some discourses by the power vested in the organisation or by leveraging pre-existing emotional connections. While this is consistent with the understanding of discourses, as competition between worldviews for dominance, discussed in Chapter 2, the value of the findings are that it provides a means of undertaking an assessment of these hidden conflicts.

For example, the compelling imagery and emotional references to the journey of atonement or self-discovery used in media representations of the PFP, were not part of the farmers’ experience. However this portrayal, while missing the mark in accuracy from the farmers’ perspective, succeeded in providing a social profile of a ‘good farmer’, the archetype of a modern land sensitive farmer, which was agreeable to the families participating and was appropriated within their own narratives. This shows how discourses are permeable; the separations I identified were perhaps situational, as farmers were able to move between them opportunistically, or as Hajer would say - functionally. This extends the use of discourse from a description of patterns formed from conflict between meanings to an exploration of how individuals navigate the terrain of discourse in a cooperative program such as the PFP. Indeed the miss-match between media use of images and a language of sickness to describe the land contrasts with the farmers’ own reference to their farmlands. This became an important characteristic differentiating the farmers’ discourses from the public ones. In seeking a cooperative position the farmers’ PFP reflections used the utility of the PFP as a social phenomena more than a landscape change phenomena.

8.2.4 Patterns of Discourse and Uneven Participation

Uneven participation is captured in the discourse approach through the multiple discourses of the PFP. The discourses were found to have utility as the many acts of
inclusion and exclusion recalled demonstrate. Individual agents, in particular women and institutional agents such as government departments were excluded from the prominent PFP story. Those included and material to the story were the PFP officers and selected farmers. The processes were active and recognised at the time by recipient agents. This has effectively limited the development of the PFP story and the learning experience of participants. This is also supported by the farmers’ steadfast interpretation of the experience of the PFP as an ‘event’, and the limited exposure given to radical discourses. Uneven participation is an outcome of these active processes that mediates a favoured type of participation. That is a participation that became symbolised with the PFP image rather than the particular farming practices it promoted.

Discourse has been useful for articulating underlying the assumptions about the meaning of the PFP to those involved. However it does not provide a predictive tool that would anticipate levels of participation by analysing an individual’s particular set of assumptions and then engineering rhetorical solutions to overcome them. This would be a regressive outcome, turning back to the early models of extension in which knowledge was introduced from above to a receptive audience of farmers below. Rather, uneven participation can be regarded as diversity that needs to be harnessed in the ongoing adoption process. This may offer participative natural resource management a step towards increasing inclusion of ideas in the joint creation of outcomes. As this study has shown, contributing alternative ideas to the prevailing or established meanings of the PFP resulted in acts of exclusion by those who were on the ‘inside’. The result was that people participated in those elements of the PFP that aligned with their own meanings of the project. This seemed to have the effect of limiting the development of the PFP as a learning experience in which ecological principles were to be integrated into every day farming practices. This study concludes therefore that discourse offers a tool to harness the diversity latent to a project which we observe as uneven outcomes. This will increase the richness of the solution mix and as a result, the knowledge and skills of those involved.

8.3 Reflections on the Research Journey

This research was an iterative process triggered by a growing curiosity about some of the observations I was making in my professional work. As a farmer I had participated
in many agri-projects, and as a practitioner in natural resource management, I had also been responsible for designing, delivering and evaluating the outcomes of agri-projects. This experience had shown me how diverse peoples’ responses were and at times conflicting. I often wondered if our project expectations were transferred to participants who, agreeably, reflect them back to us at evaluation. I also wondered about the promotion of individual farmers to convey messages about how to farm. Project sponsors often rely on individuals who exhibit characteristics or practices that align with a project’s goals to be advocates. Many farmers over the years have gained high profiles, tirelessly hosting field days, attending seminars and fielding media attention. When this happened to people in my area I could see they were positioned as symbolic representations of change. I wondered how this felt for them and for their families.

The opportunity to actually do something about following my interest came when I began to talk about the possibilities to others, resulting in an L&WA scholarship in 2006. My aim became to find a way to uncover the fundamental assumptions that influence the way people participate in agri-innovation programs to find out if it could help to explain uneven outcomes. This aim guided the research journey through an exploration of the theory and methods of social science. My work is not an evaluation of an agri-program; its processes, techniques, or the consequences of its works program. Instead I sought a different way to understand how people made sense of their participation. In retrospect I can now see that the research is a type of historiography in that the changing interpretations of the PFP event were examined and re-examined. As a consequence, the research can be seen as a historical and narrative examination of how the participants made sense of their experience of the PFP event. The research journey can now be traced in the change title used for this study. Originally the title was Exploring adoption processes for conservation agricultural practices: Potter Project case study. Then, when writing this last Chapter I decided to change the title to Finding meaning: differentiating the multiple discourses of the PFP. This is a shift from signalling my intentions to signalling the outcome.

There were no ready-to-hand methods to tackle this research. I initially thought that paradigms might be a good staring point but after reading more on global environmental issues, in particular the work of Maarten Hajer, I became interested in a discourse
approach. I found it difficult to operationalise some of the discourse methods discussed. This became a problem eventually solved through experimentation as I developed three research techniques. I came to see these techniques as discourse diagnostic tools.

The intention of each of the research techniques was to analyse the data in a transparent and non-judgmental way. I wanted others to see the machinery of the technique to see that it worked, or to pin-point where they thought it did not work. I also wanted the research participants to contribute on their own terms, without having to reflect the norms, language or goals of a sponsor organisation. Finding patterns in my results was exciting. I was uncertain where the results would lead and, indeed, if the techniques would yield any discernable differences between participants. The resulting discourses I have described provide an image of cooperation in an agi-innovation program with uneven outcomes. It is a picture of cooperation with co-existing discourses that agents could move across to remain within the collaborative sphere of the ‘social interface’.

8.4 Conclusions

This study has found that a discourse analysis approach to interpreting the meanings agents held toward their involvement in the PFP yielded patterns which can only partly explain uneven participation in the project. By using the ‘social interface’ as a time constrained conceptual space to contain the diversity of meaning agents’ communicated of the PFP, the study has demonstrated some differences that were traced to different fundamental assumptions about how things should be. In so doing, the study has found a way to illuminate, and hence to begin to understand, the mediations within the mysterious ‘black box’. The ‘black box’ refers to the unarticulated cognitive processes that precede behaviour and represents the unexplored frontier for practice change practitioners. The three analysis techniques have combined to provide a mechanism to understand communications and their attendant processes for advancing a particular meaning over others. This is a level of scrutiny will facilitate open communication in which differences can be reflected upon in a non-judgmental participatory fashion. This study provides a practical example of uncovering discourse design to understand how communications were used to convey the meaning or sense and the ways in which the agents reproduced these meanings over time.
In summary a number of discourses were identified. The prominent discourse was found to have leveraged the authority and legitimacy residing in sponsor organisations. This attracted media attention where a different discourse emerged with elements making it more emotive leveraging human stories drawing on traditional notions of rurality. The discourse was prominent and symbolic but seemingly not persuasive, as the farmers’ discourses remained separate to these public discourses. However elements of the prominent public discourses were appropriated into the farmers’ discourses to perform the functions required for participation in the project. This was apparent with agents remaining congruent with their worldviews but shifting across discourses from time to time. In the case of the Transformer group, the members of which were most often used to convey the meaning of the prominent public discourses, appeared to have been congruent with their earlier beliefs. It is just that these were sufficiently different from those of other agents to have led them through a different journey. Despite this, the Transformers also appropriated themes and language from the other discourses.

The results describe the PFP as a smorgasbord of opportunities from which all agents selected according to their preferences. In this way the agents were able to cooperate without adopting the official project discourses. This is a different picture of discourse in which power shapes and builds prominence and persuasiveness. That is because this is an examination of an artificial situation; a convenient and temporary collaboration for the duration of the project. The experience of that time endured through time as narratives and discourses that were created to explain it. This is how knowledge is transformed at the ‘social interface’. This study has shown that project sponsors have a significant but shared role with participant farmers in this transformation process. While today’s participatory approaches employ more sophisticated methods of encouraging involvement than were known during the PFP, the findings of patterns in the interpretation of the experience of the PFP from the communications provide a different level of insight to the mechanism of cooperation.

The implications of the findings are that discursive designs are present and discernable in historic and current communications. Understanding how the designs shaped the communications exposes actions, which may be insensitive to the issues they address and be selective of agents who participate. The result is that some discourses limit the
opportunity for a full participatory experience and limit the opportunity to evolve and learn from experiences. Prominent narratives, while useful in promoting a wished for outcome, can hide alternative experiences and therefore reduce our understanding of the journey of adoption to those who perform to the narrative. Conflicting assumptions can coexist in an event as agents find the connections that make the experience of the event meaningful for them, for their organisations, or for their audiences. The strength of the farming praxis discourse, operating as a ‘home site’ for the participant farmers, provides a mechanism to understand participation as an opportunity thus reconfiguring the public discourses as a public participatory discourse and underscoring its symbolic nature. Thus consensus and agreement may occur around features of the project, such as its relationships to government, which are unrelated to the official project goals. The PFP housed multiple discourses that signalled to agents the ‘way things should be’. All the discourses signalled and all agents were engaged in a discourse – there were no ‘neutral’ agents.

The study concludes from this that the diversity of ideas among the people participating in natural resource management programs could be harnessed constructively through a clear articulation of the assumptions that underpin meanings and the stories that are told about experiences. Therefore discourse analysis can be used as a tool to allow increased participation. It provides an understanding of how small social processes serve to create and defend a particular discourse and consequently a capacity to reduce their potency to limit consideration of divergent views. In forming this conclusion the understanding of uneven participation as a problem to be addressed alters to stand as evidence of diversity that did not make a contribution. Given the uncertainty in farming at so many levels such as climate change impacts, market access, community expectations of farm production and animal husbandry methods and the impact of government policy, the operating environment has become extremely complex. In such an environment solutions must be draw from a mix of alternatives that are all heard without the subtle censorship that occurs in communication practices. Discourse analysis is a tool that can assist open communication between people.
8.5 Implications

Natural resource management has in this century become global. In the 1980s issues of salinity, tree decline and biodiversity loss were understood as catchment and regional problems and addressed through on-farm activities such as tree planting. The ripple effect from this work was understood to move outwards into local and catchment scales. But now things have changed. Australia’s participation in a global treaty on carbon pollution reduction schemes will impose new changes at a farm level, changes that address issues that do not have their genesis or their benefits in the local catchment or within the farm boundaries. Now planning and striving for the ‘right’ answer to problems will be overrun by the need for farm businesses to be responsive to policy, climate and market shocks. Although the scope and scale of problems people face has changed their responses to them will be similar. This is why the PFP offers more than a glimpse into historically simpler times. It was an innovative project, and so holds lessons relevant to understanding how to deal with the complexity of change confronting farmers today.

The study has shown that the diversity among agents can be ignored by project sponsors in favour of a stereotype or the symbolism that projects objectives. Further, the study has found that this does not result in participants becoming compliant; rather, they can be selective in appropriating elements to meet participatory expectations. The result may be a participation in the rhetoric by participants and project sponsors, each borrowing from the other, rather than the adoption of changed practices of the program goals. This study has shown that participation involves a web of exchange and has demonstrated some useful diagnostic techniques to uncover this.

8.6 Recommendations

Recommendations centre on acknowledging the alternative experiences or discourses active in the practice of agriculture and delivery of services for natural resource management to enable a democratic form of participation.
Extension Programs

Prominent narratives overshadow alternative experiences limiting the practitioner’s understanding to those participants who conform to the narrative. Extension practitioners and sponsors of natural resource management look for opportunities to build on and work with these rather than confront farmers with new or artificial discourses. This would entail gaining a better understanding of the way action connects to talk and how this relationship may be encouraged in extension.

Agricultural and NRM Policy

A candid re-assessment of policy to address land and water degradation needs to take into account the multiple ways in which people interact with the land. Reliance on self-serving notions of a farmer’s higher purpose, such as nation builder or land steward, needs be replaced with a pragmatic and inclusive approach to the sector. This requires an inclusive approach in which diversity is encouraged. This will contribute to more effective communication between governments, farmers, industry and regional organisations.

Research

There are three areas for further research.

1. The first area of research is to explore how behavioural intention is formed to show how this drives action. This will require a more holistic model of change that does not attempt to reduce the journey to its components and may provide a richer insight to the cognitive journey of adoption.

2. The second area of research is to test the applicability of the techniques used in this study for small to medium scale projects across different regions. The techniques are tools to diagnose discourse and so have the potential to provide insight for traditional cause and effect evaluations and to provide real-time feedback to understand the how meanings are formed through involvement. Refining these tools would have application to extension programs that use scenario imagining techniques.
The third area, one not dealt with in this study, is the role of women in relation to the interactions of natural resource management programs. Research into this would entail a depiction of women’s agency and its expression to understand the dynamics of the farm as a social unit.
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